Financial Accounting – II

(As per the Revised Syllabus of BBI, Semester II, University of Mumbai)

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Preface

It is a matter of great pleasure to present this revised edition of the book on **Financial Accounting – II** to the students and teachers of Bachelor of Commerce (Banking and Insurance) started by the University of Mumbai. This book is written on lines of the syllabus instituted by the university. The book presents the subject matter in a simple and convincing language.

We owe a great many thanks to a great many people who helped and supported us during the writing of this book which includes Principal, Co-coordinator, and Students of BBI Section.

The syllabus contains a list of the topics covered in each chapter which will avoid the controversies regarding the exact scope of the syllabus. The text follows the term wise, chapter-topic pattern as prescribed in the syllabus. We have preferred to give the text of the section and rules as it is and thereafter, added the comments with the intention of explaining the subject to the students in a simplified language. While making an attempt to explain in a simplified language, some mistake of interpretation might have crept in.

This book is an unique presentation of subject matter in an orderly manner. This is a student-friendly book and tutor at home. We hope the teaching faculty and the student community will find this book of great use.

We welcome constructive suggestions for improvement.

We are extremely grateful to Mr. Pandey of Himalaya Publishing House Pvt. Ltd., and for their devoted and untiring personal attention accorded by them to this publication.

We gratefully acknowledge and express my sincere thanks to the following people without whose inspiration, support and constructive suggestions, this book would not have been possible.

Mr. Jitendra Singh Thakur (Trustee Thakur College)

Dr. Chaitaly Chakraborty (Principal Thakur College)

Mrs. Janki Nishikhant Jha

Authors

Syllabus

Revised Syllabus of Courses of B.Com. (Banking & Insurance) Programme at Semester II with effect from the Academic Year 2016-2017

Elective Courses (EC)

Financial Accounting – II

Modules at a Glance

Sr. No.	Modules	No. of Lectures
1	Valuation of Goodwill and Shares	**15**
2	Buyback of Equity Shares	**15**
3	Redemption of Preference Shares	**15**
4	Redemption of Debentures (Excluding Buyback of Own Debentures)	**15**
	Total	**60**

Sr. No.	Modules/Units
1	**Valuation of Goodwill and Shares**
	Valuation of Goodwill Maintainable Profit Method, Super Profit Method, Capitalisation Method, Annuity Method **Valuation of Shares** Intrinsic Value Method, Yield Method and Fair Value Method
2	**Buyback of Equity Shares**
	Introduction to Issue of Shares. Company Law/Legal Provisions (Including Related Restrictions, Power, Transfer to Capital Redemption Reserve Account and Prohibitions) Compliance of Conditions Including Sources, Maximum Limits and Debt Equity Ratio
3	**Redemption of Preference Shares**
	Company Law/Legal Provisions for Redemption of Preference Shares in Companies Act Sources of Redemption Including Divisible Profits and Proceeds of Fresh Issue of Shares Premium on Redemption from Security Premium and Profits of Company Capital Redemption Reserve Account – Creation and Use, Excluding Revised Schedule VI Balance Sheet.
4	**Redemption of Debentures**
	Redemption of Debentures by Payment from Sources Including out of Capital and/or out of Profits. Debenture Redemption Reserve and Debenture Redemption Sinking Fund Excluding Insurance Policy and Revised Schedule VI Balance Sheet. Redemption of Debentures by Conversion into New Class of Shares or Debentures with Options – Including at Par, Premium and Discount

Paper Pattern

Question Paper Pattern for Periodical Class Test for Courses at UG Programmes

Written Class Test **20 Marks**

Sr. No.	Particulars	Marks
1	Match the Column/Fill in the Blanks/Multiple Choice Questions (½ Mark each)	05 Marks
2	Answer in One or Two Lines (Concept-based Questions) (1 Mark each)	05 Marks
3	Answer in Brief (Attempt any two of the three) (5 Marks each)	10 Marks

Semester End Examination

Duration: 2½ Hrs. **Maximum Marks: 75**

All Questions are Compulsory carrying 15 Marks each. **Questions to be Set: 05**

Sr. No.	Particulars	Marks
Q.1	Objective Questions (a) Sub-questions to be asked 10 and to be answered any 08 (b) Sub-questions to be asked 10 and to be answered any 07 (*Multiple Choice/True or False/Match the Column, Fill in the Blanks)	15 Marks
Q.2	Full Length Practical Question	15 Marks
	OR	
Q.2	Full Length Practical Question	15 Marks
Q.3	Full Length Practical Question	15 Marks
	OR	
Q.3	Full Length Practical Question	15 Marks
Q.4	Full Length Practical Question	15 Marks
	OR	
Q.4	Full Length Practical Question	15 Marks
Q.5	(a) Theory Questions	08 Marks
	(b) Theory Questions	07 Marks
	OR	
Q.5	Short Notes To be asked 05 To be answered 03	15 Marks

Note: Full length question of 15 marks may be divided into two sub-questions of 08 and 07 marks.

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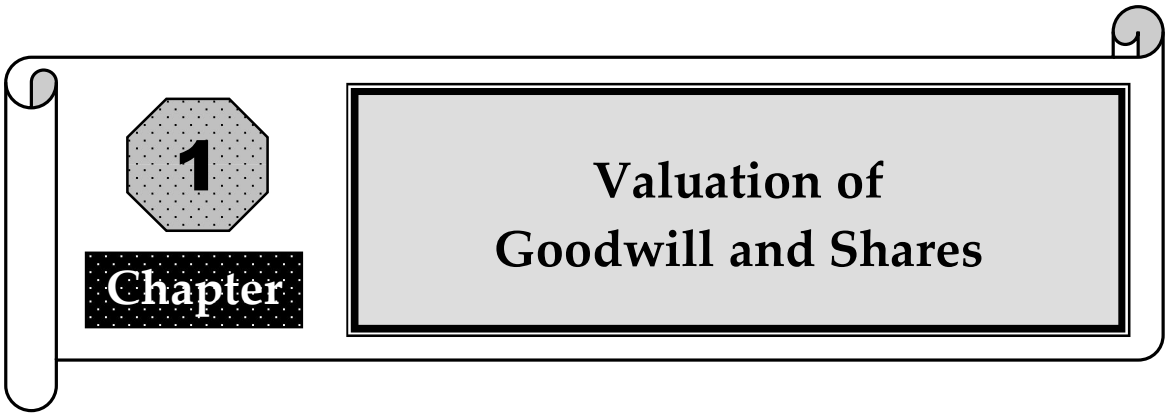


MEANING OF GOODWILL

Goodwill is an intangible but not fictitious assets that means it has some realisable value. From the accountant's point of view, goodwill, in the sense of attracting custom, has little significance unless it has a saleable value. To the accountant, therefore, goodwill may be said to be that element arising from the reputation, connection, or other advantages possessed by a business which enables it to earn greater profits than the return normally to be expected on the capital represented by the net tangible assets employed in the business. In considering the return normally to be expected, regard must be had to the nature of the business, the risks involved, fair management remuneration and any other relevant circumstances.

The goodwill possessed by a firm may be due, *inter alia*, to the following:

(a) The location of the business premises. The nature of the firm's products or the reputation of its service.
(b) The possession of favourable contracts, complete or partial monopoly, etc.
(c) The personal reputation of the promoters.
(d) The possession of efficient and contented employees.
(e) The possession of trademarks, patents or a well known business name.
(f) The continuance of advertising campaigns.
(g) The maintenance of the quality of the firm's product, and development of the business with changing conditions.

The need for evaluating goodwill may arise in the following cases:

(a) When the business or when the company is to be sold to another company or when the company is to be amalgamated with another company;
(b) When, stock exchange quotations not being available, shares have to be valued for taxation purposes, gift tax, etc.;
(c) When a large block of shares, so as to enable the holder to exercise control over the company concerned, has to be bought or sold; and
(d) When the company has previously written off goodwill and wants its written back.

In valuation of goodwill, consideration of the following factors will have a bearing:

(a) Nature of the industry, its history and the risks to which it is subject to.
(b) Prospects of the industry in the future.
(c) The company's history – its past performance and its record of past profits and dividends.
(d) The basis of valuation of assets of the company and their value.
(e) The ratio of liabilities to capital.
(f) The nature of management and the chance for its continuation.
(g) Capital structure or gearing.
(h) Size, location and reputation of the company's products.
(i) The incidence of taxation.
(j) The number of shareholders.
(k) Yield on shares of companies engaged in the same industry, which are listed in the Stock Exchanges.
(l) Composition of purchasers of the products of the company.
(m) Size of block of shares offered for sale since for large blocks very few buyers would be available and that has a depressing effect on the valuation. Question of control, however, may become important, when large blocks of shares are involved.
(n) The major factor of valuation of goodwill is the profits of the company. One who pays for goodwill looks to the future profit. The profits that are expected to be earned in future are extremely important for valuation of goodwill. The following are the important factors that have a bearing on future profits.
    (i) Personal skill in management.
    (ii) Nature of business.
    (iii) Favourable location.
    (iv) Access to supplies.
    (v) Patents and trademarks protection.
    (vi) Exceptionally favourable contracts and
    (vii) Capital requirements and arrangement of capital.
(o) Estimation of the profits expected to be earned by the firm and the amount of capital employed to earn such profits, are to be computed carefully.
(p) Market reputation which the company and its management enjoys.
(q) Returns expected by investors in the industry to which the firm or company belongs.

CONCEPT OF GOODWILL

When one company buys another company, the purchasing company may pay more for the acquired company than the fair market value of its net identifiable assets (tangible assets plus identifiable intangibles, net of any liabilities assumed by the purchaser). The amount by which the purchase price exceeds the fair value of the net identifiable assets is recorded as an asset of the acquiring company. Although sometimes reported on the balance sheet with a descriptive title such as "excess of acquisition cost over net assets acquired", the amount is customarily called goodwill.

Goodwill arises only as part of a purchase transaction. In most cases, this is a transaction in which one company acquires all the assets of another company for some consideration other than an exchange of common stock. The buying company is willing to pay more than the fair value of the

identifiable assets because the acquired company has a strong management team, a favorable reputation in the marketplace, superior production methods, or other unidentifiable intangibles.

The acquisition cost of the identifiable assets acquired is their fair market value at the time of acquisition. Usually, these values are determined by appraisal, but in some cases, the net book value of these assets is accepted as being their fair value. If there is evidence that the fair market value differs from net book value, either higher or lower, the market value governs.

Illustration 1: Company X acquires all the assets of company Y, giving Company Y ₹ 15 lakhs cash. Company Y has cash ₹ 50,000 accounts receivable that are believed to have a realizable value of ₹ 60,000, and other identifiable assets that are estimated to have a current market value of ₹ 11 lakhs.

Particulars	₹	₹
Total purchase price		15,00,000
Less: Cash acquired	50,000	
Accounts receivable	60,000	
Other identifiable assets (estimated)	11,00,000	12,10,000
Goodwill		**2,90,000**

This extra amount of ₹ 2,90,000 paid over an above, Net worth ₹ 12,10,000 is goodwill, which is a capital loss for purchasing company and to be shown on assets side of Balance Sheet. This entire amount will be written off against revenue profit, i.e., Profit and Loss Account over period of time.

Types of Valuing Goodwill

There are basically two types of valuing goodwill: (a) Simple profit method and (b) Super profit method.

(a) Simple Profit Method: Goodwill is generally valued on the basis of a certain number of years' purchase of the average business profits of the past few years. While calculating average profits for the purposes of valuation of goodwill, certain adjustments are made. Some of the adjustments are as follows:

Trading Profit/Business Profit/Recurring Profit/Normal Profit (of past year)

Particulars	1st Year	2nd Year	3rd Year
Net Profit before Adjustment and Tax	xx	xx	xx
Less: Non-trading Income (i.e., Income from Investment/Asset)			
Less: Non-recurring Income (i.e., Profit on Sale of Investment/Asset)	(xx)	(xx)	(xx)
Add: Non-recurring Loss (i.e., Loss on Sale of Investment/Asset)	xx	xx	xx
Trading Profit after Adjustment and before Tax.	xxx	xxx	xxx

Calculation of Average profit:

(a) Simple Average Profit = $\frac{\text{Total profit of past years}}{\text{Total number of past years}}$

(b) Weighted Average profit:

Years	Trading Profit (a)	Weight (b)	Product (a × b)
2014	xx	1	xx
2015	xx	2	xx
2016	xx	3	xx
		6	**xxx**

$$\text{Weighted Average Profit} = \frac{\text{Total product}}{\text{Total weight}}$$

Notes: If past profits are in increasing trend, then calculate Average Profit by weighted average method or otherwise simple average method.

Calculation of FMP (Future Maintainable Profit):

(a) All actual expenses and losses not likely to occur in the future are added back to profits.

(b) All actual income and gain not likely to occur in the future are deducted from profits.

(c) All profits likely to come in the future are added and all expenses likely to come in future are deducted.

Particulars	₹
Simple/Weighted Average Profit before Tax	XX
Add: Expenses incurred in past not to be incurred in future (i.e., Rent paid in past not payable in future)	XX
Less: Expenses not incurred in past to be incurred in future (i.e., Rent not paid in past payable in future)	(XX)
Less: Notional management Remuneration	(XX)
Future maintainable profit before tax	XXX
Less: Tax (If rate is not given, assume 50%)	(XX)
Future maintainable profit after tax	XXX

After adjusting profit in the light of future possibilities, average profit are estimated and then the value of goodwill is estimated.

This method is a simple one and has nothing to recommend since goodwill is attached to profits over and above what one can earn by starting a new business and not to total profits.

It ignores the amount of capital employed. for earning the profit. However, it is usual to adopt this method for valuing the goodwill of the practice of a professional person such as a chartered accountant or a doctor.

Calculation of Capital Employed and Average Capital Employed

Particulars	₹	₹
Tangible Trading Assets (at agreed/adjustment value) (except: intangible, non-trading/ fictitious assets):		
Plant and Machinery	xx	
Land and Building	xx	
Furniture and Fixtures	xx	
Stock	xx	
Cash/Bank	xx	xxx
Less: External Liability (at agreed/adjustment value) (except: capital and reserves and surplus):		
Loans	xx	
Debentures	xx	
Creditors	xx	
O/s Expenses, etc.	xx	xxx
Capital Employed		xxx

$$\therefore \text{Average Capital Employed} = \frac{\text{Opening Capital Employed} + \text{Closing Capital Employed}}{2} \text{ OR}$$

$$\text{Average Capital Employed} = \text{Closing Capital employed} - [\text{½ of Current year's profit} + \text{Current year's dividend}]$$

OR

Average Capital Employed = Opening Capital Employed + [½ of Current year's profit + Current year's dividend]

(b) Super Profit Method: The future maintainable profits of the firm are compared with the normal profits for the firm. Normal earnings of a business can be judged only in the light of normal rate of earning and the capital employed in the business. Hence, this method of valuing goodwill would require the following information:

(i) A normal rate of return for representative firms in the industry.

(ii) The fair value of capital employed.

The normal rate of earning is that rate of return which investors in general expect on their investments in the particular type of industry. Normal rate of return depends upon the risk attached to the investment, bank rate, market, need, inflation and the period of investment.

Normal Rate of Returns (NRR)

It is the rate at which profit is earned by normal business under normal circumstances or from similar course of business. Normal Rate of Returns means rate of profit on capital employed which is normally earned by others in a similar type of business. It will always be given in the problem in form of percentages.

Or

$$\text{NRR} = \text{Rate of Risk} + \text{Rate of Returns or } \frac{\text{Dividend per share}}{\text{Market price per share}} \times 100$$

As the capital employed may be expressed as aggregate of share capital and reserves less the amount of non-trading assets such as investments, the capital employed may also be ascertained by adding up the present values of trading assets and deducting all liabilities. Super profit is the simple difference between future maintainable operating profit and normal profit.

Illustration 2:

Rishi Computers Ltd. gives you the following summarised balance sheet as at 31st December, 2014.

Liabilities	₹	Assets	₹	₹
Preference Share Capital	5,00,000	Fixed Assets:		
Equity Share Capital	20,00,000	Cost	50,00,000	
Reserves and surplus	25,00,000	Depreciation	30,00,000	20,00,000
Long-term Loans	27,00,000	Capital Work-in-progress		40,00,000
Current Liabilities and Provisions	15,00,000	Investment (10%)		5,00,000
		Current Assets		25,00,000
		Underwriting Commission		2,00,000
	92,00,000			**92,00,000**

The company earned a profit of ₹ 18,00,000 before tax in 2014. The capital work-in-progress represents additional plant equal to the capacity of the present plant; if immediately operational there being no difficulty in sales. With effect from 1st January, 2015, two additional Works Managers are being appointed at ₹ 1,00,000 p.a. Ascertain the future maintainable profit and the capital employed, assuming the present replacement cost of fixed assets is ₹ 1,00,00,000 and the annual rate of depreciation is 10% on original cost.

Solution:

Normal Profit: Suppose investors are satisfied with a 18% return. In the above example, the normal profit will be ₹ 11,34,000, i.e., 18% of ₹ 63 lakhs.

The following are some items which generally require adjustment in arriving at the average of the past earnings:

1. Exclusion of material non-recurring items such as loss of exceptional nature through strikes, fires, floods and theft, etc., profit or loss of any isolated transaction not being part of the business of the company.
2. Exclusion of income and profits and losses from non-trading assets.
3. Exclusion of any capital profit or loss or receipt or expense included in the profit and loss account.
4. Adjustments for any matters suggested by notes, appended to the accounts or by qualifications in the Auditor's Report, such as provision for taxation and gratuities, bad debts, under or over provision for depreciation, inconsistency in valuation of stock, etc.
5. Depreciation is an important item that calls for careful review. The valuer may adopt book depreciation provided he is satisfied that the value was realistic and the method was suitable for the nature of the company and they were consistently applied from year to year. But imbalances do arise in cases where consistently written down value method was in use and heavy expenditure in the recent past has been made in rehabilitating or expanding fixed assets, since the depreciation charges would be unfairly heavy and would prejudice the seller. Under such circumstances, it would be desirable to readjust depreciation suitably as to bring a more equitable charge in the profits meant for averaging.

Another important factor comes up for consideration in averaging past profits and that is the trend of profits earned. It is imperative that estimation of maintainable profits be based on the only available record, i.e., the record of past earnings, but indiscrete use of past results may lead to an entirely fallacious and unrealistic result.

Where the profits of a company are widely fluctuating from year to year, an average fails to aid future projection. In such cases, a study of the whole history of the company and of earnings of a fairly long period may be necessary. If the profits of a company do not show a regular trend upward or downward, an average of the cycle can usefully be employed for projection of future earnings.

In some companies, profits may record a distinct rising or falling trend from year; in these circumstances, a simple average falls to consider a significant factor, namely, trend in earnings.

The shares of a company which record a clear upward trend of past profits would certainly be more valuable than those of a company whose trend of past earnings indicates a downtrend. In such cases, a weighted average giving more weight to the recent years than to the past is appropriate. A simple way of weighing is to multiply the profits by the respective number of the years arranged chronologically so that the largest weight is associated with the most recent past year and the least for the remotest.

Future Profitability Projections: Project is more a matter of intelligent guesswork since it is essentially an estimation of what will happen in the risky and uncertain future. The average profit earned by a company in the past could be normally taken as the average profit that would be maintainable by it in the future, if the future is considered basically as a continuation of the past. If future performance is viewed as departing significantly from the past, then appropriate adjustments will be called for before accepting the past average profit as the future maintainable profit of the company.

There are three methods of calculating goodwill based on super profit. The methods and formulae are as follows:

Purchase of Super Profit Method: Goodwill, as per this method, is Super Profit multiplied by a certain number of years. Under this method, an important point to note is that the number of years of purchase as goodwill will differ from industry to industry and from firm to firm. Theoretically, the number of years is to be determined with reference to the probability of a new business catching up with an old business. Suppose it is estimated that in two years' time a business, if started now will be earning about the same profits as an old business is earning now, goodwill will be equivalent to two times the super profits. In the example given above, goodwill will be ₹ 12.12 lakhs, i.e., ₹ 6.06 lakhs × 2 years.

Annuity Method of Super Profit: Goodwill, in this case, is the discounted value of the total amount calculated as per purchase method. The idea behind super profits methods is that the amount paid for goodwill will be recouped during the coming few years. But, in this case, there is a heavy loss of interest. Hence, properly speaking what should be paid now is only the present value of super profits paid annually at the proper rate of interest. Tables show that the present value 18% of Re. 1 received annually two years is 1.566. In the above example, the value of goodwill under this method will be 1.3 × ₹ 6.06 lakhs or ₹ 9.49 lakhs.

Capitalisation of Super Profit Method: This method tries to find out the amount of capital needed for earning the super profit.

The formula is:

$$= \frac{\text{Super Profit}}{\text{NRR}} \times 100$$

In above example, Goodwill will be:

$$= \frac{6.06 \text{ lakhs} \times 100}{18}$$

= ₹ 33.67 lakhs

Given in the Problems:

(a) Information of old firms assets and liabilities.
(b) Information regarding past or profit.
(c) Adjustment valuation of goodwill.

Required to Prepare:

Valuation of goodwill by different methods.

Steps, Method and Formula for Calculation of Goodwill:

I. Goodwill by purchase of average profit method:

Steps:

(a) Find out average trading profit.
(b) Find out the number of years purchase (it will always be given in problem).
(c) Goodwill = Number of year of purchase × Average trading profit.

II. Goodwill by purchase of future maintainable profit method:

Steps:

(a) Find out future maintainable profit.
(b) Number of year purchase (given in problem).
(c) Goodwill = Number of years of purchase × Future maintainable profit.

III. Goodwill by capitalisation of future maintainable profit method:

(a) Find out future maintainable profit.

(b) Find out capitalised value of future maintainable profit

$$\text{Capitalisation Value of Future Maintainable Profit} = \frac{\text{FMP}}{\text{NRR}} \times 100$$

(c) Calculate Capital Employed.

(d) Goodwill = Capitalised Value of FMP – Capital Employed

IV. Goodwill by purchase of super profit method:

(a) Find out average trading profit.

(b) Find out future maintainable profit.

(c) Find out capital employed.

(d) Find out Normal Rate Return (always given in the problem in terms of %).

(e) Find out number of year of purchase (given in the problem).

(f) Find out normal profit:

$$\text{Normal Profit} = \frac{\text{Capital Employed} \times \text{NRR}}{100}$$

(g) Find out super profit:

Super profit = Future maintainable profit – Normal profit

(h) Goodwill = Number of year purchase × Super profit

V. Goodwill by capitalisation of super profit method:

(a) Calculate super profit as discussed above.

(b) $\text{Goodwill} = \frac{\text{Super Profit} \times 100}{\text{NRR}}$

VI. Goodwill by present value of super profit method:

(a) Calculate super profit as discussed above.

(b) Goodwill = Annuity Rate × Super Profit

Note: Annuity Rate will always be given in the problem.

Illustration 3: X agreed to purchase the business of Y on 30th June, 2016. Profits earned by Y for the three preceding years were as below:

Year ending	₹
31/12/2013	82,000
31/12/2014	80,000
31/12/2015	84,000

The profit for the year 2014 includes an abnormal income of ₹ 3,000. The profit for the year 2015 is after writing off a loss due to theft of ₹ 4,000. At present, the assets of the business are not insured. X wants to take a comprehensive policy and has ascertained that an annual premium of ₹ 400 would have to be paid. X would like to manage the business whole time and this would involve giving up the present job in which he is drawing ₹ 2,000 per month. If X manages the business, the employment of the manager who is looking after the business for a salary of ₹ 1,500 per month can be terminated and X will draw a salary of ₹ 2,000 per month from the business. Calculate the goodwill if both the parties have agreed to value it at 2 year's purchase of average profits.

Solution:

Particulars	₹	₹
Profit for the year 2013		82,000
Profit for the year 2014	80,000	
Less: Abnormal Income	3,000	77,000
Profit for the year 2015	84,000	
Add: Loss due to theft	4,000	88,000
		2,47,000
Average Profits (2,47,000/3)		82,333.33
Less: Expenses to be paid-up future Insurance Premium	400	
X's salary (2,000 × 12)	24,000	(24,400)
		57,933.33
Add: Manager's salary (1,500 × 12)		18,000.00
Expected average annual profits		**75,933.33**

Goodwill = Expected average annual profits × Number of years of purchase

= ₹ (75,933.33 × 2) = ₹ 1,51,866.66

Illustration 4: P is negotiating with M for the purchase of the latter's business. It was decided to value goodwill according to the super profit method. M has been running the business only for the three years and hence P would like to attach weights for the profits of the three years in such a way that the most recent profits would be assigned a higher weight than the other year's profits. The profits of the past three years are as follows:

Year	₹
2013	36,000
2014	40,000
2015	38,000

Calculate the annual average profits.

Solution: Since P would like to attach a higher weightage to the profits of 2001, one method of weighting would be:

Year	Weight
2013	1
2014	2
2015	3

The weighted average annual profits of the business may be calculated as follows:

Year	Profits (₹)	Weights	Product (₹)
2013	36,000	1	36,000
2014	40,000	2	80,000
2015	38,000	3	1,14,000
		6	**2,30,000**

$$\therefore \text{ Weighted Average Annual Profits } = \frac{\text{Total Product}}{\text{Total Weight}}$$

$$= \frac{2,30,000}{6}$$

Average annual profit = ₹ 38,333

Illustration 5: The following particulars are available in the books of Bharti Telecom.

(a) Capital employed ₹ 1,50,000

(b) Trading profit after tax

2012	₹ 1,12,200
2013	₹ 1,15,000
2014	₹ 1,02,000 (loss)
2015	₹ 1,21,000

(c) Market rate of interest on investment 8%.

(d) Rate of risk return on capital invested in business 2%.

(e) Remuneration from alternative employment of the proprietor (if not engaged in business ₹ 13,600 p.a.).

You are required to compute the value of goodwill on the basis of 3 years' purchase of super profits of the business calculated on the average profit of the last four years.

Solution:

(a) Calculation of Average Profits:

Year	₹
2012	1,12,200
2013	1,15,000
2014	(1,02,000)
2015	1,21,000
	2,46,200

$$\text{Average Profit} = \frac{2,46,200}{4} = 61,550$$

(b) Calculation of Super Profits:

Particulars	₹
Average Profits	61,550
Less: Remuneration	13,600
	47,950
Less: Normal Profit @ 10%	
Capital employed × NRR (8% + 2%) on ₹ 1,50,000 (1,50,000 × 10%)	15,000
	32,950

Goodwill = 3 years' purchase of super profits

= 3 × 32,950

= 98,850

Illustration 6: From the following information given by Tata Telecom, calculate the value of goodwill:

(a) Average capital employed ₹ 12,00,000.

(b) Company declares 15% dividend on the shares of ₹ 20 each fully paid which is quoted in the market at ₹ 25.

(c) Net trading profit of the firm (after tax) for the past 3 years ₹ 2,15,200, ₹ 1,81,400 and ₹ 2,25,000.

You are required to compute the value of goodwill on the basis of 5 years' purchase of super profits of the business calculated on the average profit of the last three years.

Solution:

Particulars	₹
1st Year	2,15,200
2nd Year	1,81,400
3rdYear	2,25,000
	6,21,600

$$\text{Average Profit} = \frac{6,21,600}{3} = ₹\ 2,07,200$$

Calculation of super profit:

Particulars	₹
Average Trading Profit	2,07,200
Less: Normal profit @ 12% on ₹ 12,00,000	1,44,000
Super Profit	**63,200**

Goodwill = 5 years' purchase of super profits

= 5 × 63,200

= ₹ 3,16,000

Working Notes:

(1) Dividend per share = 15% of ₹ 20 = ₹ 3

(2) $$\text{Rate of return on capital} = \frac{\text{Dividend per share (DPS)}}{\text{Market price per share (MPS)}} \times 100 = \frac{3}{25} \times 100 = 12\%$$

Illustration 7: From the following information, ascertain the value of goodwill of Micro Computers Ltd. under super profit method.

Balance Sheet as on 31st March, 2014

Liabilities	₹	Assets	₹
Paid-up Capital (5,000 share of 100 each fully paid)	5,00,000	Goodwill at Cost	50,000
Bank Overdraft	1,16,700	Land and Building at cost	2,20,000
Sundry Creditors	1,81,000	Plant and Machinery at cost	2,00,000
Provision for Taxation	39,000	Stock in Trade	3,00,000
Profit and Loss Appropriation A/c	1,13,300	Bad Debts	1,80,000
	9,50,000		**9,50,000**

The company commenced operations in 1995 with a paid-up capital of ₹ 5,00,000. Profits for recent years (after taxation) have been as follows:

Year ended 31st March	₹
2010	40,000 (loss)
2011	88,000
2012	1,03,300
2013	1,16,000
2014	1,30,000

The loss in 2010 occurred due to a prolonged strike.

The income tax paid so far has been at the average rate of 40%. Dividends were distributed at the rate of 10% on the paid-up capital in 2011 and 2012 and at the rate of 15% in 2013 and 2014. The market price of share is ruling at ₹ 125 at the end of the year ended 31st March, 2009.

Solution: **Valuation of Goodwill of Micro Computers Ltd.**

Particulars	₹	₹
Capital Employed:		
Land and Building at Cost		2,20,000
Plant and Machinery at Cost		2,00,000
Stock in Trade		3,00,000
Sundry Debtors		1,80,000
		9,00,000
Less: Sundry Liabilities		
Bank Overdraft	1,16,700	
Sundry Creditors	1,81,000	
Provision for Taxation	39,000	3,36,700
Capital employed at the end of the year		**5,63,300**
Add back		
Dividend paid for the year	75,000	
Less: Half of the profits	65,000	10,000
Average capital employed		**5,73,300**
Rate of Return		
Average Dividends for the last 4 years at 12½% $\left(\frac{10+15+10+15}{4}\right)$		
Market price of shares on 31st March = ₹ 125		
Normal Rate of Return = $\frac{12.5}{125}\times 100 = 10\%$		

It may be more appropriate to relate the normal rate of return to the dividend paid in the last two years since price is related to dividend expected in future and for that, the most recent experience is relevant.

In that case, the normal rate of return will be:

$$\left(\frac{\text{Dividend per share (DPS)}}{\text{Market price per share(MPS)}}\times 100\right) = \frac{15\times 100}{125} = 12\%$$

Normal Profit on Average Capital employed:

at 10% on ₹ 5,73,300 57,330

at 12% on ₹ 5,73,300 68,796

Future Maintainable Profits – Weighted Average

Year	Profits ₹	Weights	Product ₹
2011	88,000	1	88,000
2012	1,03,000	2	2,06,000
2013	1,16,000	3	3,48,000
2014	1,30,000	4	5,20,000
		10	**11,62,000**

Average annual profit (after tax) = ₹ 1,16,200 FMP

Super Profits

Particulars	Normal Rate 12% (₹)	Normal Rate 10% (₹)
Average maintainable profits	1,16,200	1,16,200
Normal profit on capital employed	68,796	57,330
Super Profit	**47,404**	**58,870**
Goodwill at 5 years' purchase of Super Profits	2,37,020	2,94,350
Goodwill at 3 years' purchase	1,42,212	1,76,610

Three to five years' purchase of super profits can be taken as fair value of goodwill. Thus, depending on the assumptions regarding the normal rate of return and the number of years' purchase, goodwill may range between ₹ 1,42,212 and ₹ 2,94,350.

Illustration 8: The following is the balance sheet of HCL Ltd. as on March 31, 2015.

Liabilities		₹	Assets	₹
40,000 Equity Shares of ₹ 10 each		4,00,000	Goodwill	40,000
10% Debenture		1,20,000	Land and Banking	2,00,000
Profit & Loss Balance a on 01/04/14	40,000		Plant and Machinery	2,90,000
Add: Profit for the year before			Investment	1,00,000
providing for taxes	1,60,000	2,00,000	Stock	80,000
Sundry Creditors		80,000	Debtors	90,000
Provision for Taxation		40,000	Cash and Bank	40,000
		8,40,000		**8,40,000**

Profit includes ₹ 10,000 which is the income from investments. The present market value of the assets are:

Particulars	₹
Land and Building	2,50,000
Plant and Machinery	3,50,000
Investment	1,50,000

Current assets (book value).

Normal return on capital employed in this type of business is 10%.

Adjustment of depreciation is not required for valuation of goodwill.

Calculate the value of goodwill on the basis of 3 years' purchase of super profit of the company.

Solution: **Average Trading Capital Employed**

Particulars		₹
Land and Building		2,50,000
Plant and Machinery		3,50,000
Stock		80,000
Debtors		90,000
Cash and Bank		40,000
Less: **Current Liabilities**		**8,10,000**
Sundry Creditors	₹ 80,000	
Provision for Taxation	₹ 40,000	(1,20,000)
Capital Employed		**6,90,000**
Less: Half of current year's profit		(37,500)
Average Capital Employed		**6,52,500**

Working Notes:

The half of current year's profit is calculated as below:

Particulars	₹
Profit for the year	1,60,000
Less: Non-trading income	10,000
	1,50,000
Less: Income tax (assume 50%)	75,000
Current year's profit	**75,000**
$\frac{75,000}{2} = 37,500$	

$$\therefore \text{Normal Profit} = \text{Average Capital Employed} \times \frac{NRR}{100}$$

$$= 6,52,000 \times \frac{10}{100}$$

$$= 65,200$$

$$\text{Super Profit} = \text{Average Profit} - \text{Normal Profit}$$

$$= 75,000 - 65,200$$

$$= 9,800$$

$$\therefore \text{Goodwill} = \text{Super Profit} \times \text{No. of years' purchase}$$

$$= 9,800 \times 3$$

$$= 29,400$$

Illustration 9: From the following information, calculate value of the goodwill for Reliance Ltd. by:

(i) Super profit method.

(ii) Capitalisation method.

(a) Average capital employed in the business ₹ 6,00,000.

(b) Net trading profit of the firm for the past three years were ₹ 1,07,600, ₹ 90,700 and ₹ 1,12,500.

(c) Rate of interest expected from capital having regard to the risk involved 12%.

(d) Fair Remuneration to the firm for their services ₹ 12,000 per annum.

(e) Sundry assets of the firm ₹ 7,54,762.

(f) Sundry liabilities ₹ 31,329.

Note: Take 8 years' purchase of super profit as value of good will.

Solution:

1. Calculation of profit:

$$\text{Simple Average} = \frac{1,07,600 + 90,700 + 1,12,500}{3 \text{ years}}$$

$$= ₹ 1,03,600$$

2. Calculation of future maintainable profit:

Simple average profit	1,03,600
Less: Fair Remunerations to partner	(12,000)
Future maintainable profit	**91,600**

3. Calculation of Capital Employed:
   Given = ₹ 6,00,000
4. NRR = 12% (given)
5. Number of years purchase: 8 years (given)
6. Calculation of Normal Profit:

$$\text{Normal Profit} = \text{Capital Employed} \times \frac{\text{NRR}}{100}$$

$$= 6,00,000 \times \frac{12}{100}$$

$$= ₹\ 72,000$$

Super Profit = FMP – Normal Profit
= 91,600 – 72,000
= 19,600

Calculation of Goodwill by purchase super profit method:
Goodwill = Number of years purchase × super profit
= 8 × 19,600
= ₹ 1,56,800

7. Calculation of Goodwill by capitalised value of super profit method:

$$\text{Goodwill} = \frac{\text{Super Profit} \times 100}{\text{NRR}}$$

$$= \frac{19,600}{12} \times 100$$

$$= ₹\ 1,63,333$$

OR

Calculation of capitalised value of super profit method:
Goodwill = Capitalised Value of FMP – Capital Employed
= 7,63,333 – 6,00,000
= ₹ 1,63,333

Illustration 10: A company desirous of selling its business to another company has earned an average profit in past ₹ 1,50,000 per annum. It is considered that such average profit fairly represents the profit likely to be earned in the future except that:

(a) Director's fees ₹ 10,000 charged against such profit will not be payable by the purchasing company whose existing board can cope up with additional work without additional fees.
(b) Rent at ₹ 20,000 p.a. which has been paid by the existing company will not be charged in the future.

The value of the tangible assets of the existing company at the proposed date of sale was ₹ 19,00,000 and was considered that reasonable return on capital invested, for the type of company was 8%.

Calculate the value of Goodwill at 3 years' purchase of super profits.

Solution:

1. Calculation of Average Profit: ₹ 1,50,000 (Given)
2. Calculation of future maintainable profit:

Average profit	1,50,000
Add: Director's fees not required in future	10,000
Add: Rent not payable in future	20,000
Future maintainable profit	**91,600**

3. Calculation of capital employed: ₹ 19,00,000 (Given)
4. Calculation of NRR: 8% (Given)
5. Calculation of number of years' purchase: 3 years (Given)
6. Calculation of Normal Profit:

$$\text{Normal Profit} = \text{Capital Employed} \times \frac{\text{NRR}}{100}$$

$$= \frac{19,00,000 \times 8}{100}$$

$$= 1,52,000$$

(i) Calculation of Super Profit:

Super Profit = FMP – Normal Profit
= 1,80,000 – 1,52,000
= ₹ 28,000

(ii) Calculation of Goodwill by purchase of super profit method:

Goodwill = Super profit × Number of years' purchase
= 28,000 × 3
= ₹ 84,000

Illustration 11: The average net profit was (before adjustment) ₹ 2,07,000. It included investment income ₹ 2,000. The cost (also present value) of investment was ₹ 50,000. Expenses amounting to ₹ 3,000 p.a. are likely to be discontinued in future. 50 paise in rupee may be taken as average annual taxation. 6% represented a fair commercial return. The average capital employed was ₹ 13,50,000 but upon valuation obtained, the actual was valued ₹ 14,50,000.

(a) Assuming seven years' purchase of super profit, what is the value of goodwill?

(b) What will be the value of goodwill under capitalisation method?

Solution:

1. Calculation of Average Profit:

Average profit (before adjustment)	2,07,000
Less: Investment income	(2,000)
Average profit (after adjustment)	**2,05,000**

2. Calculation of Future Maintainable Profit:

Average profit (before adjustment)	2,05,000
Add: Expenses likely to be discontinued in future	3,000
Future maintainable profit before tax	2,08,000
Less: Tax @ 50%	(1,04,000)
Future maintainable profit after tax	**1,04,000**

3. Calculation for Capital Employed:

As given	14,50,000
Less: Investment	(50,000)
Actual Capital Employed	**14,00,000**

4. NRR = 6% (Given)
5. Normal of years' purchase = 7 years (Given)
6. Calculation of Normal Profit:

$$\text{Normal Profit} = \text{Capital} \times \frac{\text{NRR}}{100}$$

$$= 14,00,000 \times \frac{6}{100}$$

$$= ₹\ 84,000$$

7. **C**alculation of Super Profit:

Super profit = 1,04,000 – 84,000

= ₹ 20,000

8. Calculation of Goodwill by purchase of super profit method:

Goodwill = No. of years × Super Profit

= 7 × 20,000

= ₹ 1,40,000

9. Goodwill by capitalisation of super profit:

$$\text{Goodwill} = \frac{\text{Super Profit.}}{\text{NRR}} \times 100$$

$$= \frac{20,000}{6} \times 100$$

$$= ₹\ 3,33,333$$

Illustration 12: L, M and N are partners sharing profit and losses in the ratio of 4:3:3 respectively. The firm closes its account on 31st December, every year. On 31st March, 2015, N died and it was decided to calculate the amount of the goodwill to be paid to the heirs of Mr. N. According to the partnership agreement, Goodwill was to be valued at the three year purchase of average super profits of the three years upto the death after deducting 17.5% interest on capital employed and paying a reasonable remuneration of ₹ 30,000 per annum to each partner. Average capital employed in the business was ₹ 2,00,000.

The profits of the earlier years before charging interest on capital employed were as follows:

Year	₹
2012	1,47,000
2013	1,59,000
2014	2,23,000

The profits for the year ending 31st December, 2015 were ₹ 1,31,000. Profits may be considered to have been earned uniformly for all the years including 2015. Calculate the amount of goodwill to be paid to the heirs of Mr. N.

Solution:

1.

Year	Profit	Weight	Total Product
2012	1,47,000	1	1,47,000
2013	1,59,000	2	3,18,000
2014	2,23,000	3	6,69,000
		6	**11,34,000**

2. Calculation for Average Profit:

$$\therefore \text{ Weighted Average Profit} = \frac{11{,}34{,}000}{6} = ₹\ 1{,}89{,}000$$

3. Calculation for FMP:

∴ Weighted Average present	1,89,000
Less: Managerial Remuneration (30,000 × 3)	(90,000)
FMP	**99,000**

4. Calculation for Capital Employed = ₹ 2,00,000
5. Calculation of NRR = ₹ 17.5%

$$\text{Calculation for Normal Profit} = \text{Capital Employed} \times \frac{\text{NRR}}{100}$$

$$= 2{,}00{,}000 \times \frac{17.5}{100}$$

$$= ₹\ 35{,}000$$

6. Calculation for super profit:

Super Profit = FMP – Normal Profit
= 99,000 – 35,000
= 64,000

7. Calculation of Goodwill by purchase of super profit.

Goodwill = Number of years purchase × super profit
= 3 × 64,000
= ₹ 1,92,000

$$\therefore \text{ Goodwill to be paid to legal heirs of N} = 1{,}92{,}000 \times \frac{3}{10} = 57{,}600$$

Illustration 13: Following is the Balance sheet of A Limited as on 31st March, 2014:

Liabilities	₹	Assets	₹	₹
Share Capital		Goodwill		1,25,000
5,000 share of ₹ 100 each	5,00,000	Land and Building (at cost)	1,80,000	
Reserve Fund	1,50,000	*Less:* Depreciation	36,000	1,44,000
Workmen Compensation Fund	25,000	Plant and machinery (at cost)	2,40,000	
Workmen Profit Sharing Fund	45,000	*Less:* Depreciation	40,000	2,00,000
Profit and Loss Account	1,50,000	Investment for replacement of plant		1,00,000
Creditors	2,30,000	& machinery		
Other Liabilities	1,00,000	Books Debts	3,60,000	
		Less: R.D.D.	30,000	3,30,000
		Stock		2,00,000
		Cash at Bank		75,000
		Preliminary expense		26,000
	12,00,000			**12,00,000**

Further Information:

(i) A Ltd. had been carrying on business for the past several years. The company is to be taken over by another company and for this purpose, you are required to value Goodwill by "Capitalisation of maintainable profits method". For this purpose, following additional information is available.

(a) The profit earned by the company for the past three years were as under:

Year ended 31st March, 2012 ₹ 3,10,000
Year ended 31st March, 2013 ₹ 2,73,000
Year ended 31st March, 2014 ₹ 2,90,000

The profits given are profits before tax, which was 50% throughout.

(b) The new company expects to carry on business with its own board of directors, without any addition.

The directors' fees paid by A Ltd. to its directors amounted to ₹ 9,000 per year, no more payable in future.

(c) The new company expects a large increase in volume of business and therefore, will have to pay extra rent of ₹ 12,000 per year.

(d) As on 31st March, 2015, land and buildings were worth ₹ 3,00,000, whereas plant and machinery were worth only ₹ 1,80,000. There is sufficient provision for doubtful debts. There is no fluctuation in the value of investment and stock.

(e) Liability under workmen compensation fund was only ₹ 5,000.

(f) The expected rate of return on similar business may be taken at 12%.

You are required to value Goodwill according to above instructions. All your workings should form part of your answer. (Take average capital employed, the same as closing employed for your calculations.)

Solution: Calculation of Average Profit

$$\text{Simple Average} = \frac{\text{Total profit (past year)}}{\text{Total Number of years}}$$

$$= \frac{3,10,000 + 2,73,000 + 2,90,000}{3}$$

$$= ₹\ 2,91,000$$

1. Calculation of future maintainable profit.

Particulars	₹
Simple Average Profit	2,91,000
Add: Directors' fees not required in future	9,000
Less: Extra rent payable in future	(12,000)
FMP before tax	2,88,000
Less: Tax @ 50%	(1,44,000)
FMP after tax	**1,44,000**

2. Calculation of Capital Employed:

Particulars	₹	₹
Tangible Trading Asset (at Average Value):		
Land and Building	3,00,000	
Plant and Machinery	1,80,000	
Investment	1,00,000	
Debtors	3,30,000	
Stock	2,00,000	
Cash at Bank	75,000	11,85,000
Less: External Liabilities:		
Workmen Compensation Fund	5,000	
Workmen Profit Sharing Fund	45,000	
Creditors	2,30,000	
Other Liability	1,00,000	(3,80,000)
Capital Employed		**8,05,000**

3. NRR = 12% (Given)
4. Number of years' purchase = 3 years (Given)
5. Calculation for capitalised value of FMP:

$$\text{Capitalised Value of FMP} = \frac{\text{FMP}}{\text{NRR}} \times 100$$

$$= \frac{1,44,000}{12} \times 100$$

$$= ₹\ 12,00,000$$

6. Calculation of Goodwill by capitalised of FMP Method:

Goodwill = Capitalised value of FMP – Capital Employed

= 12,00,000 – 8,05,000

= ₹ 3,95,000

Illustration 14: From the following Balance sheet of Prosperous Ltd. as at 31st Dec. 2015 and further information, value goodwill at five year purchase of super profit based on average profit of last three years.

Liabilities	₹	₹	Assets	₹	₹
Share Capital:			**Fixed Assets:**		
Equity Capital	1,50,000		Goodwill	20,000	
Preference Capital	50,000	2,00,000	Machinery	2,10,000	
Reserves and Surplus:			Land and Building	1,20,000	
General Reserves	2,60,000		Furniture	60,000	

Profit and Loss Account	15,000	2,75,000	Vehicles	90,000	5,00,000
Secured Loan		1,25,000	Stocks	55,000	
Current Liabilities:			Debtors	1,00,000	
Sundry Creditors	60,000		Cash and Bank Balance	25,000	1,80,000
Bills Payable	30,000		Misc. Expenditure		20,000
Outstanding Expenses	10,000	1,00,000			
		7,00,000			**7,00,000**

(a) Profit (before tax)

For 2015 ₹ 1,11,000

For 2014 ₹ 1,05,000

For 2013 ₹ 99,000

(b) Machinery costing ₹ 10,000 purchased on 31st December, 2015 was wrongly charged to revenue.

(c) Normal return in similar business is 10% of the average net tangible capital employed.

(d) Machinery, land and buildings have appreciated by 10% and 20% respectively. Furniture and vehicles have depreciated by 5% and 10% respectively. Outstanding expenses were up by ₹ 3,750.

(e) Provision for tax – 50%.

(f) Ignore additional depreciation effect on revalued figures of Assets.

Solution: **Calculation of Average Profit**

Year	Profit	Weight	Product
2013	99,000	1	99,000
2014	1,05,000	2	2,10,000
2015	1,11,000 + 10,000	3	3,63,000
		6	**6,72,000**

1. Weighted Average Profit $= \frac{\text{Total of product}}{\text{Total of weight}}$

$= \frac{6,72,000}{6}$

$= 1,12,000$

2. Calculation of FMP:

Average profit before.tax	1,12,000
Less: Tax @ 50%	(5,60,000)
FMP after tax	**56,000**

3. Calculation of Capital Employed:

Particulars	₹	₹
Tangible Trading Assets (at value):		
Machinery [2,10,000 + 10,000 + 22,000]	2,42,000	
Land and Building	1,44,000	
Furniture	57,000	
Vehicles	81,000	
Stock	55,000	
Debtors	1,00,000	

Cash and Bank	25,000	7,04,000
Less: Sundry Creditors	60,000	
Bills Payable	30,000	
O/s Expenses	13,750	
Secured Loan	(1,25,000)	(2,28,750)
Capital Employed		**4,75,250**

4. NRR = 10% (Given)
5. Normal years' purchase = 5 years (Given)
6. Calculation of Normal Profits:

$$\text{Normal Profit} = \text{Capital Employed} \times \frac{\text{NRR}}{100}$$

$$= 4,75,250 \times \frac{10}{100}$$

$$= ₹\ 47,525$$

7. Calculation of super profits:

Super Profit = FMP – Normal Profit
= 56,000 – 47,525
= ₹ 8,475

8. Calculation for Goodwill by purchased super profit method:

Goodwill = Number of years' purchase × Super Profit
= 5 × 8,475
= ₹ 42,375

Illustration 15: ALTO agreed to purchase business of A. For that purpose, goodwill is to be valued at three years' purchase of the weighted average of previous 4 years adjusted profits.

The profits for the year ending 31/12/2012 to 31/12/2015 were as under:

Year ending 2012 ₹ 20,200
Year ending 2013 ₹ 24,800
Year ending 2014 ₹ 25,000
Year ending 2015 ₹ 30,000

Following additional information is available:

(a) On 01/09/2014, major repair expenditure to plant and machinery for 6,000 was charged to revenue. That was agreed to be capitalized for goodwill, subject to 10% p.a. depreciation on diminishing balance method to be calculated.
(b) The closing stock for the year ending 31/12/2013 was overvalued by ₹ 2,400.
(c) In order to cover cost of management, an annual charge of ₹ 4,800 should be made for valuation of Goodwill.

Compute value of goodwill.

Solution:

Calculation of Trading profit:

Particulars	2012 (₹)	2013 (₹)	2014 (₹)	2015 (₹)
Profit before adjustment	20,200	24,800	25,000	30,000
Add: P/M [capital Expenses charged	–	–	6,000	–

as Revenue Express]				
Less: Depreciation 10% on above P/M				W.D.V. method
For (4 & 12 month)	–	–	(200)	(580)
				(6,000 – 200 × 10%)
Less: Closing Stock overvalued		(2,400)		
Add: Opening Stock overvalued			2,400	–
Less: Cost of Management	(4,800)	(4,800)	(4,800)	(4,800)
Adjusted Profit	**15,400**	**17,600**	**28,400**	**24,620**

Year	Profit	Weights	Product
2012	15,400	1	15,400
2013	17,600	2	35,200
2014	28,400	3	85,200
2015	24,620	4	98,480
		10	**2,34,280**

$$\text{Weighted Average Profit} = \frac{2,34,280}{10} = ₹\ 23,428$$

Calculation for Goodwill by purchase of Weighted Average method:

Goodwill = Number of years' purchase × Weighted Average Profit

= 3 × 23,428

= ₹ 70,284

Illustration 16: The balance sheet of a partnership was as follows:

Particulars	₹	₹	Particulars	₹
Capital Accounts:			Goodwill	1,000
A	50,000		Plant	70,000
B	30,000		Furniture	3,000
C	20,000	1,00,000	Stock in trade	45,000
Current Accounts:			Sundry debtors	28,000
A	8,000		Prepayments	10,000
B	7,000		Bank balance	19,000
C	10,000	25,000		
Sundry Creditors		51,000		
		1,76,000		**1,76,000**

It was proposed to form a company to acquire the business for the purpose of the acquisitions. The assets revalued as follows:

Plant of ₹ 60,000; Furniture ₹ 4,000; Stock ₹ 25,000; Pre-payment Nil. It was ascertained that the profits before charging anything in respect of the partners, for the past five years been as follow ₹ 25,000, ₹ 29,000, ₹ 33,000, ₹ 35,000 and ₹ 33,000. Included in these profits were non-recurring items, averaging ₹ 1,500. But from the nature of the business, casual non-recurring items were found to arise every year and promoters agreed that a figure of ₹ 1,200 should be allowed as profit from this source.

Similar business paid a dividend of 8% p.a. on their ordinary share and partners who would be directors of the company were worth remuneration of: A – ₹ 4,000; B – ₹ 5,000 and C – ₹ 6,000 p.a.

Five years' purchase of the adjusted super profits on annuity basis was the agreed price for goodwill; the super profit being taken on the value of the goodwill. Ignore taxation. Annuity rate for Re. 1 @ 8% is 3.75.

Solution:

1. Calculation of average profit:

$$\text{Simple Average} = \frac{25{,}000 + 29{,}000 + 33{,}000 + 35{,}000 + 33{,}000}{5}$$

=	31,000
Less: Non-recurring items [1,500 – 1,200]	300
Average Profit	**30,700**

2. Calculation of FMP:

Average profit before tax	30,700
Less: Managerial Remuneration (4,000 + 5,000 + 6,000)	(15,000)
FMP	**15,700**

3. Calculation of capital Employed:

Particulars	₹	₹
Tangible Trading Assets:		
Plant	60,000	
Furniture	4,000	
Stock	42,000	
Debtors	25,000	
Pre-payments	Nil	
Bank	19,000	1,50,000
Less: External Liabilities:		
Sundry Creditors		(51,000)
Capital Employed		**99,000**

4. Calculation of NRR = 8%
5. Number of years' purchase = 5 years
6. Calculation of Normal Profit:

$$\text{Normal Profit} = \text{Capital Employed} \times \frac{\text{NRR}}{100}$$

$$= 99{,}000 \times \frac{8}{100}$$

$$= ₹\ 7{,}920$$

7. Calculation of Super Profit:

$$\text{Super Profit} = \text{FMP} - \text{Normal Profit}$$

$$= 15{,}700 - 7{,}920$$

$$= ₹\ 7{,}780$$

8. Calculation of Goodwill by purchase of super profit method:

$$\text{Goodwill} = \text{Normal of years' purchase} \times \text{Super Profit}$$

$$= 5 \times 7{,}780$$

$$= ₹\ 38{,}900$$

9. Calculation of Goodwill by Annuity method of Super Profit:

Goodwill = Annuity Rate × Super Profit

= 3.75 × 7,780

Goodwill = ₹ 29,175

Illustration 17: From the following information supplied to you, ascertain the value of Goodwill of Anamika Ltd. which is carrying business as retail trader under the capitalisation of profit method.

Balance sheet as on March 31, 2015

Particulars	₹	Particulars	₹
Paid-up Capital		Goodwill at cost	50,000
5,000 Equity Shares of ₹ 100 each fully paid	5,00,000	Land and Buildings at cost	2,20,000
Profit and Loss Appropriation A/c	1,13,300	Plant and Machinery cost	2,00,000
Bank Overdraft	1,16,700	Stock in Trade	3,00,000
Provision for Taxation	39,000	Book Debt (–) Provisions for bad debts	1,80,000
Sundry Creditors	1,81,000		
	9,50,000		**9,50,000**

The company commenced operations in 1985 with a paid-up capital of ₹ 5,00,000. Profit for recent years (after taxation) have been as follows:

Year ending March, 31	₹
2011	(Loss) 40,000
2012	88,000
2013	1,03,000
2014	1,16,000
2015	1,30,000

(a) The loss in 2011 occurred due to prolonged strike.

(b) The income tax paid so far has been at the average rate of 40%, but it is likely to be 50% now onwards.

(c) Dividend were distributed at the rate of 10% at the end of the year ending March 31, 2015.

(d) The market price of shares is ruling at ₹ 125 at the end of the year ending March, 31, 2015.

(e) Profit till 2015 had been ascertained after debiting ₹ 40,000 as remuneration to the managing director. The Government has approved a remuneration of ₹ 60,000 with effect from April 1, 2015.

(f) The company has been able to secure a contract for supply of materials at advantageous prices. The advantage has been valued at ₹ 40,000 p.a. for the next five years.

Solution:

1. Calculation for Average Profit:

Note: Loss in the years 2014 is to be ignored because it was due to prolonged strike which is a abnormal event in the normal course of business. We are excluding profit of the years 2012 also because impact of the strike was there in that year also.

	2013	2014	2015
Profit before tax =	$\frac{1,03,000}{60\%}$ = 1,71,667	$\frac{1,16,000}{60\%}$ = 1,93,333	$\frac{1,30,000}{60\%}$ = 2,16,667

2. Calculation for Weighted Average Profit:

Year	Profit	Weights	Product
2013	1,71,667	1	1,71,667
2014	1,93,333	2	3,86,666
2015	2,16,667	3	6,50,001
		6	**12,08,334**

$$\text{Weighted Average Profit} = \frac{12,08,334}{6} = ₹\ 2,01,389$$

3. Calculation for FMP:

Weighted Average Profit	2,01,389
Less: Extra director's fees in future	(20,000)
Add: Profit likely to be earned in future	40,000
FMP before tax	2,21,389
Less: Tax at 50%	1,10,694
FMP after tax	**1,10,695**

4. Calculation for Capital Employed:

Particulars	₹	₹
Tangible Trading Assets:		
Land & Building	2,20,000	
Plant & Machinery	2,00,000	
Stock	3,00,000	
Debtors	1,80,000	9,00,000
Less: External Liabilities:		
Bank	1,16,700	
Provision for Tax	39,000	
Creditors	1,81,000	(3,36,700)
Capital Employed		**5,63,300**

5. Calculation for NRR:

$$\text{NRR} = \frac{\text{Dividend Per Share}}{\text{Market Price Per Share}} \times 100$$

$$= \frac{10}{125} \times 100$$

$$= 8\%$$

6. Calculation of Normal Profit:

$$\text{Normal Profit} = \text{Capital Employed} \times \frac{\text{NRR}}{100}$$

$$= 5,63,300 \times \frac{8}{100}$$

$$= ₹\ 45,064$$

7. Calculation of Super Profit:

$$\text{Super Profit} = \text{FMP} - \text{Normal Profit}$$

$$= 1,10,695 - 45,064$$

$$= ₹\ 65,631$$

8. Calculation of Goodwill by capitalisation of super profit method:

$$\text{Goodwill} = \frac{\text{Super Profit}}{\text{NRR}} \times 100$$

$$= \frac{65,631}{8\%}$$

$$= ₹\ 8,20,387$$

Valuation of Shares

In the case of shares quoted in the recognised Stock Exchanges, the prices quoted in the Stock Exchanges are generally taken as the basis of valuation of those shares. However, the Stock Exchange prices are determined generally on the demand supply position of the shares and on business cycle. The London Stock Exchange opines that the Stock Exchange may be linked to a scientific recording instrument which registers not its own actions and options but the actions and options of private institutional investors all over the country/world. These actions and options are the result of fear, guess work, intelligent or otherwise, good or bad investment policy and many other consideration. The quotations what result definitely do not represent valuation of a company by reference to its assets and its earning potential. Therefore, the accountants are called upon to value the shares by following the other methods.

The value of share of a company depends on so many factors such as:

1. Nature of business.
2. Economic policies of the government.
3. Demand and supply of shares.
4. Rate of dividend paid.
5. Yield of other related shares in the stock exchange, etc.
6. Net worth of the company.
7. Earning capacity.
8. Quoted price of the shares in the stock market.
9. Profits made over a number of years.
10. Dividend paid on the shares over a number of years.
11. Prospects of growth, enhanced earning per share, etc.

Need and Purpose of Valuation of Shares

The need for valuation of shares may be felt by any company in the following circumstances:

1. For assessment of Wealth Tax, Estate Duty, Gift Tax, etc.
2. Amalgamations, Absorptions etc.
3. For converting one class of shares to another class.
4. Advancing loans on the security of shares.
5. Compensating the shareholders on acquisition of shares by the Government under a scheme of nationalisation.
6. Acquisition of interest of dissenting shareholder under the reconstruction scheme, etc.

Factors Influencing Valuation

The valuation of shares of a company is based, *inter alia*, on the following factors:

1. Current stock market price of the shares.
2. Profits earned and dividend paid over the years.
3. Availability of reserves and future prospects of the company.

4. Realizable value of the net assets of the company.
5. Current and deferred liabilities for the company.
6. Age and status of plant and machinery of the company.
7. Net worth.of the company.
8. Record of efficiency, integrity and honesty of Board of Directors and other managerial personnel of the company.
9. Quality of top and middle management of the company and their professional competence.
10. Record of performance of the company in financial terms.

Methods of Valuation of Shares

Certain methods have come to be recognised for valuation of shares of a company, *viz*., (1) Open market price; (2) Stock exchange quotation; (3) Net assets basis; (4) Earning per share method; (5) Yield or return method; (6) Net worth method; (7) Break-up value etc.

IDEAL VALUATION METHOD

The various methods of valuation of shares of a company as mentioned above have their individual merits and demerits. Therefore, it has been universally recognised that while valuing the shares of a company, it is advisable not to depend upon any single method but to resort to a combination of three well recognized methods, *viz*., market value method, yield or return on investment method and net assets value method for arriving at a fair and reasonable shares exchange ratio. While doing this, due weightage should be given to each method based on the company's performance and future prospects.

INTRINSIC VALUE METHOD

This method is also called as Assets backing method, Real value method, Balance Sheet method or Break-up value methods. Under this method, the net assets of the company including goodwill and non-trading assets are divided by the number of shares issued to arrive at the value of each share.

If the market value of the assets is available, the same is to be considered and in the absence of such information, the book values of the assets shall be taken as the market value. While arriving at the net assets, the fictitious assets such as preliminary expenses, the debit balance in the Profit and Loss A/c should not be considered. The liabilities payable to the third parties and to the preference shareholders is to be deducted from the total asset to arrive at the net assets. The funds relating to equity shareholders such as General Reserve, Profit and Loss Account, Balance of Debenture Redemption Fund, Dividend Equalisation Reserve, Contingency Reserve, etc. should not be deducted.

Illustration 18: From the information given below and the balance sheet of Cipla Limited on 31st December, 2015, find the value of share by Intrinsic value method.

Balance Sheet

Particulars	₹	Particulars	₹
1000, 8% Preferential Shares of 100 each fully paid	1,00,000	Buildings	70,000
4,000 Equity shares of ₹ 100 fully paid	4,00,000	Furniture	3,000
Reserves	1,50,000	Stock (Market value)	4,50,000
Profit and Loss Account	5,10,000	Investment at cost (Face value ₹ 4,00,000)	3,35,000
Creditors	48,000	Debtors	2,80,000

		Bank	60,000
		Preliminary Expenditure	10,000
	12,08,000		**12,08,000**

Building is now worth of ₹ 3,50,000 and the Preferential shareholders are having preference as to capital.

Solution: Valuation of Equity Share (Intrinsic Value Method)

Particulars	₹
Building	3,50,000
Furniture	3,000
Stock	4,50,000
Investment	3,35,000
Debtors	2,80,000
Bank	60,000
Total Assets	14,78,000
Less: Creditors	(48,000)
Net Assets	14,30,000
Less: Preference Share Capital	(1,00,000)
Assets Available for equity shareholders	**13,30,000**

$$\text{Value of Equity Share} = \frac{\text{Net Assets Available to Equity Shareholders}}{\text{No. of Equity Shares}}$$

$$= \frac{13,30,000}{4,000}$$

$$= ₹\ 332.5$$

∴ Intrinsic value of each equity shares = ₹ 332.50

Yield Method

The valuation of shares under the Yield method may be done under two categories:

(a) Return on Capital Employed Method: This methods is applied for the purpose of valuation of the shares of majority shareholding. A big investor is more interested in what the company earns and not simply in what the company distributes. Even if the company does not distribute 100% of its earning among its shareholders, it, as a matter of fact, strengthens the financial position of the company. The value of the share under this method is calculated by the formula.

$$\frac{\text{Return of Capital Employed}}{\text{Normal Rate of Return}} \times \text{Paid - up value of shares}$$

(b) Valuation on the Basis of Dividend: This method is more suitable for valuation of small block of shares. The method of calculation is:

$$\frac{\text{Expected Rate of Dividend}}{\text{Normal Rate of Dividend}} \times \text{Paid - up value of shares}$$

NORMAL RATE OF DIVIDEND

Illustration 19: The following particulars are available in respect of Goodluck Limited.

(a) Capital 450, 6% preference shares of ₹ 100 each fully paid and 4,500 equity shares ₹ 10 each fully paid.

(b) External liabilities: ₹ 7,500.

(c) Reserves and Surplus: ₹ 35,000.

(d) The average expected profit (after taxation) earned by the company ₹ 8,500.

(e) The normal profit earned on the market value of equity shares (full paid) of the same type of companies is 9%.

(f) 10% of the profit after tax is transferred to reserves.

Calculate the intrinsic value per equity share and value per equity share according to dividend yield basis.

Assume that out of total assets, assets worth of ₹ 350 are fictitious.

Solution:

Intrinsic Value of Shares

Particulars		₹
6% Preference Share Capital (450 × 10)		45,000
Equity Shares (4,500 × 10)		45,000
Reserves and Surplus		3,500
External Liabilities		7,500
Total Liabilities		**1,01,000**
As Total Liabilities = Tota1 Assets,		
Tota1 Assets		1,01,000
Less: Fictitious Assets	(350)	
External Liabilities	(7,500)	
Preference Shares	(45,000)	52,850
Net Assets Available for Equity Shareholders		**48,150**

$$\therefore \text{Intrinsic Value of Share} = \frac{\text{Net Assets Available for Equity Shareholders}}{\text{Number of Equity Shares}}$$

$$= \frac{48,150}{4,500}$$

Yield Basic = 10.70

Profit Available to Equity Shareholders

Particulars	₹
Average Profit after Taxation	8,500
Transfer to General Reserves (10%)	(850)
	7,650
Less: Preference Dividend (60% of 45,000)	2,700
Profit Available to Equity Shareholders	**(4,950)**

$$\text{Rate of dividend} = \frac{4,950}{45,000} \times 10$$

$$= 11\%$$

$$\therefore \text{Value of Equity Share} = \frac{\text{Rate of Dividend}}{\text{Normal Rate}} \times \text{Paid – up Value of Share}$$

$$= \frac{11}{9} \times 10$$

$$= ₹\ 12.22$$

Illustration 20: The capital structure of company as on 31st March, 2015 was as under:

Equity Share Capital	5,00,000
11% Preference Share Capital	3,00,000
12% Secured Debentures	4,00,000
Reserves	3,00,000

The company on an average earns a profit of ₹ 4,00,000 annually before deduction of interest on Debentures and Income Tax, which works out to 45%. The normal return on equity shares on companies similarly placed is 15% provided.

(a) The profit after tax covered the fixed interest and fixed dividends at least four times.

(b) Equity capital and reserves are 150% of debentures and preference capital.

(c) Yield on shares is calculated at 60% of profits distributed and 5% on undistributed profits.

The company is regularly paying an equity dividend of 18%. Ascertain the value of equity share of the company.

Solution:

Particulars	₹
Average Profit of the companies before Interest and Tax	4,00,000
Less: Debenture interest (12% of 4,00,000)	48,000
Profit after interest but before tax	3,52,000
Less: Tax @ 45%	1,58,400
Profit after Interest and Tax	**1,93,600**

Evaluation of Conditions given in the question:

(a) Profit after tax whether covers fixed interest and fixed dividend at least four times. Profit after tax.

= 4,00,000 – 1,58,400 = 2,41,600 Fixed interest and fixed dividend interest.

Interest	48,000
Fixed dividend 11% of 3,00,000	33,000
	81,000

$$= \frac{2,41,600}{81,000}$$

= 2.9827 times

∴ Fixed interest and dividend coverage is 2.98 times only and is less than the prescribed 4 times.

(b) Whether equity capital and reserves are of 150% of preference share capital and debentures.

Particulars	₹	Particulars	₹
Equity share	5,00,000	Preference share	3,00,000
Reserves	3,00,000	Debentures	4,00,000
	8,00,000		**7,00,000**

$$\therefore \text{Ratio} = \frac{8,00,000}{7,00,000} \times 100 = 114.28\%$$

∴ Ratio is less than the Prescribed Ratio of 150%.

(c) Yield on Profit:

Particulars	₹	₹
Average Profit after Interest and Tax		1,93,000
Less: Preference Dividend 11 % of 3,00,000	33,000	
18% Equity Dividend (Regularly Paying) $5,00,000 \times \frac{18}{100}$	90,000	1,23,000
∴ Undistributed profits		**70,600**
∴ Yield = 60% of Distributed Profit of = 60% of 90,000		54,000
5% of on Undistributed Profit		3,530
		57,530

$$\therefore \text{ Yield Rate} = \frac{57,530}{5,00,000} \times 100 = 11.506\%$$

Expected Yield of Equity Shares

Normal Return if (a), (b) conditions cited above fulfilled	=	15%
Add: For low coverage of fixed interest and dividend (assumed)	=	0.5%
For low ratio of Equity share capital and Reserves (assumed)	=	0.5%
		16%

∴ Value of Equity Share

$$= \frac{\text{Possible Yield Rate}}{\text{Expected Yield Rate}} \times \text{Paid - up Value of Shares}$$

$$= \frac{11.506\%}{16\%} \times 10$$

= ₹ 71.91

Illustration 21: From the following information of Dell Ltd., calculate the value of share by yield basis.

Balance Sheet as on 31/12/2015

Particulars	₹	Particulars	₹
800 Equity Shares of ₹ 100 each	80,000	Land and Building	50,000
4,000 Preference Shares of ₹ 10 each	40,000	Plant and Machinery	60,000
6% Debentures	20,000	Patents	20,000
Sundry Creditors	40,000	Sundry Debtors	30,000
		WIP and Stock	50,000
		Cash and Bank	10,000
	2,20,000		**2,20,000**

Land and Building to be valued at ₹ 90,000. The company's earnings were as follows:

Year	Profit before Tax	Tax
2011	30,000	8,000
2012	40,000	16,000
2013	10,000	(Strike) 4,000
2014	50,000	23,000
2015	55,000	30,000

The company paid managerial remuneration of ₹ 6,000 per annum but it will become ₹ 10,000 in future. There has been no change in capital employed. The company paid dividend of ₹ 9 per share and it will maintain the same in future. The company proposes to build up a plant rehabilitation reserve at

15% of profit after tax. Dividend rate in this type of company is fluctuating and the asset backing of the equity share is about 1½ times. The equity share with an average dividend of 8% sold at par.

Solution:

Average Maintainable Profits

Year	Weights	Profit	Product
2011	1	30,000	30,000
2012	2	40,000	80,000
2013	(abnormal due to strike)		
2014	3	50,000	1,50,000
2015	4	55,000	2,20,000
	10		**4,80,000**

$$\text{Weighted Average Profit} = \frac{4,80,000}{10} = ₹\ 48,000$$

Profit Available for Equity Shareholders

Particulars	₹
Weighted Average Profit	48,000
Less: Increase in the Managerial Remuneration (10,000 – 6,000)	4,000
	44,000
Less: Tax (assuming 50%)	22,000
Profits available for distribution	22,000
Less: Plant Rehabilitation Reserve	3,300
	18,700
Less: Preference Dividend (9% of 40,000)	3,600
	15,100

Asset Backing per Equity Share

Particulars	₹	₹
Tangible Trading Assets:		
Land and Building		90,000
Plant and Machinery		60,000
Patents		20,000
Sundry Debtors		30,000
WIP and Stock		50,000
Cash and Bank		10,000
		2,60,000
Less: Sundry Creditors	40,000	
Preference Share Capital	40,000	
6% Debentures	20,000	1,00,000
∴ Net assets available for equity shareholders		**1,60,000**

$$\therefore \text{ Asset Backing} = \frac{1,60,000}{80,000} = 2 \text{ Times}$$

Dividend Rate:

Normal Dividend Rate	8.0%
Less: For higher dividend rate of 9%	(0.5%)
For higher asset backing (2 times compared to 1.5)	(0.5%)
	7.0%

$$\therefore \text{ Capitalisation factor} = \frac{100}{7} = 14.226$$

$$\therefore \text{ Value of equity share} = \frac{\text{Profit Available for Equity Shareholders}}{\text{Number of Equity Shares}} \times \text{Capitalisation Factor}$$

$$= \frac{15{,}100}{800} \times 14.286$$

$$= 269.64$$

Fair Value of a Share

The Fair value of a share is the average of the value obtained by the net asset method and the yield method.

$$\text{Fair Value} = \frac{\text{Intrinsic Value} + \text{Yield Value}}{2}$$

Illustration 22: The Balance Sheet of Diamond Limited as on 30-06-2015 is as follows:

Liabilities	₹	Assets	₹
Share Capital: 2,000 shares of ₹ 100 each	2,00,000	Land and Building	1,10,000
General Reserve	40,000	Plant and Machinery	1,30,000
Profit and Loss Account	32,000	Patents and Trade Marks	20,000
Sundry Creditors	1,28,000	Stock	48,000
Income Tax Reserve	60,000	Debtors	88,000
		Bank Balance	52,000
		Preliminary Expenses	12,000
	4,60,000		**4,60,000**

The expert valuer valued the land and building at ₹ 2,40,000, goodwill at ₹ 1,60,000 and plant and machinery at ₹ 1,20,000. Out of the total debtors, it is found that debtors of ₹ 8,000 are bad. The profits of the company have been as follows:

Year	₹
2013	80,000
2014	90,000
2015	1,06,000

The company follows the practice of transferring 25% of profits to General Reserve. Similar type of companies earn at 10% of the value of their shares. Ascertain the values of shares of the company under: (Ignore taxation)

(a) Intrinsic value method,

(b) Yield value method, and

(c) Fair value method.

Solution:

(a) Intrinsic value method

Particulars	₹	₹
Tangible Trading Assets:		
Land and Building		2,40,000
Goodwill		1,60,000
Patent and Machinery		1,20,000
Patents and Trademarks		20,000

Stock		48,000
Debtors	88,000	
Less: Bad Debts	8,000	80,000
Bank Balance		52,000
		7,20,000
Less: Sundry Creditors		1,28,000
Net Assets		**5,92,000**

$$\therefore \text{ Intrinsic value of shares } = \frac{\text{Net Assets}}{\text{No. of Equity Shares}}$$

$$= \frac{5,92,000}{2,000} = 296$$

(b) Yield Value Method

Particulars	₹	₹
Total profit of the year	2013	80,000
	2011	90,000
	2015	1,06,000
		2,76,000
Less: Bad Debts		(8,000)
		2,68,000

$\therefore$ Average Profit = $\frac{2,68,000}{3}$ 89,333.33

Less: Depreciation on account of Revaluation of Plant and Machinery 1,000

$(1,30,000 - 1,20,000) = 10,000 \times \frac{10}{100}$

Land and Building $(2,40,000 - 1,10,000) = 1,30,000 \times \frac{5}{100}$ 6,500 (5,500.00)

83,833.33

Transfer to Reserves (25%) 20,958.33

62,875.00

$$\therefore \text{ Rate of Dividend} = \frac{62,875}{2,00,000} \times 100 = 31.4375\%$$

$$\therefore \text{ Yield value of each share } = \frac{\text{Rate of Dividend}}{\text{Normal Rate}} \times \text{Paid - up value of share}$$

$$= \frac{31.4375\%}{10\%} \times 100$$

$$= 314.375$$

(c) Fair Value = $\frac{\text{Intrinsic value} + \text{Yield value}}{2} = \frac{296 + 314.375}{2} = 305.1875$

Note: The Depreciation Rates are assumed.

Value of Right Shares

According to Section 81 of the Companies Act, if the company increases its share capital issuing new shares, the existing shareholders have a right to subscribe to the new shares in a fix proportion of their existing shares. If the shareholders want to sell his right of such shares, the value of such right can be ascertained by the following formula,

$$R = \frac{r}{N + r} \times (M - S)$$

where, R = Value of right share
r = Number of right shares
M = Market price per share
S = Subscription price, i.e., issue price
N = Number of old shares.

Illustration 23: Sunitha Limited offers to its existing shareholders two shares for every seven shares held by them. The right issue price is ₹ 140 (including premium of ₹ 40) and the market value of the share at the time of right issue is ₹ 190 per share. Calculate the value of rights.

Solution:

$$\text{Value of Rights} = \frac{r}{N + r} \times (M - S)$$

$$= \frac{2}{(7 + 2)} \times (190 - 140) = \frac{2}{9} \times 50$$

$$= ₹\ 11.11$$

r = No. of rights = 2
N = No. of old shares = 7
M = Market + Price = 190
S = Subscription/Issue Price = 140

Valuation of Preference Shares

In case of non-participating preference shares, the value of such shares will be their face value plus the arrear dividend if any. However, the participating preference shareholders have a right to participate in the surplus in case of liquidation. The surplus will be distributed to equity and preference shareholders in the ratio of paid-up share capital. In such case, the value of preference share is equal to face value of each preference share plus arrears preference dividend plus surplus of each preference share.

Illustration 24: The following information is extracted from the books of M/s TVS Limited:

(a) The paid-up share capital of the company consists of 1,000, 15% preference shares of ₹ 100 each and 20,000 equity shares of ₹ 10 each.

(b) The average annual profits of the company after providing for depreciation and taxation amounted to ₹ 75,000. It is considered necessary to transfer ₹ 10,000 to general reserve before declaring any dividend.

(c) The normal return expected by investors on equity shares from this type of business carried on by the company is 10%.

Calculate the value of an equity share.

Solution:

Particulars	₹
Average Annual Profit	75,000
Less: Preference Dividend (15% on ₹ 100 × 100)	15,000
	60,000
Less: Transfer to General Reserve	10,000
Profit for Equity Shareholder	**50,000**
Equity share capital = 20,000 × ₹ 10 = ₹ 2,00,000	
ROE = (Profit for equity shareholder/Outstanding balance of equity share capital) × 100	
= (₹ 50,000 ₹ 2,00,000) × 100	
= 25%	
Normal rate of return = 10%	
Value of equity share = ₹ 10 × (25%/10%)	
= ₹ 25	

Illustration 25: The following is the balance sheet of Asaraf Ltd. as on March 31, 2015.

Liabilities	₹	Assets	₹
Equity Share Capital of ₹ 10 each fully paid	15,00,000	Plant and Machinery	8,75,000
Reserve and Surplus	2,75,000	Building	6,25,000
12% Debentures	3,25,000	Furniture	3,90,000
Sundry Creditors	80,000	Stock	1,20,000
		Sundry Debtors	1,40,000
		Cash	30,000
	21,80,000		**21,80,000**

Other information related to operation of the company is given below:

Particulars	March 31st 2012 ₹	March 31st 2013 ₹	March 31st 2014 ₹	March 31st 2015 ₹
Sale	10,00,000	11,00,000	13,00,000	15,00,000
Expenses	4,25,000	6,15,000	7,00,000	8,75,000
Interest on Debentures	39,000	39,000	39,000	39,000

It is the usual practice of the company to transfer ₹ 50,000 every year to general reserve. Assume, a rate of tax of 50% and normal earnings of 15%.

Compute the value of equity share by capitalisation of earning method.

Solution:

Particulars	2011-12 (₹)	2012-13 (₹)	2013-14 (₹)	2014-15 (₹)
Sales (₹)	10,00,000	11,00,000	13,00,000	15,00,000
Less: Expenses (₹)	4,25,000	6,15,000	7,00,000	8,75,000
	5,75,000	4,85,000	6,00,000	6,25,000
Less: Interest on Debentures	39,000	39,000	39,000	39,000
Profit Before Tax	5,36,000	4,46,000	5,61,000	5,86,000
Less: Tax (50%)	2,68,000	2,23,000	2,80,500	2,93,000
Profit after Tax	**2,68,000**	**2,23,000**	**2,80,500**	**2,93,000**

$$\text{Average Profit} = ₹ \frac{(2,68,000 + 2,23,000 + 2,80,500 + 2,93,000)}{4}$$

$$= ₹ \frac{(10,64,500)}{4}$$

$$= ₹ 2,66,125$$

$$\text{Expected Rate of Earnings} = \frac{\text{Average Profit}}{\text{Outstanding Balance of Equity Shares}}$$

$$= \frac{2,66,125}{15,00,000} \times 100 = 17.74\%$$

$$\text{Value per share} = \left(\frac{\text{Expected earnings}}{\text{Normal earnings}} \times \text{Face value} \right)$$

$$= \left(\frac{17.74\%}{15\%} \right) \times ₹ 10$$

$$= ₹ 11.83$$

Illustration 26:

Liabilities	₹	Assets	₹
1,00,000 Equity Shares of ₹ 10 each	10,00,000	Land and Building at cost	12,00,000
1,00,000 equity share of ₹ 10 paid-up ₹ 7.50 paid-up	7,50,000	Plant and Machinery at cost	14,00,000
1,00,000 Equity Shares of ₹ 10 each fully paid (₹ 5 paid up)	5,00,000	Patent and Copyrights	2,00,000
Capital Reserves	3,00,000	Investment at cost	1,50,000
General Reserves	4,00,000	Closing Stock	6,00,000
Profit and Loss A/c	2,00,000	Sundry Debtors	8,00,000
Share Premium A/c	5,00,000	Bank Balance	1,60,000
Sundry Creditors	5,10,000	Preliminary expenses	40,000
Workers' Compensation Fund	60,000		
Dividend Equalisation Fund	1,00,000		
Provision for Depreciation on Plant & Machinery	2,00,000		
Provision for Bad and Doubtful Debts	30,000		
	45,50,000		**45,50,000**

The balance sheet as on March 31, 2015 does not contain a provision for unassessed taxes, which are estimated to be ₹ 75,000.

The present market value of the assets are as follows:

Particulars	₹
Land and Building	15,00,000
Plant and Machinery	13,00,000
Patent and Copyrights	1,00,000
Investment	1,80,000

Current assets are valued at their book value but bad debt provision should be maintained at 2% of sundry debtors.

Calculate the value of each type of equity share per unit by using the asset backing method (excluding goodwill) based on the notional calls.

Solution: **Asset Backing Method**

Particulars		₹
Assets:		
Land and Buildings		15,00,000
Plant and Machinery		13,00,000
Patents and Copyrights		1,00,000
Investments		1,80,000
Closing Stock		6,00,000
Sundry Debtors less Provision for Bad and Doubtful Debts (98% of ₹ 8,00,000)		7,84,000
Bank balance		1,60,000
Total Assets	**.... (1)**	**46,24,000**
Less: **Liabilities:**		
Sundry Creditors		5,10,000
Tax Provision		75,000
Total Liabilities	**.... (2)**	**5,85,000**
Net Assets = Total Assets – Total Liabilities	**(2 – 1)**	**40,39,000**
Add: Notional Calls:		
1,00,000 Equity Shares × ₹ 2.50		2,50,000
1,00,000 Equity Shares × ₹ 5.00		5,00,000
Value of Assets		**47,89,000**

Net value of assets:

$$\text{Value of each equity share} = \left(\frac{\text{Net value of asset}}{\text{Number of equity shares}}\right)$$

$$= \left(\frac{47,89,000}{3,00,000}\right)$$

$$= ₹\ 15.96$$

Value of each ₹ 10 paid equity share = ₹ 15.96

Value of each ₹ 10 each, 7.50 paid-up equity share = ₹ 15.96 – 2.50 = 13.46

Value of each ₹ 10 each, 5.00 paid-up capital share = ₹ 15.96 – 5.00 = 10.96

Illustration 27: The following is the Balance Sheet of Kemicolour Industries Ltd. as on 31st December, 2015:

Liabilities	₹	Assets	₹
10,000 Equity Shares of ₹ 10 each	1,00,000	Goodwill	50,000
General Reserve	2,50,000	Fixed Assets	1,50,000
Tenn Loans	50,000	Investments	1,00,000
Current Liabilities	1,50,000	Current Assets	2,50,000
	5,50,000		**5,50,000**

On 31st December, 2015, the fixed assets were independently valued at ₹ 2,10,000 and that goodwill was to be revalued at 2 years' purchase of super profits. The post-tax profits for the three years were:

Year	₹
2013	51,600
2014	54,800
2015	40,600

A yield of 12% is considered to be normal in this line of industry. Tax rate is 30%.

You are asked to compute the value of an equity share on Net Assets Backing basis.

Solution:

(a) Calculation for Average Profit:

$$\text{Simple Average} = \frac{51,600 + 54,800 + 40,600}{3}$$

$$= ₹\ 49,000$$

(b) Calculation for FMP:

Simple Average Profit = 49,000

FMP = 49,000

(∵ no future changes given)

(c) Calculation of Capital Employed:

Particulars	₹	₹
Tangible Trading Assets:		
Fixed Assets	2,10,000	
Current Assets	2,50,000	4,60,000
Less: External Liabilities:		
Term Loan	50,000	
Current Liability	1,50,000	(2,00,000)
		2,60,000

(i) Calculation of NRR = 12% (given)

(ii) Number of years' purchase = 2 years

(iii) Calculation of Normal Profit:

$$\text{Normal Profit} = \text{Capital Employed} \times \frac{\text{NRR}}{100}$$

$$= 2,60,000 \times \frac{12}{100}$$

$$= ₹\ 31,200$$

(iv) Calculation of Super Profit:

Super Profit = FMP – Normal Profit

= 49,000 – 31,200

= ₹17,800

(v) Calculation of Goodwill by Purchase of Super Profit Method:

Goodwill = Number of Years' Purchase × Super Profit

= 2 × 17,800

= 35,600

(vi) Calculation for Amount Available for Shareholders:

All Assets (at agreed/adjustment value):	
Capital Employed (excluding Goodwill & Investment)	2,60,000
Goodwill	35,600
Amount Available for Equity Shareholders	1,00,000
	3,95,600

(vii) Calculation for Shares by Assets backing method:

$$= \frac{\text{Amount Available for Equity Shareholders}}{\text{Number of Equity Shares}}$$

$$= \frac{3,95,600}{10,000}$$

$$= ₹ 39.56$$

Illustration 28: The following is the summarised Balance Sheet of M/s. Vijay Engineers as on 30/09/15.

Liabilities		₹	Assets	₹
Share Capital:			Plant	50,000
30,000 Equity shares of ₹ 10 each		3,00,000	Property	1,20,000
Reserves and Surplus:			Stock	3,10,000
General	1,20,000		Debtors	2,03,000
Capital	40,000		Bank	1,17,000
Profit & Loss A/c	1,20,000	2,80,000	Cash	1,700
Current Liabilities Provisions:				
Creditors	93,700			
IT Payable	11,500			
Proposed Dividend	34,000			
Provision for Tax	82,500	2,21,700		
		8,01,700		**8,01,700**

Net profit before taxation for three years ended 30th September 2013 – ₹ 1,38,000, 30th September, 2014 – ₹ 1,83,000 and 30th September, 2015 – ₹ 1,97,000. Freehold property was valued at ₹ 1,60,000. Average yield in this type of business is 10% on capital employed. You are required to find out the value of each equity share on the basis of above mentioned facts as: (i) Net Assets basis and (ii) Yield basis.

The company has a practice of transferring 20% of its yearly profit after tax to General reserve.

Solution:

(i) Net Assets Basis:

(a) Calculation for Amount Available for Shareholders:

Particulars	₹	₹
Plant	50,000	
Property	1,60,000	
Stock	3,10,000	
Debtors	2,03,000	
Bank	1,17,000	
Cash	1,700	8,41,700
Less: External Liabilities		
Creditors	93,700	
IT Payable	11,500	
Proposed Dividend	34,000	
Provision for Tax	82,500	(2,21,700)
Amount Available for Equity Shareholders		**6,20,000**

(b) Calculation for Shares by Net Asset Value (NAV) method:

$$NAV = \frac{\text{Amount Available for Equity Shareholder}}{\text{Number of Equity Shares}}$$

$$= \frac{6,20,000}{30,000}$$

$$= ₹\ 20.67$$

(ii) Yield Value:

1. Calculation of Average Profit:

Year	Profit	Weight	Product
2013	1,38,000	1	1,38,000
2014	1,83,000	2	3,66,000
2015	1,97,000	3	5,91,000
		6	**10,95,000**

$$\text{Weighted Average Profit} = \frac{10,95,000}{6}$$

FMP before Tax = ₹ 1,82,500

2. Calculation for Profit Available to Shareholders:

Particulars	₹
FMP before Tax	1,82,500
Less: Tax @ 50%	(91,250)
FMP after Tax	91,250
Less: Transfer to General Reserves (20%)	(18,250)
Profit Available to Equity Shareholders	**73,000**

(a) Calculation for ERR:

$$ERR = \frac{\text{Profit Available for Equity Shareholder}}{\text{Total Equity Share Capital}} \times 100$$

$$= \frac{73,000}{3,00,000} \times 100$$

$$= 24.33\%$$

(b) Calculation of Value of Share by Yield Value Method:

$$\text{Yield Value} = \frac{ERR}{NRR} \times \text{Paid - up Face Value of each equity share}$$

$$= \frac{24.33 \times 10}{10}$$

$$= ₹\ 24.33$$

Illustration 29: Following is the balance sheet of Super Prospects Co. Ltd. as on 31st December, 2015.

Liabilities	₹	Assets	₹
Share Capital:		Land and Building (at cost)	30,000
3,000 5% Preference Shares of ₹ 10 each fully paid	30,000	Plant and Machinery (at cost less depreciation)	50,000
9,000 Equity Shares of ₹ 10 each full	90,000	Furniture and Fixtures (at cost less	10,000

paid		depreciation)	
Reserves	30,000	6% Government Securities	12,000
Profit and Loss A/c	12,000	(Normal Value ₹ 10,000)	
6% Debentures	20,000	(Market Value ₹ 14,000)	
Creditors	15,000	Debtors (all good)	39,000
		Stock	46,000
		Cash in Hand	5,000
		Preliminary Expenditure	5,000
	1,97,000		**1,97,000**

Find out the fair value of equity shares after considering the following information as: (i) intrinsic value method and (ii) on the basis of yield.

(a) Average annual profit (before taxation) ₹ 51,200.
(b) Rate of income tax is 50%.
(c) ₹ 5,000 is transferred to General Reserve every year.
(d) Normal return is 9% on capital employed.
(e) Goodwill is to be valued at 4 years purchase of super profits.
(f) Dividend declared by companies doing similar business is 10%.
(g) All assets are worth book value subject to following changes:
  (i) The land and building is valued ₹ 35,000.
  (ii) Investment as given in the Balance Sheet.

Solution:

Super Prospects Co. Ltd.

(i) Calculation of Average Profit: ₹ 51,200 (Given)

(ii) Calculation for FMP:

Average Profit before Tax	51,200
Less: Tax @ 50%	(25,600)
FMP after Tax	**25,600**

(iii) Calculation for Capital Employed:

Particulars	₹	₹
Tangible Trading Assets:		
Land and Building	3,5000	
Plant and Machinery	50,000	
Furniture and Fixture	10,000	
Debtors	39,000	
Stock	46,000	
Cash	5,000	1,85,000
Less: External Liabilities:		
6% Debtors	20,000	
Creditors	15,000	(35,000)
Capital Employed		**1,50,000**

(iv) Calculation of NRR = 9%

(v) Calculation of Number of Years = 4 years

(vi) Calculation Normal Profit $= \text{Capital Employed} \times \frac{\text{NRR}}{100}$

$= 1,50,000 \times \frac{9}{100}$

$= ₹\ 13,500$

(vii) Calculation of Super Profit = FMP – Normal Profit

$= 25,600 - 13,500$

$= ₹\ 12,100$

(viii) Calculation of Goodwill by Purchase of Super Profit Method:

Goodwill = Number of Years' Purchase × Super Profit

$= 4 \times 12,100$

$= 48,400$

(I) Intrinsic Value Method

(i) Calculation for Amount Available for Shareholder Fund:

	₹
All Assets (at agreed value):	
Capital Employed (Excluding Goodwill and Investment)	1,50,000
6% Government Securities	48,400
Amount Available for Shareholders	14,000
Less: Preference Shareholder's Share	2,12,400
Preference Share Capital	(30,000)
Amount Available for Equity Shareholders	**1,82,400**

(ii) Calculation for Value of Share by Intrinsic Method (IV):

$$IV = \frac{\text{Amount Available for Equity Shareholder}}{\text{Number of Equity Shares}}$$

$$= \frac{1,82,400}{9,000}$$

$= ₹\ 20.27$

(II) Yield Value Method

(i) Calculation for Profit Available to Shareholder:

		₹
FMP before Tax + Investment Income	(51,200 + 600)	51,800
Less: Tax @ 50%		(25,900)
FMP after Tax		25,900
Less: Transfer to Reserves		(5,000)
Profit Available to Shareholder		20,900
Less: Preference Dividend (30,000 × 5/100)		(1,500)
Profit Available to Equity Shareholder		**19,400**

(ii) Calculation to ERR:

$$\text{ERR} = \frac{\text{Profit Available to Equity Shareholder}}{\text{Total Equity Share Capital}} \times 100$$

$$= \frac{19{,}400}{90{,}000} \times 100$$

$$= 21.56$$

(iii) Calculation for Yield Value for Share:

$$\text{Yield Value} = \frac{\text{ERR}}{\text{NRR}} \times \text{Paid - up Value of each equity}$$

$$= \frac{21.56}{10} \times 10$$

$$= 21.56$$

(III) Fair Value

$$\text{Fair Value} = \frac{\text{IV} + \text{YV}}{2}$$

$$= \frac{20.27 + 21.56}{2}$$

$$= 20.92$$

Illustration 30: The following is the balance sheet of T Ltd. on 31st March, 2015:

Liabilities	₹	Assets	₹
3,00,000 Equity Shares of ₹ 10 each fully paid	30,00,000	Goodwill	1,00,000
Reserves	30,00,000	Building	9,00,000
Long-term Loans	20,00,000	Machinery	40,00,000
Current Liabilities	54,00,000	Vehicles	1,00,000
		Shares in Subsidiary Ltd.:	
		4,000 Equity Shares of ₹ 100 each (at cost)	80,00,000
		Current Assets	3,00,000
	1,34,00,000		**1,34,00,000**

Find out the value on net assets of equity shares of T Ltd. on the basis of the following information:

(i) Goodwill is valued at ₹ 10,00,000, machinery at ₹ 49,50,000, building at ₹ 20,00,000 and vehicles at ₹ 50,000.

(ii) Current Assets and Current at Liabilities are to be taken at book value.

(iii) Shares of T Ltd. are to be valued on the basis of Net Assets of F Ltd.

Liabilities	₹	Assets	₹
5000 Equity Shares of ₹ 100 each	5,00,000	Fixed Assets	9,00,000
Reserves	8,00,000	Current Assets	11,00,000
Current Liabilities	7,00,000		
	20,00,000		**20,00,000**

Solution:

For "F" Ltd.:

(a) Calculation for Amount Available for Equity Shareholder.

Particulars	₹	₹
All Assets (at agreed value):		
Fixed Assets	9,00,000	
Current Assets	11,00,000	20,00,000
Less: External Liability:		
Current Liability		(7,00,000)
Amount Available for Equity Shareholder		**13,00,000**

(b) Calculation for Value of Share by IV Method:

$$\text{Intrinsic Value} = \frac{\text{Amount Available for Equity Shareholder}}{\text{Number of Equity Shares}}$$

$$= \frac{13,00,000}{5,000}$$

$$= 260$$

For "T" Ltd.:

(a) Calculation for Amount Available for Shareholder:

Particulars	₹	₹
All Assets (at agreed/adjustment value):		
Goodwill	10,00,000	
Building	20,00,000	
Machinery	49,50,000	
Vehicles	50,000	
Share of subsidiary "F" Ltd. (4000 × 260)	10,40,000	90,40,000
Less: External Liabilities:		
Long-term Loans	20,00,000	
Current Liability	54,00,000	(74,00,000)
Amount Available for Equity Shareholder		**16,40,000**

(b) Calculation of Share by IV Method:

$$\text{Intrinsic Value} = \frac{\text{Amount Available for Equity Shareholder}}{\text{Number of Equity Shares}}$$

$$= \frac{16,40,000}{3,00,000}$$

$$= ₹\ 5.47$$

Illustration 31: A shareholder of X Private Ltd. Requests you to advise him about the fair value of the equity shares of the company. The company's financial position as on 31st December, 2015 is as under:

Liabilities		₹	Assets	₹
Share Capital			**Fixed Assets (at cost)**	
20,000 6% Cumulative Preference			Goodwill	1,20,000
Shares of ₹ 10 each		2,00,000	Plant and Machinery	2,00,000
12,000 Equity Shares of ₹ 20 each			**Investments (at cost)**	1,20,000

fully paid		2,40,000	**Current Assets:**	
Debenture Redemption Fund		40,000	Stock	1,20,000
Profit and Loss A/c			Debtors	1,40,000
Balance as on 1/1/2008	45,000		Cash at Bank	1,52,000
Profit for the Year (before tax)	1,30,000	1,75,000	Land and Building	2,00,000
5% Debentures		2,00,000		
Creditors		1,67,000		
Depreciation Fund (Plant, etc.)		30,000		
		10,52,000		**10,52,000**

The following information is relevant:

(a) Goodwill is revalued at ₹ 1,45,000.

(b) Normal rate of return expected is 10%.

(c) The shares of the company are not freely transferable.

(d) Investments are part of business assets.

(e) Profits for the year as stated above are before annual transfer of ₹ 12,700 to Debenture Redemption Fund.

(f) Income tax may be taken at 50% of the profits.

(g) Dividend record of the company is not stable.

Work out the fair value of equity shares as requested.

Solution:

(i) Calculation of Amount Available to Shareholder:

Particulars	₹	₹	₹
All Assets (at agreed value):			
Goodwill		1,45,000	
Plant and Machinery	2,00,000		
Less: Depreciation	(30,000)	1,70,000	
Investment		1,20,000	
Stock		1,20,000	
Debtors		1,40,000	
Cash at Bank		1,52,000	
Land and Building		2,00,000	10,47,000
Less: External Liabilities:			
5% Debentures		2,00,000	
Creditors		1,67,000	(3,67,000)
Amount Available for Shareholder			6,80,000
Less: Preference Share Capital			(2,00,000)
Amount Available for Equity Shareholder			**4,80,000**

(ii) Calculation for Share Value by IV Method:

$$\text{Intrinsic Value} = \frac{\text{Amount Available for Equity Shareholder}}{\text{Number of Equity Shares}}$$

$$= \frac{4,80,000}{12,000}$$

$$= ₹\ 40$$

Yield Value

(i) Calculation for Profit Available:

	₹
FMP before tax	1,30,000
Less: Tax @ 50%	(65,000)
FMP after tax	65,000
Less: Transfer to Reserves	(12,700)
Profit Available to Shareholder	52,300
Less: Preference Dividend (6% × ₹ 2,00,000)	(12,000)
Profit Available for Equity Shareholder	**40,300**

(ii) Calculation for ERR:

$$\text{ERR} = \frac{\text{Profit Available to Equity Shareholder}}{\text{Total Equity Share Capital}} \times 100$$

$$= \frac{40,300}{2,40,000} \times 100$$

$$= ₹\ 16.79$$

(iii) Calculation of Share by Yield Value:

$$\text{YV} = \frac{\text{ERR}}{\text{NRR}} \times \text{Paid - up Value of each share}$$

$$= \frac{16.79}{10} \times 20$$

$$= ₹\ 33.58$$

$$\text{Fair Value} = \frac{\text{IV} + \text{YV}}{2}$$

$$= \frac{40 + 33.58}{2}$$

$$= ₹\ 36.79$$

Illustration 32: BOWLING LTD. and GREEN LTD. propose to sell their business to a new company being formed for that purposes.

The summarised Balance Sheets as on 31st December, 2015 and profits of the companies for the past three years are as follows:

Particulars	Bowling Ltd. (₹)	Green Ltd. (₹)	Particulars	Bowling Ltd. (₹)	Green Ltd. (₹)
Ordinary Shares of ₹ 1 each	60,000	25,000	Freehold Property at cost	36,000	12,000
Capital Reserve	–	15,000	Plant and Machinery		
General Reserve	39,000	12,000	at cost less depreciation	32,000	18,000
Profit and Loss A/c	11,000	16,000	Investment at cost	–	10,000
Creditors	21,580	12,680	Stock-in-trade	11,100	8,950
			Debtors	8,800	6,400
			Balance at Bank	43,680	25,330
	1,31,580	**80,680**		**1,31,580**	**80,680**

Particulars	Bowling Ltd. (₹)	Green Ltd. (₹)
Net profits for the years ended:		
31st December, 2013	17,450	10,760
31st December, 2014	19,340	12,290
31st December, 2015	21,750	14,450

You are also given the following relevant information:

(a) It is agreed that:

(i) the properties and Plant and Machinery to be revalued as follows:

Particulars	Bowling Ltd. (₹)	Green Ltd. (₹)
Freehold Property	44,800	14,400
Plant and Machinery	30,750	17,095

(ii) the value of stocks be reduced by 10% and a provision of 12½% be made on debtors for bad and doubtful debts.

(iii) goodwill be valued at two years' purchase of the average annual trading profits of the past three years, after deducting a standard profit of 10% p.a. on the net trading assets before revaluation or adjustment on 31st December, 2009.

(b) Profits of Green Ltd. include ₹ 600 income from the investments in each of the three years. The market value of the investment as on 31st December, 1984 was ₹ 10,000.

You are required to prepare a statement as to how you would arrive at the intrinsic value per share to the nearest rupee of the ordinary share in: (i) Bowling Ltd. and (ii) Green Ltd.

Solution:

1. Calculation of Average Profit:

Blowing Ltd.:

Year	Profit	Weight	Product
2013	17,450	1	17,450
2014	19,340	2	38,680
2015	21,470	3	64,410
		6	**1,20,540**

Green Ltd.:

Year	Profit	Weight	Product
2013	10,760	1	10,760
2014	12,290	2	24,580
2015	14,450	3	43,350
		6	**78,690**

"B" Ltd. Weight Average = $\frac{1,20,540}{6} = 20,090$

"G" Ltd. Weight Average = $\frac{78,690}{6} = 13,115$

2. Calculation of Goodwill by Purchase of Average profit Method:

Goodwill = Normal of Years' Purchase × Average Profit

"B" Ltd. = 2 × 20,090

= 40,180

"G" Ltd. = 2 × 13,115
= 26,230

3. Calculation of Amount Available for Shareholders:

Particulars	'B' Ltd. (₹)	'G' Ltd. (₹)
All Assets at agreed value:		
Goodwill	40,180	26,230
Freehold Property	44,800	14,400
Plant and Machinery	30,750	17,095
Investment	–	10,000
Stock (110%)	9,990	8,055
Debtors (12.5%)	7,700	5,600
Bank Balance	43,680	25,330
Less: External Liability:	1,77,100	1,06,710
Creditors	(21,580)	(12,680)
Amount Available for Equity Shareholders	**1,55,520**	**94,030**

(i) Calculation of Value of Share by IV Method:

$$\text{Intrinsic Value} = \frac{\text{Amount of Equity Shareholder}}{\text{Number of Equity Shares}}$$

"B" Ltd. $= \frac{1,55,520}{60,000} = ₹ 2.59$

"G" Ltd. $= \frac{94,030}{25,000} = ₹ 3.76$

Illustration 33: 'Goodbye Ltd.' was to be taken over by another company for which you are required to value: Equity shares by Net assets method, taking revised values of all assets and liabilities and goodwill at 2 years' purchase of super profits based on simple average of the last three years' adjusted net profit.

Balance Sheet as on 31st December, 2015

Liabilities	₹	Assets	₹
Equity Share Capital (6,000 shares of ₹ 100 each)	6,00,000	Goodwill	1,00,000
Preference Share Capital	3,00,000	Other Fixed Assets	8,00,000
Reserves & Surplus	2,00,000	Trade Investments	50,000
Secured Loans	1,50,000	Current Assets	4,60,000
Creditors	40,000	Preliminary Expenses	30,000
Workmen Compensation Fund	10,000		
Workmen Profit Sharing Fund	20,000		
Workmen Savings Account	30,000		
Proposed Dividend on Shares	90,000		
	14,40,000		**14,40,000**

Further Information:

(a) The new company expects to carry on business with its own Board of Directors, without any addition. The Director's fees paid by 'A' Ltd. to its directors amounted to ₹ 9,000 per year.

(b) The new company expects a large increase in volume of business and therefore, will have to take an additional office for which it will have to pay extra rent of ₹ 12,000 per year.

(c) Net profit of 2013 includes ₹ 8,000 being profit on sale of furniture whereas net profit of 2014 includes loss of ₹ 6,000 debited to profit and loss account as a result of fall in value of investments.

(d) In 2015, the company received a refund of ₹ 73,000 – from excise department for some old pending matter. This amount was credited to profit and loss account.

(e) The profits upto now were subject to 40% tax, but is likely to be 50% now onwards.

(f) Dividends were distributed at the rate of 10% at the end of 31.12.2015 when the market price ruling is ₹ 125.

(g) Fixed Assets were valued at 20% more than the book value and current assets at 10% less than the book value.

(h) Net profits (after tax) of last three years were 2013 – ₹ 1,08,000; 2014 – ₹ 1,23,000 and 2015 – ₹ 1,50,000.

Solution:

(i) Calculation of Trading Profit (Adjustment Profit):

Particulars	2013	2014	2015
Profit after Tax	1,08,000	1,23,000	1,50,000
Tax	60%	60%	60%
Profit before Adjustment	1,80,000	2,05,000	2,50,000
Less: Net Profit on Sale of Furniture	(8,000)		
Add: Loss on Sale of Furniture	–	6,000	
Less: Refund Received by the Company		–	(73,000)
Profit after Adjustment	**1,72,000**	**2,11,000**	**1,77,000**

$$\text{Simple Average Profit} = \frac{1,72,000 + 2,11,000 + 1,77,000}{3} = ₹\ 1,86,667$$

(ii) Calculation of FMP:

	₹
Average Profit	1,86,667
Add: Director's Fees not required in future	9,000
Less: Rent not incurred in past to be incurred in future	(12,000)
FMP before tax	1,83,667
Less: Tax @ 50%	(91,834)
FMP after tax	**91,833**

(iii) No. of years' purchase = 2 years

(iv) $$\text{NRR} = \frac{\text{Dividend Rate}}{\text{Market Price per Share}} \times 100$$

$$= \frac{10}{125} \times 100$$

$$= 8\%$$

(v) Calculation of Capital Employed:

Particulars	₹	₹
Tangible Trading Assets:		
Other Fixed Assets $\left(\frac{120}{100} \times 8,00,000\right)$	6,66,667	

Trade Investment	50,000	
Current Assets $\left(\frac{90}{100} \times 4,60,000\right)$	5,11,111	12,27,778
Less: External Liabilities:		
Secured Loans	1,50,000	
Creditors	40,000	
Workmen Profit Sharing Fund	20,000	
Workmen Saving A/c	30,000	
Proposed Dividend on Share	90,000	(3,30,000)
Capital Employed		**8,97,778**

(vi) Calculation of Normal Profit:

$$\text{Normal Profit} = \text{Capital Employed} \times \frac{\text{NRR}}{100}$$

$$= 8,97,778 \times \frac{8}{100}$$

$$= ₹\ 71,822$$

(vii) Calculation of Super Profit:

Super Profit = FMP – Normal Profit

= 91,833 – 71,822

= 20,011

(viii) Calculation for Goodwill by Purchase of Super Profit Method:

Goodwill = No. of Years' Purchase × Super Profit

= 2 × 20,011

= 40,022

(ix) Calculation for Amount Available for Shareholder:

	₹
All Assets (at agreed value):	
Capital Employed (excluding Goodwill)	8,97,778
Good will	40,022
Amount Available for Shareholder	9,37,800
Preference Shares	(3,00,000)
Amount Available for Equity Shareholder	**6,37,810**

(x) Calculation for Share by Net Asset Method:

$$\text{IV} = \frac{\text{Amount Available for Equity Shareholders}}{\text{Number of Equity Shares}}$$

$$= \frac{6,37,800}{6,000}$$

$$= ₹\ 106$$

Illustration 34: The following is the Balance Sheet of H. Ltd. on 30th September, 2015.

Liabilities	₹	Assets	₹
5,000 Equity Shares of ₹ 100 each fully paid	5,00,000	Land and Building	10,00,000
Profit and Loss Account	7,50,000	Machinery	2,00,000
Bank Loan	2,50,000	Stock	3,00,000
Creditors	1,00,000	Debtors (due for less than one year)	1,80,000
Proposed Dividend	1,20,000	Bank Balance	2,10,000
Income Tax Provision	2,00,000	Preliminary Expenses	30,000
	19,20,000		**19,20,000**

The net profits (after tax) for the five years ending 30th September, 2009 were as follows:

(i) 2010-11 ₹ 2,20,000
(ii) 2011-12 ₹ 2,50,000
(iii) 2012-13 ₹ 1,75,000
(iv) 2013-14 ₹ 3,00,000
(v) 2014-15 ₹ 1,60,000

The profit for 2011-12 was ₹ 20,000 less due to loss by theft and the profit of 2013-14 included a profit of ₹ 30,000 on sale of investments. Land and Building is revalued at ₹ 15,00,000 and a return of 10% on tangible capital employed (before adjustments) is considered reasonable.

Goodwill is to be calculated at five years purchase of annual super profit. Also find out the intrinsic value of the equity shares.

Proposed Dividend has been subsequently approved and paid.

Solution:

(i) Calculation of Average Profit:

Particulars	2010-11	2011-12	2012-13	2013-14	2014-15
Profit before adjustment	2,20,000	2,50,000	1,75,000	3,00,000	1,60,000
Add: Loss due to theft	–	20,000	–	–	–
Less: Sale of Investment	–	–	–	(30,000)	–
	2,20,000	**2,70,000**	**2,75,000**	**2,70,000**	**1,60,000**

(ii) Calculation of Simple Average:

$$= \frac{2,20,000 + 2,70,000 + 1,75,000 + 2,70,000 + 1,60,000}{5}$$

$$= \frac{10,95,000}{5}$$

= ₹ 2,19,000

(iii) Calculation of FMP:

Average Profit of FMP = ₹ 2,19,000

(iv) Calculation of Capital Employed:

Particulars	₹	₹
Tangible Trading Assets:		
Land and Building	15,00,000	
Machinery	2,00,000	
Stock	3,00,000	
Debtors	1,80,000	

Bank Balance	2,10,000	23,90,000
Less: External Liabilities:		
Bank Loan	2,50,000	
Creditors	1,00,000	
Proposed Dividend	1,20,000	
Income Tax provided	2,00,000	(6,70,000)
Capital Employed		**17,20,000**

(v) NRR = 10%

(vi) Calculation of Normal Profit:

$$\text{Normal Profit} = \text{Capital Employed} \times \frac{\text{NRR}}{100}$$

$$= 17,20,000 \times \frac{10}{100}$$

$$= ₹\ 1,72,000$$

(vii) Number of years' purchase = 5years

(viii) Calculation of Super Profit:

Super Profit = FMP – Normal Profit

= 2,19,000 – 1,72,000

= ₹ 47,000

(ix) Calculation of Amount Available for Shareholder Fund:

Goodwill = Super Profit × No. of Years' Purchase

= 47,000 × 5

= ₹ 2,35,000

(x) Calculation of Amount Available for Shareholder Fund:

All Assets:	
Capital Employed	17,20,000
Goodwill	2,35,000
Amount Available for Equity Shareholder	**19,55,000**

(xi) Calculation of Share by IV Method:

$$\text{Intrinsic Value} = \frac{\text{Amount Available for Equity Shareholde r}}{\text{Number of Equity Shares}}$$

$$= \frac{19,55,000}{5,000}$$

$$= ₹\ 391$$

Illustration 35: WIMCO Limited furnishes the following and requests you to find out.

(i) Value of goodwill on the basis of capitalisation of future maintainable profit method.

(ii) Value of shares.

Balance Sheet as on 31st March, 2015

Liabilities	₹	Assets	₹
Share Capital:		Goodwill	2,50,000
10,000 Shares of ₹ 1.00 each	10,00,000	Property	2,88,000

General Reserves	3,00,000	Equipments	4,00,000
Profit & Loss Account	3,00,000	Investments	2,00,000
Workmen Fund for Compensation	1,40,000	Receivables	6,60,000
Loans	2,00,000	Inventory	4,00,000
Current Liabilities	4,60,000	Cash & Bank	1,50,000
		Capital Issues Expenses	52,000
Total	**24,00,000**	**Total**	**24,00,000**

Further Information:

(a) The investments are earmarked to provide funds for replacement of equipment as and when required.

(b) The provisions already deducted from assets are:

Depreciation on Property	₹ 72,000
Depreciation on Equipments	₹ 80,000
Bad & Doubtful Debts	₹ 60,000

3. The property is worth ₹ 6,00,000 and equipments are worth ₹ 3,60,000. Other assets are valued properly.
4. The liability for Workmen Compensation is expected at ₹ 1,00,000.
5. The expected rate of return is 12%.
6. The profits of past three years (before tax @ 50%) have been:

Year ended on 31.3.2015	₹ 5,60,000
On 31.3.2014	₹ 5,46,000
On 31.3.2013	₹ 6,20,000

7. The changes expected from ensuing year are:
   (a) Increase rent for new office @ ₹ 18,000 p.a.
   (b) Increase in director's fees @ ₹ 24,000 p.a.
   (c) Reduction in publicity expenses @ ₹ 36,000 p.a.
8. For the purpose of valuation, year end capital employed should be considered.

Solution:

(i) Calculation of Average Profit:

$$\text{Simple Average Profit} = \frac{5,60,000 + 5,46,000 + 6,20,000}{3}$$

$$= ₹\ 5,75,333$$

(ii) Calculation of FMP:

	₹
FMP before adjustment	5,75,333
Add: Reduction in publicity	36,000
Less: Rent for new office	(18,000)
Less: Director's fees	(24,000)
FMP before tax	5,69,333
Less: Tax @ 50%	2,84,667
FMP after tax	**2,84,666**

(iii) Calculation of Capital Employed:

Particulars	₹	₹
Tangible Trading Assets:		
Property	6,00,000	
Equipment	3,60,000	
Investment	2,00,000	
Receivable	6,60,000	
Inventory	4,00,000	
Cash and Bank	1,50,000	23,70,000
Less: External Liabilities:		
Workmen Fund Compensation	1,00,000	
Loans	2,00,000	
Current Liability	4,60,000	(7,60,000)
Capital Employed		**16,10,000**

(i) NRR = 12%

(ii) Number of years' purchase = 3 years

(iii) Calculation of capitalisation value of FMP

$$\text{Capital Value of FMP} = \frac{\text{FMP}}{\text{NRR}} \times 100$$

$$= \frac{2,84,666}{12} \times 100$$

$$= ₹\ 23,72,217$$

(iv) Calculation of Goodwill by FMP:

Goodwill = Capitalised Value of FMP – Capitalised Employed

= 23,72,217 – 16,10,000

= ₹ 7,62,217

(v) Amount Available for Equity Shareholders:

	₹
All Assets:	
Capital Employed	16,10,000
Goodwill	7,62,217
Amount Available for Equity Shareholders	**23,72,217**

(iv) Calculation of Share by IV Method:

$$\text{Intrinsic Value} = \frac{\text{Amount Available for Equity Shareholder}}{\text{Number of Equity Shares}}$$

$$= \frac{23,72,217}{1,000}$$

$$= ₹\ 237.22$$

(vi) Profit Available for Equity Shareholder:

Particulars	₹
FMP before tax	5,69,333
Less: Tax @ 50%	(2,84,667)
FMP after tax	2,84,666

(vii) Calculation of ERR:

$$\text{ERR} = \frac{\text{Profit Available for Equity Shareholders}}{\text{Total Equity Share Capital}} \times 100$$

$$= \frac{2,84,666}{10,00,000} \times 100$$

$$= ₹\ 28.47\%$$

(viii) Calculation of Share by Yield Value:

$$\text{Yield Value} = \frac{\text{ERR}}{\text{NRR}} \times \text{Paid-up Value of each equity share}$$

$$= \frac{28.47}{12} \times 100$$

$$= ₹\ 237.25$$

(ix) Calculation of Share by Fair Value:

$$\text{Fair Value} = \frac{\text{IV} + \text{YV}}{2}$$

$$= \frac{237.22 + 237.25}{2}$$

$$= 237.23$$

Illustration 36: Kiran Enterprises Ltd. has the following items appearing in its Balance Sheet as on 31st March, 2015.

Liabilities	₹	Assets	₹
Share Capital:		Goodwill	2,50,000
Equity Shares of ₹ 10	10,00,000	Freehold Property	2,88,000
10% Preference Shares ₹ 10	5,00,000	Plant and Machinery	12,02,000
Profit and Loss A/c	5,00,000	Investment	2,00,000
Bank Loan	10,00,000	Stocks	6,60,000
Current Liabilities	1,50,000	Debtors	4,00,000
		Bank and Cash	1,50,000
	31,15,000		**31,15,000**

(a) The profit for the past three years are year ended 31st

March 2013 ₹ 1,40,000

March 2014 ₹ 3,25,000

March 2015 ₹ 5,50,000

(b) The profits shown above are after debiting:

(i) Goodwill @ ₹ 50,000 p.a.

(ii) Dividend on Preference Shares as applicable

(iii) Dividend on Equity Capital

@ ₹ 10% in 2014

@ ₹ 12% in 2015.

(c) The recent valuation of Fixed Assets revealed property is worth ₹ 5,00,000 and Machinery worth ₹ 25,00,000.

(d) The investment are trade investment worth ₹ 2,50,000.

(e) Obsolete and worthless stock included above is ₹ 4,00,000. This can only realise ₹ 50,000.

(f) Provision for doubtful debts is ₹ 50,000.

You are required to calculate:

(i) Future maintainable profit applying weights:

2013	1
2014	2
2015	3

(ii) Value of equity shares on basis of capitalised value of future maintainable profit @ 8⅓%.

(iii) Intrinsic value of equity shares.

Solution:

(i) Calculation of Trading of Profit:

Particulars	2013	2014	2015
Profit adjustment	1,40,000	3,25,000	5,50,000
Add: Goodwill	50,000	50,000	50,000
Add: Dividend on Preference Shares (10% × 5,00,000)	50,000	50,000	50,000
Add: Dividend on Equity Share Capital (10% of 10,00,000 in 2014)	–	1,00,000	–
Add: Dividend on Equity Share Capital (10,00,000 in 2015)	–	–	1,20,000
Adjustment Profit	**2,40,000**	**5,25,000**	**7,70,000**

(ii) Calculation of Weighted Average Profit:

Years	Profit	Weight	Product
2013	2,40,000	1	2,40,000
2014	5,25,000	2	10,50,000
2015	7,70,000	3	23,10,000
		6	**36,00,000**

$$\text{Weighted Average Profit} = \frac{36,00,000}{6}$$

$$= 6,00,000$$

(iii) Calculation of FMP:

FMP before tax	6,00,000
Less: Tax @ 50%	3,00,000
FMP after tax	**3,00,000**

(iv) Calculation of Capital Employed:

Particulars	₹	₹
Tangible Trading Assets:		
Freehold property	5,00,000	
Plant and mach	25,00,000	
Investment	2,50,000	
Stock	1,50,000	
Debtors [4,00,000 – 50,000]	3,50,000	
Bank and Cash	1,50,000	39,00,000
Less: External Liabilities:		
Bank Loan	10,00,000	
Current Liability	1,50,000	(11,50,000)
Capital Employed		**27,50,000**

(v) NRR = 8.1/3% = $\frac{25\%}{3} = 8.333\%$

(vi) Calculation of Capitalised value of FMP:

$$\text{Capitalised Value of FMP} = \frac{\text{FMP}}{\text{NRR}} \times 100$$

$$= \frac{3,00,000}{25/3} \times 100$$

$$= \frac{3,00,000 \times 100 \times 3}{25}$$

$$= ₹\ 36,00,000$$

(vii) Goodwill by Capitalised of FMP:

Goodwill = Capitalised Value of FMP – Capital Employed

= 36,00,000 – 27,50,000

= ₹ 8,50,000

(viii) Calculation of Amount Available to Shareholder:

	₹
All Assets:	
Capital Employed	27,50,000
Goodwill	8,50,000
Amount Available to Shareholder	36,00,000
Less: Preference Share Capital	(5,00,000)
Amount Available to Equity Shareholders	**31,00,000**

(ix) Calculation of IV = $\frac{\text{Amount Available Equity Shareholde rs}}{\text{Number of Equity Shares}}$

$$= \frac{31,00,000}{1,00,000}$$

$$= ₹\ 31$$

Illustration 37: (A) Final Accounts of Quest Ltd. as on 31st March, 2015 revealed the following significant information:

(a) Share Capital (fully paid up)
Equity – 1,00,000 shares of ₹ 10 each
12% Preference – 20,000 shares of ₹ 50 each.

(b) Reserve & Surplus – ₹ 1,50,000

(c) Preliminary Expenses – ₹ 30,000
The valuation of assets revealed that assets as per accounts are undervalued by ₹ 2,50,000.

(d) The average pre-tax profits of past three years was ₹ 5,00,000. Tax applicable to company is @ 50%.

(e) It is anticipated that due to favourable market condition, pre-tax profit will increasing by 20%.

(f) Equity shareholders expect a return at 15% Find the FAIR VALUE of Shares:

(B) Gem. Ltd. submits the following information as on 31st March, 2015:

		₹
(a)	Fixed Assets (Tangible)	15,00,000
(b)	Current Assets	6,00,000
(c)	Patent Right	2,50,000
(d)	Investments	1,00,000
(e)	Capital Issues Expenses	50,000
(f)	Liabilities	4,00,000
(g)	Capital comprises of 12,500 shares of ₹ 100 each fully paid.	

It is ascertained that Patent Rights are valueless.

Solution:

(A) (i) Calculation of Fixed Assets:

Balance Sheet

Liabilities	₹	Assets	₹
Share Capital:		Fixed Assets	21,20,000
100,000, Equity Shares of ₹ 10 each	10,00,000	Preliminary Expenses	30,000
20,000, 12% Preference Shares of ₹ 50 each	10,00,000		
Reserves and Surplus	1,50,000		
	21,50,000		**21,50,000**

(ii) Calculation of Amount Available for Shareholders:

	₹
All Assets:	
Fixed Asses (21,20,000 + 2,50,000)	23,70,000
Less: External Liability	Nil
	23,70,000
Less: Preference Share Capital	10,00,000
Amount Available to Equity Shareholder	**13,70,000**

(iii) Calculation of Value of Share by IV Method:

$$\text{Intrinsic Value} = \frac{\text{Amount Available to Equity Share holder}}{\text{Total Number of Equity Shares}}$$

$$= \frac{13,70,000}{1,00,000}$$

$$= ₹\ 13.7$$

(iv) Calculation of FMP (Profit Available):

	₹
Average tax (preference tax) profit	5,00,000
Add: Increase in profit (20%)	1,00,000
FMP before Tax	6,00,000
Less: Tax @ 50%	(3,00,000)
FMP after Tax	3,00,000

Less: Preference Dividend (12% of ₹ 10,00,000)	(1,20,000)
Profit Available for Equity Shareholder	1,80,000

(v) Calculation of ERR:

$$\text{ERR} = \frac{\text{Profit Available for Equity Shareholder}}{\text{Total Equity Share Capital}} \times 100$$

$$= \frac{1,80,000}{10,00,000} \times 100$$

$$= 18\%$$

(vi) Calculation of Share by Yield Value Method:

$$\text{Yield Value} = \frac{\text{ERR}}{\text{NRR}} \times \text{Paid-up Value}$$

$$= \frac{18}{15} \times 10$$

$$= ₹\ 12$$

(vii) $$\text{Fair Value} = \frac{\text{IV} + \text{YV.}}{2}$$

$$= \frac{13.7+12}{2}$$

$$= ₹\ 12.85$$

(B) Calculation for Amount Available to Shareholders:

Particulars	₹	₹
All Assets (at agreed value):		
Fixed Assets	15,00,000	
Current Assets	6,00,000	
Investment	1,00,000	22,00,000
Less: External Liability:		
Liability		(4,00,000)
Amount Available to Equity Shareholder		**18,00,000**

$$\text{Intrinsic Value} = \frac{\text{Amount Available for Equity Shareholders}}{\text{Number of Shares}}$$

$$= \frac{18,00,000}{12,500}$$

$$= ₹\ 144$$

Illustration 38: Rana & Co. presents the following Balance Sheet on 31st December, 2015.

Particulars	₹	Particulars	₹
Share Capital (₹ 10 each)	3,00,000	Fixed Assets	4,50,000
Reserves	1,20,000	Current Assets	30,000
Loans	50,000		
Current Liabilities	10,000		
	4,80,000		**4,80,000**

It is observed that fixed assets are undervalued by ₹ 30,000. The current assets are overvalued by ₹ 2,000. The assets are to be valued properly.

It is proposed to issue fully paid shares by capitalisation of General Reserves in the ratio of General Reserves in the ratio of one share for three shares held. Find the value of shares: (i) before issue of bonus shares and (ii) after issue of bonus shares.

In Beeta Ltd., capital of ₹ 11,00,000 is divided in shares of ₹ 10 each. Of these, 40,000 shares are 8% preference and remaining are equity shares.

The average profit (after tax @ 50%) earned during past 3 years is ₹ 1,50,000. In future, expenses will increase by ₹ 12,000.

The expected yield for risk capital is 10%, net of tax.

Find the value of equity shares.

Solution:

1. Calculation for Amount Available for Shareholder:

Particulars	₹	₹
All Assets:		
Fixed Assets		
Add: Undervalued by ₹ 30,000	4,80,000	
Current Assets		
Less: Overvalued by ₹ 2,000	28,000	5,08,000
Less: External Liabilities:		
Loans	50,000	
Liability	10,000	(60,000)
Amount Available to Equity Shareholder		**4,48,000**

(i) Before issue of bonus share:

$$\text{Intrinsic Value} = \frac{\text{Amount Available for Equity Shareholders}}{\text{Number of Shares}}$$

$$= \frac{4,48,000}{40,500}$$

$$= ₹\ 11.2$$

$$= ₹\ 11$$

Yield Method

[B] (i) Calculation for profit available for shareholders:

Particulars	₹
FMP (after tax)	1,50,000
Less: Expenses will increase not incurred in future	(12,000)
Less: Dividend of preference share (8% of ₹ 4,00,000)	(32,000)
FMP after adjustment	**1,06,000**

(ii) Calculation of ERR:

$$\text{ERR} = \frac{\text{Amount Available for Equity Shareholder}}{\text{Number of Equity Share Capital}} \times 100$$

$$= \frac{15.14}{10} \times 10$$

$$= ₹\ 15.14$$

$$\text{Yield Value} = \frac{\text{ERR}}{\text{NRR}} \times \text{Paid} - \text{up value of each share}$$

$$= \frac{15.14}{10} \times 10$$

$$= 15.14$$

Illustration 39: AMTEE LTD. presents the following Balance Sheet as on 31st March, 2015.

Particulars		₹	Particulars	₹
Share Capital (in ₹ 10 shares)			Goodwill	40,000
Equity	4,00,000		Property	2,40,000
Less: Calls in Arrears (5,000 × 2)	10,000	3,90,000	Equipment	1,20,000
8% Preference	2,00,000		Plant	2,20,000
Less: Calls in Arrears (₹ 20)	(2,000)	1,98,000	Vehicles	1,60,000
General Reserve		1,60,000	Investments	1,60,000
Profit & Loss Account		32,000	Stock	1,10,000
Loan Bank		1,20,000	Debtors	1,80,000
Creditors		3,10,000	Bank	20,000
Acceptances		60,000	Preliminary Expenses	20,000
		12,70,000		**12,70,000**

The company desires to value its equity shares on the basis of its business assets and liabilities.

To enable the valuation of shares, following information is furnished.

All fixed assets (except goodwill) are worth 30% above book value (after following adjustments).

Stock is overvalued by ₹ 10,000.

₹ 2,000 due from a customer is doubtful.

All investments earn income @ 10%. However, only 10% are Trade Investment and remaining are Non-trade.

On verification, it was noticed that ₹ 20,000 paid in 2012-13 for a plant was debited as repairs. The depreciation @ 10% p.a. on cost is provided by company.

Goodwill is valued at 2 years' purchase of past four years' average profits. The profits and loss account revealed following profits 2011-12 – ₹ 1,60,000; 2012-13 – ₹ 1,80,000; 2013-14 – ₹ 2,10,000 and 2014-15 – ₹ 2,00,000.

Ascertain the value of fully paid and partly paid shares.

Solution: **Calculation of Trading Profit**

Particulars	2011-12	2012-13	2013-14	2014-15
Profit before adjustment	1,60,000	1,80,000	2,10,000	2,00,000
Less: Income from Non-trade Investment (90% of ₹ 1,60,000)				(1,44,000)
Add: Plant debited as repair (10% of ₹ 20,000)		20,000		

Less: Depreciation on the above plant		(2,000)	(2,000)	(2,000)
Profit after adjustment	**1,60,000**	**1,98,000**	**2,08,000**	**54,000**

(i) Calculation of Average Profit:

$$\text{Simple Average Profits} = \frac{1,60,000 + 1,98,000 + 2,80,000 + 54,000}{4}$$

$$= ₹\ 1,55,000$$

(ii) Calculation of Goodwill by Purchase of Average Profit Method:

Goodwill = Number of Years' Purchase × Average Profit

$= 2 \times 1,55,000$

$= ₹\ 3,10,000$

(iii) Calculation of Amount Available for Shareholders:

Particulars		₹	₹
All Assets:			
Goodwill		3,10,000	
Property	(2,40,000 + 30%)	3,12,000	
Plant	(2,20,000 + 30%)	2,86,000	
Equipments	(1,20,000 + 30%)	1,56,000	
Vehicles	(1,60,000 + 30%)	2,08,000	
Investment		1,60,000	
Stock	(1,10,000 – 10,000)	1,00,000	
Bank		20,000	
Add: Notional call		12,000	
Debtors	(1,80,000 – 2,000)	1,78,000	
Less: External Liability			17,42,000
Loans Bank		1,20,000	
Creditors		3,10,000	
Acceptances		60,000	(4,90,000)
Account Available			(12,52,000)
Less: Preference Share Capital			(2,00,000)
Amount Available to Equity Share Capital Holder			**10,52,000**

(iv) Calculation for Fully Paid-up Equity Share by IV Method:

$$\text{Intrinsic Value} = \frac{\text{Amount Available for Equity Shareholder}}{\text{No. of Equity Share}}$$

$$= \frac{10,52,000}{40,000}$$

$= ₹\ 26.30$

(v) Calculation for Value of Share:

Value for Share = Value of Fully Paid-up Share – Calls in Arrears

$= 26.3 – 2$

$= 24.3$

Illustration 40: The following is the Balance Sheet of Amruta & Co. Ltd. for the year ended 31st December, 2013:

Liabilities	₹	Assets	₹
Equity Share Capital (50,000 @ 10 each)	5,00,000	Land	1,00,000
2,000, 10% Cumulative Preference Shares		Building	3,00,000
of ₹ 100 each	2,00,000	Bills Receivable	50,000
Reserves	1,00,000	Debtors	3,00,000
Creditors	2,10,000	Cash	2,00,000
Bills Payable	80,000	Preliminary Expenses	40,000
	10,90,000		**10,90,000**

Compute the value of each equity share by:

(a) Yield Method

(b) Intrinsic Value Method

(c) Fair Value Method.

Given that:

All the fixed assets are revalued at ₹ 6,00,000.

Profit for the years 2011, 2012 and 2013 was ₹ 1,00,000, ₹ 3,00,000 and ₹ 2,00,000.

Company had a practice to transfer 10% profit to Reserve Fund.

Normal rate of return is 12%.

Arrears of Preference Dividend for last 3 years. **(M.U., T.Y.BAF, October 2008)**

Solution:

(a)

Profit of 2011	1,00,000	
2012	3,00,000	
2013	2,00,000	
Total	**6,00,000**	
Average Profit = $\frac{6,00,000}{3}$		2,00,000
Loss: Transfer to Reserve (10%)		20,000
		1,80,000
Loss: Preference Dividend		20,000
Profit for Equity Shareholders		**1,60,000**

$$\text{Extended Rate of Return} = \frac{\text{Amount Available for Equity Shareholders}}{\text{Paid - up Value of Equity Share Capital}} \times 100$$

$$= \frac{1,60,000}{5,00,000} \times 100$$

$$= 32$$

$$\text{Yield Value of Share} = \frac{\text{CRR}}{\text{NRR}} \times \text{Paid - up value of each share}$$

$$= \frac{32}{12} \times 10$$

$$= 26.67$$

Note: For calculation, simple average has been taken

(b) Intrinsic value method:

Calculation of Intrinsic Value

Particulars	₹	₹
Assets:		
Fixed Assets	6,00,000	
Bills Receivable	50,000	
Debtors	3,00,000	
Cash	2,00,000	11,50,000
Less: Outside Liabilities		
Creditors	2,10,000	
Bills Payable	80,000	2,90,000
		8,60,000
Less: Preference Shareholders Claims		
Capital	2,00,000	
Arrears of Dividends	60,000	2,60,000
Amount Available for Equity Shareholders		**6,00,000**

$$\text{Intrinsic Value} = \frac{\text{Amount Available for Equity Shareholders}}{\text{No. of Equity Shareholders}}$$

$$= \frac{6,00,000}{50,000}$$

Intrinsic Value = ₹ 12 per share

(c) $$\text{Fair Value} = \frac{\text{Yield Value} + \text{Intrinsic Value}}{2}$$

$$= \frac{26.67 + 12}{2}$$

Fair Value = ₹ 19.335 per share.

Illustration 41: Following is the Balance Sheet of RNRL Ltd. as on 31st December, 2015. Compute its goodwill as 5 years' purchase of Super Profit Method.

Liabilities	₹	Assets	₹	₹
Equity Share Capital	18,00,000	Plant and Machinery		5,00,000
General Reserves	2,00,000	Building		10,00,000
Secured Loan	3,00,000	Furniture		6,00,000
Unsecured Loan	5,00,000	10% Non-trade Investment		
Bills Payable	1,00,000	(Purchased on 1st Jan. 2003)		1,00,000
Creditors	4,25,000	Debtors	8,00,000	
		Less: RDD	50,000	7,50,000
		Stock		1,25,000
		Cash		2,00,000
		Discount on Issue of Shares		50,000
	33,25,000			**33,25,000**

(a) The company profit before Managing Director's remuneration of ₹ 30,000 p.a. and Taxation @ 50% are as follows:

Year	Profit before Tax (₹)
2011	5,00,000
2012	7,00,000
2013	8,00,000
2014	6,00,000
2015	2,00,000

(b) Normal rate return is 10% p.a.

(c) In the year 2013, company earned prize of ₹ 10,000 for good performance for the year.

(d) In future, the existing rent of the building will be increased by ₹ 2,000 per month.

(e) All fixed assets to be increased by 10%.

(f) Closing Stock for the year 2014 is overvalued by ₹ 5,000. **(M.U., T.Y.BAF, October 2008)**

Solution:

(a) Calculation of Future Maintenance Profit (FMP):

Particulars	2011	2012	2013	2014	2015
Profit before Tax and Remuneration	5,00,000	7,00,000	8,00,000	6,00,000	2,00,000
Less: Prize for Good Performance			(10,000)		
Less: Income from Investment	(10,000)	(10,000)	(10,000)	(10,000)	(10,000)
Less: Closing Stock Overvalued				(5,000)	
Add: Opening Stock Overvalued					5,000
	4,90,000	**6,90,000**	**7,80,000**	**5,85,000**	**1,95,000**

Average Profit	5,48,000
Less: Extra rent payable in future	(2,000)
Less: M.D. remuneration	(30,000)
	5,16,000
Taxation @ 50%	2,58,000
FMP (after tax)	**2,58,000**

(b) Calculation of Capital Employees:

Particulars	₹	₹
Tangible Trading Assets:		
Plant and Machinery	5,50,000	
Building	11,00,000	
Furniture	6,60,000	
Debtors	7,50,000	
Stock	1,25,000	
Cash	2,00,000	33,85,000
Less: Outsider's Liability:		
Secured Loan	3,00,000	
Unsecured Loan	5,00,000	
Bills Payable	1,00,000	
Creditors	4,25,000	13,25,000
Capital Employed		**20,60,000**

Super Profit = FMP – Normal Profit

$$= 2,58,000 - \frac{NRR}{100} \times \text{Capital Employed}$$

$$= 2,58,000 - \frac{10}{100} \times 20,60,000$$

$$= 2,58,000 - 2,06,000$$

$\therefore$ Super Profit = 52,000

Goodwill = 5 years' purchase of Super Profit

$= 5 \times 52,000$

$= 2,60,000$

$\therefore$ Goodwill of the RNRL Ltd. = ₹ 2,60,000

Illustration 42: The Balance Sheet of Gorakhnath Alloy Ltd. as on 31st December, 2013 were as follows:

Liabilities	₹	Assets	₹
Equity Share Capital (50,000 @ 10 each)	5,00,000	Land and Building	5,00,000
Profit and Loss Account	2,00,000	Plant and Machinery	2,00,000
Debentures	1,80,000	Furniture and Fixture	1,00,000
Creditors	1,50,000	10% Government Bonds	50,000
Provision for Taxation	50,000	Stock	80,000
Proposed Dividend	1,00,000	Debtors	2,00,000
		Cash	50,000
	11,80,000		**11,80,000**

The net profit of the company after charging depreciation and taxes were as follows:

Year	₹
2009	1,00,000
2010	1,25,000
2011	1,50,000
2012	1,75,000
2013	2,00,000

On 31st December, 2013, Land and Building were revalued at ₹ 6,00,000, Plant and Machinery at ₹ 1,50,000 and Furniture and Fixture at ₹ 80,000.

Normal rate of return is 10%.

Find value of goodwill by 5 years' purchase of super profits and capitalisation of Future Maintainable Profit method.

One of the machinery purchased on 01/01/2011 for ₹ 50,000 wrongly charged to Profit and Loss Account has to be rectified and depreciation to be charged on that machinery @ 10% by WDV method.

Use Simple Average.

Government bonds are purchased on 01/01/2009. **(M.U., T.Y.BAF Modified, May 2008)**

Solution:

(a) Calculation of Capital Employed:

Particulars	₹	₹
Assets:		
Land and Building	6,00,000	
Plant and Machinery	1,50,000	
Furniture	80,000	
Stock	80,000	

Debtors	2,00,000	
Cash	50,000	
Machinery wrongly charged in Profit and Loss A/c (50,000 – 10% = 45,000 – 10% = 40,500 – 10%)	36,450	11,96,450
Less: Liabilities:		
Debentures	1,80,000	
Creditors	1,50,000	
Provision to Taxation	50,000	
Proposed Dividends	1,00,000	4,80,000
Capital Employed		**7,16,450**

(b) Calculation of Future Maintainable Profit (FMP):

Particulars	2009	2010	2011	2012	2013
Net Profit after Tax	1,00,000	1,25,000	1,56,000	1,75,000	2,00,000
Add: Machinery wrongly changed to Profit & Loss A/c			50,000		
Less: Depreciation on Machinery			(5,000)	(4,500)	(4,050)
Less: Interest on Government bonus	(5,000)	(5,000)	(5,000)	(5,000)	(5,000)
Profit	**95,000**	**1,20,000**	**1,96,000**	**1,75,500**	**1,90,950**

$$\therefore \text{ Average Profit} = \frac{95,000 + 1,20,000 + 1,96,000 + 1,65,500 + 1,90,950}{5}$$

Average Profit = 1,53,490

NP = 10% of CE
= 10% of 7,16,450
= 71,645

SP = 1,53,490 – 71,645
= 81,845

Valuation of Goodwill:

1. Valuation of goodwill purchase by of super profit
   = Super profit × No. of years purchase
   = 81,845 × 5
   ∴ Goodwill = ₹ 4,09,225
2. Capitalisation of FMP

$$= \frac{\text{FMP}}{\text{NRR}} - \text{Capital Employed}$$

$$= 1,53,490 \times \frac{100}{10} - 7,16,450$$

$$= 1,53,490 \times 10 - 7,16,450$$

$$= 15,34,900 - 7,16,450$$

∴ Goodwill = ₹ 8,18,450

Illustration 43: The Balance Sheet of Mahi Ltd. as on 31st December, 2015 is as follows:

Liabilities	₹	Assets	₹
10% Cumulative Preference Share Capital	1,00,000	Goodwill	50,000
Equity Share Capital (5,000 @ ₹ 100 each)	5,00,000	Land and Building	3,00,000
Profit and Loss A/c	2,50,000	Plant and Machinery	2,00,000
Bank Loan	1,00,000	Investment (Market Price ₹ 2,00,000)	50,000

Creditors	2,00,000	Stock	1,00,000
Bills Payable	50,000	Debtors	3,00,000
		Cash	1,00,000
		Bank	1,00,000
	12,00,000		**12,00,000**

Addition Information:

1. Land and Building revalued at ₹ 4,00,000.
2. Plant and Machinery revalued at ₹ 2,50,000.
3. Investment should be taken at market price.
4. Closing stock include stock of ₹ 20,000 worthless.
5. Net profits for the the year 2009, 2010, 2011, 2012 and 2013 amounted to ₹ 50,000, ₹ 75,000, ₹ 1,00,000, ₹ 2,50,000 and ₹ 2,00,000 respectively.
6. Normal Rate of Return is 10%.
7. Transfer 10% profit to General Reserve.
8. Preference dividend are in arrears for one year.

Calculate value of equity shares:

(a) Net Assets Method. **(M.U., T.Y.BAF Modified, May 2008)**

Solution: **Net Asset Method**

Liabilities		₹	₹
(A)	Assets:		
	Land and Building	4,00,000	
	Plant and Machinery	2,50,000	
	Investment	2,00,000	
	Stock	80,000	
	Debtors	3,00,000	
	Cash	1,00,000	14,30,000
Less:	(B) Liabilities:		
	Bank Loan	1,00,000	
	Creditors	2,00,000	
	Bills Payable	50,000	3,50,000
			10,80,000
	(–) Preference Share Capital		1,00,000
	(–) Preference Dividend		10,000
	Amount available to equity shareholders		**9,70,000**

$$\therefore \text{ Value of one equity share} = \frac{\text{Amount Available to equity shareholders}}{\text{No. of equity shareholders}}$$

$$= \frac{9,70,000}{5,000}$$

$$= ₹\ 194$$

Illustration 44: Greg Cappell & Co. want to purchase the business of Saurabh & Co. on 31-12-2015. Balance Sheet and Profit of Saurabh & Co. for the last four years were:

Balance Sheet as on 31-12-2015

Liabilities	₹	Assets	₹
Capital	2,00,000	Land and Building	1,20,000
General Reserve	70,000	Machinery	90,000
Profit and Loss A/c	1,03,050	Vehicle	50,000
Creditors	30,000	10% Non-trade Investments	25,000
Bills Payable	31,475	(Cost ₹ 20,000 and Purchase on 1-1-2005)	
Outstanding Expenses	18,475	Debtors	55,000
		Cash in Hand	48,000
		Cash at Bank	50,000
		Bills Receivable	15,000
	4,53,000		**4,53,000**

Years	Profit (₹)
2012	37,200
2013	49,600
2014	77,500
2015	96,100

The following additional information about Saurabh & Co. is also available:

An unexpected income of ₹ 9,300 was included in the profit of 2012 which can never be expected in future.

There was a fire in the premises in the year 2013 which caused loss of ₹ 3,100.

After acquisition, Greg Chappell & Co. has to pay rent of ₹ 3,100 p.a. which was not paid by Saurabh & Co.

Normal rate of return is 10%.

Proprietor had a practice to withdrew profits at regular basis.

Greg Chappell, the proprietor of Greg Chappell & Co. will be managing a company at a salary of ₹ 3,100 p.a. The business of Saurabh & Co. was managed by a salaried manager who was paid a salary of ₹ 1,240 p.a.

Calculate the Goodwill by:

3 years purchase of super profit.

Capitalization of Future Maintainable Profit Method.

Use simple average. **(M.U., T.Y.BAF Modified, Oct. 2006)**

Solution:

Goodwill = 3 × Purchase of super profit

$$\text{Super Pro fit} = \text{FMP} - \frac{\text{NRR}}{100} \times \text{Capital employed}$$

Future Maintainable Profit

Particulars	2012	2013	2014	2015
Given Profit	37,200	49,600	77,500	96,100
Less: Income (Non-recurring)	(9,300)			
Add: Non-recurring expenses		3,100		
	27,900	**52,700**	**77,500**	**96,100**

Particulars	₹	₹
Average Past Profit = $\left(\frac{27,900 + 52,700 + 77,500 + 96,100}{4}\right)$		63,550
Less: Rent payable in future		(3,100)
Less: Managing director's salary	3,100	
	1,240	(1,860)
Future Maintainable Profits		58,590
Less: Income from investments		2,000
FMP		**56,590**

Capital Employed

Particulars	₹	₹
Land and Building		1,20,000
Machinery		90,000
Vehicle		50,000
Debtors		55,000
Cash in Hand		48,000
Cash at Bank		50,000
Bills Receivable		15,000
		4,28,000
Less: Outside Liabilities:		
Creditors	30,000	
Bills Payable	31,475	
Outstanding Expenses	18,475	79,950
Capital Employed		**3,48,050**

$$\text{Super Profit} = 56,590 - \frac{10}{100} \times 3,48,050$$

$$= 56,590 - 34,805$$

$$= ₹\ 21,785$$

$$\text{Goodwill} = 3 \times 21,785$$

$$= ₹\ 65,355$$

Capitalisation of future maintainable profit

$$= \frac{\text{FMP}}{\text{NRR}} \times 100 - \text{Capital Employed}$$

$$= \frac{56,590}{10} \times 100 - 3,48,050$$

$$= 5,65,900 - 3,48,050$$

$$= ₹\ 2,17,850$$

Illustration 45: Mohan Enterprises provides the following details in its:

Balance Sheet as on 31-12-2015

Liabilities	₹	Assets	₹
Equity Share Capital of (₹ 10 each fully paid)	8,00,000	Goodwill	80,000
General Reserve	3,80,000	Fixed Assets	10,00,000

Profit and Loss A/c	2,40,000	Current Assets	8,00,000
14% Debentures	2,00,000		
Current Liabilities	2,60,000		
	18,80,000		**18,80,000**

Following additional information is provided:

The Fixed Assets were valued at ₹ 7,60,000 and Goodwill ₹ 1,00,000.

The net profits for the three years are 2013 was ₹ 1,89,600, 2014 was ₹ 2,08,000 and 2015 was ₹ 2,02,400.

The company transfers 20% of profit to General Reserve.

The profit earned by similar companies is 16%.

Ignore Taxation.

Calculate the value per share under:

Intrinsic Value Method.

Yield Value Method.

Fair Value Method. **(M.U., T.Y.BAF, May 2006)**

Solution:

Particulars	(₹)	(₹)
Intrinsic Value Method		
Intrinsic Value = $\frac{\text{Amount Available for Equity Shareholders}}{\text{No. of Equity Shares}}$		
All Assets		1,00,000
Goodwill		7,60,000
Fixed Assets		8,00,000
		16,60,000
Less: 14% Debentures	2,00,000	
Current Liabilities	2,60,000	4,60,000
Amount Available to Equity Shareholders		12,00,000
Intrinsic Value = $\frac{1,20,000}{80,000}$		
= ₹ 15 per share		
Yield Value Method		
Average Post Profits = $\left(\frac{1,89,600 + 2,08,000 + 2,02,400}{3}\right)$		2,00,000
Less: Transfer to Reserve @ 2%		40,480
Profit Available to Equity Shareholders		1,59,520
ERR = $\frac{\text{Profit Available to Equity Shareholders}}{\text{Paid - up Equity Share Capital}} \times 100$		
= $\frac{1,59,520}{8,00,000} \times 100$		
= 19.94%		
Yield Value = $\frac{\text{ERR}}{\text{NRR}} \times$ Paid - up value per equity share		

$$= \frac{19.94}{16} \times 10$$

$$= ₹\ 12.46$$

Fair Value Method

$$\text{Fair Value} = \frac{\text{Intrinsic Value} + \text{Yield Value}}{2}$$

$$= \frac{15 + 12.46}{2}$$

$$= ₹\ 13.73$$

Illustration 46: Balance Sheet of Shubhangi Co. Ltd. as on 31st March, 2015 is as follows:

Liabilities	₹	Assets	₹	₹
Share Capital		Fixed Assets:		
Equity Share Capital	3,00,000	Goodwill		30,000
Preference Share Capital	2,00,000	Land		2,00,000
Reserves and Surplus		Building		2,50,000
General Reserve	1,50,000	Furniture		75,000
Capital Reserve	50,000	Current Assets and Loans and Advances:		
Profit and Loss A/c	1,27,500	Debtors	1,20,000	
Current Liabilities and Provisions:		*Less:* R.D.D.	20,000	1,00,000
Creditors	1,17,500	Stock		1,30,000
Provisions for Taxation Current Year	75,000	Cash		75,000
		Bills Receivable		50,000
		Bank		1,10,000
	10,20,000			**10,20,000**

The following information is available:

The reasonable return on capital invested in the class of business done by the company is 10%.

50% provision has been made in accounts for income tax and adequate provision has been made for depreciation.

In future, cost reduction scheme will save ₹ 25,000 expenditure.

You are required to value the goodwill by:

Five years purchase of super profit method.

Capitalisation of super profit method. **(M.U., T.Y.BAF Modified, May 2007)**

Solution: Goodwill = 5 × Super Profit

(a) $\text{Super Profit} = \text{FMP} - \frac{\text{NRR}}{100} \times \text{Capital Employed}$

Future Maintainable Profit (FMP)

Particulars	₹
Average Past Profit (Before Tax)	1,50,000
Add: Expenses not payable in future	25,000
Less: Taxation @ 50%	87,500
Future Maintainable Profit	**87,500**

Capital Employed

Particulars		₹
Land		20,00,000
Building		2,50,000
Furniture		75,000
Debtors		1,00,000
Stock		1,30,000
Cash		75,000
Bills Receivable		50,000
Bank		1,10,000
		9,70,000
Less: Outside Liabilities:		
Creditors	1,17,500	
Provision for Taxation	75,000	1,92,500
Capital Employed		**7,77,500**

$$\text{Super Profit} = 87,500 - \frac{10}{100} \times 7,77,500$$
$$= 87,500 - 77,500$$
$$= ₹\ 9,750$$
$$\text{Goodwill} = 5 \times 9,750$$
$$= ₹\ 48,750$$

$$\text{Capitalisation of Super Profit} = \frac{\text{Super Profit}}{\text{NRR}} \times 100$$
$$= \frac{9,750}{10} \times 100$$
$$= ₹\ 97,500$$

Illustration 47: The Balance Sheet of Bob Woolmer Ltd. as 31st December, 2015:

Liabilities	₹	Assets	₹
Share Capital:		Goodwill	68,000
Equity Shares of ₹ 10 each	5,00,000	Motor Car	1,00,000
10% Preference Shares of ₹ 10 each	2,00,000	Land and Building	5,00,000
General Reserve	2,75,000	Machinery	3,00,000
Profit and Loss Account	2,86,000	Furniture and Fixture	2,50,000
Creditors	2,00,000	Investment	1,00,000
Bills Payable	50,000	Debtors	1,50,000
Dena Bank Loan	1,00,000	Stock	90,000
		Cash	43,000
		Discount on Issue of Debentures	10,000
	16,11,000		**16,11,000**

You are required to value each fully paid equity share by:

(a) Asset backing method.

(b) Earning capacity method.

In the year 2012, Motor Car of ₹ 10,000 wrongly charged to Profit and Loss Account for which rectification not yet done.

Depreciation is charged @ 10% on motor car by Straight Line method.

Goodwill is valued at ₹ 90,000.

All other assets are taken at book value.

Closing Stock of 2012 is undervalued by 10%. Remaining assets should be taken on book value.

Debtors to be reduced by ₹ 2,000.

Normal Rate of Return is 8%.

Profits for 4 years are given as follows (Use simple average):

Years	Profit (₹)
2012	50,000
2013	1,00,000
2014	1,25,000
2015	2,00,000

(M.U., T.Y.BAF Modified, 2007)

Solution:

(a) Asset Backing Method = $\frac{\text{Amount Available to Equity Shareholders}}{\text{No. of Equity Shares}}$

Particulars	₹	₹
Assets:		
Goodwill		90,000
Motor Car		1,09,700
Land and Building		5,00,000
Machinery		3,00,000
Furniture and Fixture		2,50,000
Investments		1,00,000
Debtors (1,50,000 – 2,000)		1,48,000
Stock $\left(\frac{90,000}{90} \times 100\right)$		1,00,000
Cash		43,000
		16,40,700
Less: Outside Liabilities:		
Creditors	2,00,000	
Bills Payable	50,000	
Dena Bank Loan	1,00,000	3,50,000
		12,90,700
Less: Preference Shareholders Claims		2,00,000
Amount Available to Equity Shareholders		**10,90,700**

Asset Backing Method = $\frac{10,90,700}{50,000}$

= ₹ 21.81 per share

(b) Earning Capacity Method

Particulars	2012	2013	2014	2015
Given Profits	50,000	1,00,000	1,25,000	2,00,000
Add: Motor car wrongly charged to Profit & Loss A/c	10,000			

Less: Depreciation		(100)	(100)	(100)
Add: Closing stock undervalued				9,000
Business Profit	**60,000**	**99,900**	**1,24,900**	**2,08,900**

$\therefore$ Average Past Profit $= \left(\frac{60,000 + 99,900 + 1,24,900 + 2,08,900}{4} \right)$

$= ₹\ 1,23,425$

Less: Preference dividend $= ₹\ (20,000)$

Profit available to equity shareholders $= ₹\ 1,03,425$

$$\text{ERR} = \frac{\text{Profit available to equity shareders}}{\text{Paid up share capital}} \times 100$$

$$= \frac{1,03,425}{5,00,000} \times 100$$

$= 20.68\%$

Earning Capacity method

$$= \frac{20.68}{8} \times 10$$

$= ₹\ 25.85$ per share

Illustration 48: On 31st March, 2015 Ronus Co. Ltd. proposes to purchase the business carried on by M/s Kanus Co. Ltd. Goodwill for the purpose is agreed to be valued at three years purchase of the weighted average profit for the last four years. The appropriate weights to be used were decided as follows:

Years	Profits	Weights
2011-12	18,68,500	1
2012-13	22,94,000	2
2013-14	18,50,000	3
2014-15	25,90,000	4

By verifying the accounts, following information obtained:

1. On 1st December, 2012, major repairs of the plant, spending ₹ 5,55,000 the amount was charged to revenue. The said surplus is agreed to be capitalised for the purpose of calculation of goodwill subject to the adjustment for depreciation @ 12% p.a. on straight line method.
2. The closing stock for the year 2012-13 was overvalued by ₹ 2,22,000.
3. To cover administrative cost, an annual charge of ₹ 4,44,000 is to be made while calculating goodwill.

Calculate the goodwill. **(M.U., T.Y.BAF, Oct. 2006)**

Solution:

Ronus Co. Ltd.

Calculation of FMP

Particulars	2011-12 (₹)	2012-13 (₹)	2013-14 (₹)	2014-15 (₹)
NPBT	18,68,500	22,94,000	18,50,000	25,90,000
Less: Repairs of Plant		5,55,000		
Less: Deprecation		22,200	66,600	66,600

Less: Overvaluation of Closing Stock		2,22,000		
Add: Overvaluation of Opening Stock			2,22,000	
	18,68,500	**14,94,800**	**20,05,400**	**25,23,400**
	1	2	3	4

$$\text{Weighted Average Profit} = \frac{\text{Total Weghted Pr ofit}}{\text{Total Weight}}$$

$$= \frac{78,92,100}{10}$$

$$= 7,89,210$$

Particulars	₹
Weighted Average Profit	7,89,210
Less: Annual Charges	4,44,000
	3,45,210

Goodwill = 3 Years × 3,45,210

= 3 × 3,45,210

= 10,35,630

Illustration 49: Following is the Balance Sheet of Radha Krishna Ltd. as on 31st December, 2015.

Liabilities	₹	Asset	₹
25,000 Equity Shares of ₹ 10 each	2,50,000	Land & Building	1,20,000
Securities Premium	50,000	Furniture	50,000
General Reserve	1,19,700	Stock	3,10,000
Profit & Loss A/c	78,800	Debtors	1,03,000
Sundry Creditors	2,04,700	Cash at Bank	2,18,700
Provision for Tax	98,500		
	8,01,700		**8,01,700**

The net profits before tax for the last 3 years have been as follows:

Year	₹
31/12/2013	1,55,500
31/12/2014	1,97,000
31/12/2015	2,10,000

Following addition information is provided:

(a) The rate of income tax is 50%.

(b) The company transfer 20% for the profits after tax to General Reserve.

(c) The expected rate of return on similar business is 15%.

(d) The land and building was valued at ₹ 1,82,300 and furniture ₹ 1,14,200.

Calculate the value of one equity shares on the basis of: (i) Intrinsic value, (ii) Yield value and (iii) Fair value. **(M.U., T.Y.BAF Modified, May 2006)**

Solution: **Radha Krishna Ltd.**

Particulars	2013	2014	2015
NPBT	1,55,500	1,97,000	2,10,000
Less: Income Tax @ 50%	77,750	98,500	1,05,000
NPAT	77,750	98,500	1,05,000
Less: 20% Transfer to General Reserve	15,550	19,700	21,000
	62,200	**78,800**	**84,000**

$$\text{Average Profit} = \frac{2,25,000}{3}$$

$$= 75,000$$

$$\text{Goodwill} = 1 \times 75,000$$

$$= 75,000$$

(i) Intrinsic Method:

Closing Capital Employed

Assets	₹
Land and Building	1,82,500
Furniture	1,14,200
Stock	3,10,000
Debtors	1,03,000
Cash	2,18,700
Total Assets	**9,28,400**
Less: Liabilities:	
Sundry Creditors	2,04,700
Provision for Tax	98,500
Total Liabilities	**3,03,200**
Closing Capital Employed	**6,25,200**

$$\therefore \text{Net Assets Available to Shareholders} = \text{Closing Capital Employed} + \text{Goodwill}$$

$$= 6,25,000 + 75,000$$

$$= ₹\ 7,00,000$$

$$\text{Value Per Share as per Intrinsic Method} = \frac{\text{Net Assets Available to Equity Shareholder}}{\text{No. of Equity Shares}}$$

$$= \frac{7,00,000}{25,000}$$

$$= ₹\ 28$$

(ii) Yield Method:

$$\text{ERR} = \frac{\text{Profit Available for Equity Shareholder}}{\text{Paid - up Equity Share Capital}} \times 100$$

$$= \frac{75,000}{2,50,000} \times 100$$

$$= 30\%$$

$$\text{Value Per Share as per Yield} = \frac{\text{ERR}}{\text{NRR}} \times \text{Paid - up value per share}$$

$$= \frac{30}{15} \times 10$$

$$= ₹\ 20$$

(iii) Fair Value Method:

$$\text{Fair Value} = \frac{\text{Intrinsic Value} + \text{Yield Value}}{2}$$

$$= \frac{28 + 20}{2}$$

$$= ₹\ 24$$

Illustration 50: The Balance Sheet of Amtek Ltd. as on 31st March, 2015 was as under:

Liabilities	₹	Asset	₹
Equity Share Capital	3,90,000	Goodwill	30,000
General Reserve	38,000	Land	1,50,000
Profit and Loss A/c	50,000	Machinery	1,00,000
Creditors	77,000	Furniture	1,50,000
Provision of Depreciation:		Debtors	1,50,000
Furniture	50,000	Stock	20,000
Machinery	20,000	Bank	25,000
	6,25,000		**6,25,000**

Betek Ltd. want to purchase the business of Amtek Ltd. For this purpose, you are required to calculate the value of goodwill by 3 years purchase of super profit method and capitalisation of super profit method after taking the following adjustments:

(a) The company's average profit of the last five years after making provision for taxation at 50% amounted to ₹ 2,00,000.

(b) Land is revalued at ₹ 2,00,000.

(c) Stock to be revalued and increased by 10%.

(d) All other assets and liabilities are taken over at book value.

(e) One of the manager of Ametak Ltd. is to be appointed on the Board of Directors of Betek Ltd. on ₹ 10,000 as a remuneration.

(f) Normal rate of return on capital is 10%. **(M.U., T.Y.BAF, May 2009)**

Solution: Calculation of Goodwill

Calculation of Future Maintainable Profit (FMP)

Particulars	₹
Profit before Tax	2,00,000
Less: Board of Directors' Remuneration	(10,000)
	1,90,000
Less: Tax	(95,000)
FMP	**95,000**

Calculation of Average Capital Employed

Particulars	₹	₹
Assets (at revised value):		
Land	2,00,000	
Machinery (1,00,000 – 20,000)	80,000	
Furniture (1,50,000 – 50,000)	1,00,000	
Debtors	1,50,000	
Stock	22,000	
Bank	25,000	5,77,000

Less: External Liability:		
Creditors		(77,000)
Average Capital Employed		**5,00,000**

Normal Profit = ACE × NRR
= 5,00,000 × 10%
= 50,000

Super Profit = FMP – Normal Profit
= 95,000 – 50,000
= ₹ 45,000

Goodwill = Number of years purchase × Super profit
= 3 × 45,000
= ₹ 1,35,000

$$\text{Goodwill} = \left(\frac{\text{Super profit}}{\text{Normal Rate Return}}\right) = \left(\frac{45,000}{10\%}\right)$$

= ₹ 4,50,000

Illustration 51: Following is the Balance sheet of Ramdeo Baba Ltd. as on 31st March, 2015:

Liabilities	₹	Asset	₹
Share Capital:		Motor Car	5,00,000
1,10,000 Equity Shares of ₹ 10 each	11,00,000	Land and Building	5,00,000
10% Preference Share Capital	2,00,000	Machinery	10,00,000
General Reserve	5,02,000	Furniture and Fixture	3,00,000
Profit and Loss Account	7,85,000	10% Securities Bond	62,000
Creditors	1,00,000	Debtors	2,00,000
12% Debentures	4,00,000	Stock	1,70,000
		Cash	3,30,000
		Discount on Issue of Debentures	25,000
	30,87,000		**30,87,000**

Further information are as follows:

(a) Normal rate of return is 8%.
(b) Goodwill is to be valued at 3 years purchase of super profit method.
(c) Average annual profit before tax is ₹ 5,52,000.
(d) Tax rate is 50%.
(e) All assets and liabilities are worth book value.

You are required to value the equity shares by:

(i) Intrinsic value method.
(ii) Yield method.
(iii) Fair value method. **(M.U., T.Y.BAF, May 2007)**

Solution:

(a) Calculation of Intrinsic value method of value per share:

Particulars	₹	₹
Average Capital Employed (as per Goodwill)		25,00,000
Add: Goodwill		2,18,700

Add: 10% Securities Bond		62,000
Assets Available for Shareholders		27,80,700
Less: Preference Shareholder Claim		
Preference Share Capital	2,00,000	
Preference Dividend	20,000	(2,20,000)
Net Assets Available for Equity Shareholders		25,60,700
÷ Number of Equity Shares		÷ 1,10,000
Intrinsic Value per share		**23.28**

Calculation of Goodwill under Super Profit-method Calculation of Future Maintainable Profit:

Particulars	₹
Net Profit before Tax	5,52,000
Less: Income from Securities Bond	(6,200)
	5,45,800
Less: Tax @ 50%	(2,72,900)
FMP	**2,72,900**

Calculation of Normal Profit:

Calculation of Average Capital Employed

Particulars	₹	₹
Asset (at revised value):		
Motor Car	5,00,000	
Land and Building	5,00,000	
Machinery	10,00,000	
Furniture and Fixture	3,00,000	
Debtors	2,00,000	
Stock	1,70,000	
Cash	3,30,000	30,00,000
Less: External Liabilities:		
Creditors	1,00,000	
12% Debentures	4,00,000	(5,00,000)
Average Capital Employed		**25,00,000**

Normal Profit = ACE × NRR
= 25,00,000 × 8% = ₹ 2,00,000

Super Profit = FMP – Normal Profit
= 2,72,900 – 2,00,000 = ₹ 72,900

Goodwill = Number of years purchase × Super Profit
= 3 × 72,900 = ₹ 2,18,700

(b) Calculation of Yield Value per share:

Particulars	₹
Profit before Tax	5,52,000
Less: Tax	(2,76,000)
	2,76,000
Less: Preference Dividend	20,000
	2,56,000

$$\text{Rate of FMP} = \frac{\text{FMP}}{\text{Paid - up Capital}} \times 100$$

$$= \frac{2,56,000}{11,00,000} \times 100$$

$$= 23.27\%$$

$$\text{Yield Value per share} = \frac{\text{Rate of FMP}}{\text{NRR}} \times \text{Paid - up value per share}$$

$$= \frac{23.27}{8} \times 10$$

$$= 29.09$$

(c) Fair Value Method: $= \frac{\text{Intrinsic Value} + \text{Yield Value}}{2}$

$$= \frac{23.28 + 29.09}{2}$$

$$= 26.19$$

Illustration 52: The following figures are extracted from the books of M/s Prosperous Limited as on 31st March, 2012:

Particulars	₹
Share Capital:	
9% Preference Shares of ₹ 100 each	3,00,000
1000 Equity Shares of ₹ 100 each ₹ 50 paid up	50,000
1000 Equity Shares of ₹ 100 each ₹ 25 paid up	25,000
1000 Equity Shares of ₹ 100 each fully paid up	1,00,000
Reserves and Surplus:	
General Reserves	2,00,000
Profit and Loss Account	50,000
Total	**7,25,000**

On a fair valuation of all the assets of the company, it is found that they have an appreciation of ₹ 1,05,000. The Articles of Association provided that, in case of liquidation, the preference shareholders will have a further claim to the extent of 10% of the surplus assets. Ascertain the value of each preference and equity shares, assuming:

(a) Company make a call on equity shares, which is paid by all shareholders

(b) Company does not make a call on equity shares. **(M.U., T.Y.BAF, April 2013)**

Solution:

Particulars	₹	₹
Total Capital and Reserves:		
(i.e., net assets)		7,25,000
Appreciation Asset		1,05,000
Total		8,30,000
Preference Share Capital		(–) 3,00,000
Funds for Equity		5,30,000
Equity Share Capital	50,000	
	(+) 25,000	

	(+)1,00,000	1,75,000
Surplus to Equity		3,35,000
(A) If company makes a call total asset will increase by 75,000 + 50,000 = 1,25,000. All Equity shares would be fully called up.		
Total Assets		8,30,000
Call Money Received		(+) 1,25,000
		9,55,000
Preference Capital		(–) 3,00,000
For Equity Capital		6,55,000
Less: Equity Share Capital (1,75,000 + 1,25,000)		(–) 3,00,000
Surplus		3,55,000
For Preference		35,500
For Equity		3,19,500
Total Assets for Equity Shareholders		3,00,000
		(+) 3,19,500
		6,19,500
No of equity shares 3,000 value per share (6,19,500/3,000)		206.50
(B) All equity shares would be fully called up.		
Total Assets		8,30,000
Call Money Received		(+) 1,25,000
		9,55,000
Preference Capital		(–) 3,00,000
For Equity Capital		6,55,000
Less: Equity Share Capital (1,75,000 + 1,25,000)		(–) 3,00,000
		3,55,000
Surplus:		
For Preference		35,500
For Equity		3,19,500
Total Assets for Equity Shareholders		3,00,000
		(+) 3,19,500
		6,19,500
No. of equity shares 3000 value per share (equity shares) (6,19,500/3,000)		206.50
Full Paid 1000		206.50
Full Paid 50 = 206.50 – 50.00		156.50
Full Paid 25 = 206.50 – 75.00		131.50
Preference Share Capital		3,00,000
Surplus		35,500
		3,35,500
Value per share (3,35,500/3,000)		**111.83**

GLOSSARY

- **Goodwill:** It is an intangible fixed asset having a realisable value.
- **F.M.P.:** It is the amount of profit likely to be earned in future from trading operations under normal conditions.
- **Super Profit:** It is the excess of FMP over normal profit.
- **Normal Profit:** It is the average profit earned by similar companies in the industry.

- **Capital Employed:** It is the tangible trading capital employed in business.
- **Fair Value:** It is the average of Intrinsic value and yield value.

EXERCISES

Theory Questions

1. Explain the meaning of goodwill.
2. Explain both the types of goodwill.
3. Explain different methods for valuation of goodwill.
4. Explain capital employed and average capital employed.

Short Notes

1. Normal Rate of Returns.
2. Super Profit.
3. Business Profit.
4. Abnormal Income and Expenses.

Objective Type Questions

(A) Fill in the Blank:

1. Goodwill is an _____ asset.
2. Goodwill has _____ value.
3. Goodwill is not a _____ asset.
4. Goodwill may be _____ or _____.
5. Only _____ goodwill is accounted.
6. _____ is calculated on the basis of adjusted average profit
7. _____ is equal to Rate of interest plus rate of risk.
8. Investments are _____ assets.
9. _____ value depends on Net assets.
10. Yield value depends on _____.
11. Fair value is the _____ of Intrinsic value and yield value.
12. EPS depends on net profit available to _____ shareholders.
13. P/E ratio is a relationship between _____ and _____.

[**Ans.:** 1. Intangible, 2. Realisable, 3. Fictitious, 4. Purchased/Non-purchased, 5. Purchased, 6. FMP, 7. NRR, 8. Non-trading, 9. Intrinsic, 10. Net profit, 11. Average, 12. Equity, 13. MP & EPs]

(B) State Whether the Following Statements are True or False:

1. Goodwill is an intangible fixed asset which has a realizable value.
2. Goodwill can be realized at any time.
3. Goodwill is fictitious asset.
4. Goodwill depends on personal reputation of the enterprise.
5. Goodwill consists of the super earning power.
6. Goodwill may be purchased or non-purchased.
7. Accounting system recognizes only purchased goodwill.
8. Non-purchased goodwill is recognized in financial statements.

9. FMP is considered in valuation of Goodwill.
10. FMP is calculated on the basis of adjusted average profit.
11. Super profit is the profit which is more than the normal profit earned by similar organizations in the industry.
12. NRR is calculated on the basis of Rate of interest only.
13. Investments are non-trading assets.
14. Fictitious assets should be included in average capital employed.
15. Valuation of shares has to be done when they are to be bought and sold.
16. Intrinsic value is also known as Net Asset Value.
17. Yield value depends on Net Assets.
18. Fair value is the average of intrinsic value and yield value.
19. Valuation of shares from the point of view of majority shareholders is based on dividend.
20. Valuation of shares from the point of view of minority shareholders is based on FMP.
21. EPS depends on net profit available to Equity shareholders.
22. P/E ratio is a relationship between M.P. and EPS.

[**Ans.:** **True:** 1, 5, 6, 7, 9, 10, 11, 13, 15, 16, 18, 21, 22
False: 2, 3, 4, 8, 12, 14, 17, 19, 20]

(C) Multiple Choice Questions:

1. Goodwill is
   (a) an intangible asset (b) a fixed asset
   (c) realisable (d) all the above
2. Goodwill is to be valued when
   (a) amalgamation takes place (b) one company takes over another company
   (c) a partner is admitted (d) all of the above
3. Goodwill is paid for obtaining
   (a) future benefit (b) Present benefit
   (c) Past benefit (d) none of the above
4. Super profit is
   (a) excess of average profit over normal profit
   (b) extra profit earned
   (c) average profit earned by similar companies
   (d) none of the above
5. Normal profit is
   (a) average profit earned
   (b) Profit earned by similar companies in the same industry
   (c) a and b
   (d) none of the above
6. Normal profit depends on
   (a) Normal Rate of Return (b) Average capital employed
   (c) both a and b (d) none of the above

7. Goodwill as per purchase of average profit method
   (a) Average Profit (b) Average profit × Amount of purchases
   (c) Average Profit × No of years purchases (d) all of the above
8. Goodwill as per purchase or super profit method is equal to
   (a) Super Profit (b) Super Profit × amount of Purchases
   (c) Super Profit × No of year's Purchases (d) none of the above
9. Normal Rate of Return depends on
   (a) Rate of Interest (b) Rate of Risk
   (c) both a & b (d) none of the above
10. While calculating capital employed
   (a) Tangible trading assets should be considered
   (b) Intangible assets should be considered
   (c) Fictitious assets should be considered
   (d) none of the above
11. Any non trading income included in the profit should be
   (a) eliminated (b) added
   (c) ignored (d) none of the above
12. Under capitalisation of super profit method, Goodwill is equal to
   (a) Capitalised Value of super profit at NRR (b) Capitalised value of maintained profit
   (c) a and b (d) none of the above
13. Capital employed at the end of the year is ₹ 4,20,000. Profit earned ₹ 40.000. Average capital employed is
   (a) ₹ 4,20,000 (b) ₹ 4,00,000
   (c) ₹ 4,40,000 (d) ₹ 4,60,000
14. Rate of interest is 11% and the rate of risk is 9%. The normal rate of return is
   (a) 11% (b) 9%
   (c) 20% (d) 2%
15. Capital employed at the beginning of the year is ₹ 5,20,000 and the profit earned during the year is ₹ 60,000. Average capital employed during the year is
   (a) ₹ 5,50,000 (b) ₹ 5,20,000
   (c) ₹ 5,80,000 (d) ₹ 4,60,000
16. Average Profit is ₹ 19,167 and nonna1 profit is ₹ 10,000. The Super Profit is
   (a) ₹ 9,167 (b) ₹ 29,167
   (c) ₹ 19,167 (d) ₹ 10,000
17. Super Profit is ₹ 9,167 and the Normal Rate of Return is 10% Goodwill as per capitalisation of Super Profit method is equal to
   (a) ₹ 91,670 (b) ₹ 90,600
   (c) ₹ 67,910 (d) ₹ 95,000
18. Capital employed is ₹ 50,000 Trading Profit amounted ₹ 12,200, ₹ 15,000 and ₹ 2000 loss for 2008, 2009 and 2010 respectively. Rate of interest is 8% and the rate of risk is 2% Remuneration from alternative employment of the proprietor is ₹ 3,600 pa. Amount of Goodwill at 3 years. purchase of super Profit is

(a) ₹ 8,000 (b) ₹ 8,800
(c) ₹ 8,850 (d) ₹ 9,500

19. Shares are to be valued on
(a) Mergers (b) Sale of shares
(c) Gift tax (d) all of the above

20. Quoted shares are those shares which are
(a) Listed on the stock exchange (b) quoted daily
(c) quoted by the seller (d) quoted by the buyer

21. Under net asset method value of a share depends on
(a) net assets available to equity shareholders
(b) net assets available to debentures holders
(c) net assets available to prefer shareholders
(d) none of the above

22. Net asset value is also called as
(a) asset backing value (b) intrinsic value
(c) liquidation value (d) a, b and c

23. While deciding net asset value fictitious assets
(a) Should be considered (b) Should not be considered
(c) added to total assets (d) none of the above

24. Net asset value method is based on the assumption that the company is
(a) a going concern (b) going to be liquidated
(c) a & b (d) none of the above

25. Yield value depends on
(a) Future maintainable Profit (b) Paid up equity Capital
(c) Normal Rate of Return (d) all of the above

26. F.M.P. For yield valuation is
(a) Future Profit
(b) Profit that would be available to equity shareholders
(c) Past Profit
(d) none of the above

27. Yield value is based on the assumption that
(a) the company is a going concern (b) the company will be liquidated
(c) the cornpany is sick (d) none of the above

28. Fair value of a share is equal to
(a) Intrinsic Value only (b) Yield value only
(c) Average of Intrinsic and Yield Value (d) none of the above

29. Value of a Partly Paid equity Share is equal to
(a) Value of fully Paid Share - calls unpaid per share
(b) Calls in arrears per share
(c) Paid up value per share
(d) none of the above

30. Following details are extracted from the records of a company:

	₹
2000 9% Pref. Shares of ₹ 100 each	2,00,000
50,000 equity shares of ₹ 10 each ₹ 8 per share paid up	4,00,000
Expected Profit	2,18,000
Tax Rate	40%
Transfer to general reserve	20%
Normal rate of earning	15%

Yield value per share is

(a) ₹ 15 (b) ₹ 11.55

(c) ₹ 16 (d) ₹ 17.50

31. Gross assets are ₹ 1,01,000, fictitious assets ₹ 350 are included in the gross assets. External liabilities are ₹ 7,500. 6% prefer share capital is ₹ 45,000. Equity capital is 4,500 equity shares of ₹ 10 each fully paid. Average expected profit is ₹ 8,500. Transfer to reserves is 10%. Pref. dividend is payable. NRR is 9%. The Net Asset Value Per share is

(a) ₹ 11 (b) ₹ 10.70

(c) ₹ 15 (d) ₹ 20

32. Refer. To q. No 31. The yield value is

(a) ₹ 12 (b) ₹ 22

(d) ₹ 12.22 (d) ₹ 14

33. The company earns a net profit of ₹ 24,000 with a capital of ₹ 1,20,000. The NRR is 10%. Under capitalization of super profit, goodwill will be

(a) 1,20,000 (b) 70,000

(c) 12,000 (d) 24,000

34. Average capital employed ₹ 14,00,000.

Net profit 2011	2,50,000
2012	1,00,000 loss
2013	4,50,000

NRR 10%

Goodwill at 3 years purchase of super profit will be:

(a) 1,80,000 (b) 1,50,000

(c) 1,20,000 (d) 90,000

35. Refer to Q. No. 34 Goodwill by capitalization of Super profit w:ill be

(a) ₹ 6,00,000 (b) ₹ 4,80,000

(c) ₹ 3,00,000 (d) ₹ 2,40,000

36.

Equity shares of ₹ 10 each	₹ 22,00,000
15% Pref. Shares of ₹ 100 each	₹ 18,00,000
	₹ 40,00,000
Average Net Profit	10,50,000
NRR	20%

Net Tangible assets are revalued by ₹ 2,00,000 more than the amounts at which they are staed in the books. Super profit of the company will be:

(a) 2,00,000 (b) 2,10,000
(c) 2,50,000 (d) 2,70,000

37. Refer to Q. No. 36 Goodwill at 3 years purchase of super profit will be
(a) 6,30,000 (b) 6,20,000
(c) 5,40,000 (d) 3,80,000

38. Refer to Q. No. 36, intrinsic value per share will be
(a) 10.90 (b) 10.20
(c) 15.20 (d) 40.10

39. Refer to Q. No. 36 yield value per share will be
(a) 17.73 (b) 27.70
(c) 15.23 (d) 10.92

40. Refer to Q. No. 36 fair value per share will be
(a) ₹ 14.32 (b) 13.39
(c) 14.35 (d) 14.49

[**Ans.** 1. (d), 2. (d), 3. (a), 4. (a), 5. (b), 6. (c), 7. (c), 8. (c), 9. (c), 10. (a), 11. (a), 12. (a), 13. (b), 14. (c), 15. (a), 16. (a), 17. (a), 18. (c), 19. (d), 20. (a), 21. (a), 22. (d), 23. (b), 24. (b), 25. (d), 26. (b), 27. (a), 28. (c), 29. (a), 30. (b), 31. (b), 32. (c), 33. (a), 34. (a), 35. (a), 36. (b), 37. (a), 38. (a), 39. (a), 40. (a)]

(D) Match the Columns:

Column A	Column B
1. Goodwill	(a) Intangible having no realizable value
2. Fictitious asset	(b) Accounted in the Books of Accounts
3. Purchased Goodwill	(c) Future Maintainable Profit
4. FMP	(d) Excess of FMP over normal profit
5. Super Profit	(e) Based on Rate of Interest and Rate of Risk
6. NRR	(f) An Intangible Asset
7. Intrinsic Value	(g) Net Asset Value
8. Yield Value	(h) Based on FMP

[**Ans.:** 1. (f), 2. (a), 3. (b), 4. (c), 5. (d), 6. (e), 7. (g), 8. (h)]

Practice Problems

1. (a) Rana & Co. presents the following Balance Sheet on 31st December, 2015.

Liabilities	₹	Assets	₹
Share Capital (₹ 10 each)	3,00,000	Fixed Assets	4,50,000
Reserves	1,20,000	Current Assets	30,000
Loans	50,000		
Current Liabilities	10,000		
	4,80,000		**4,80,000**

It is observed that fixed assets are undervalued by ₹ 30,000. The current assets are overvalued by ₹ 2,000. The assets are to be valued properly.

It is proposed to issue fully paid shares by capitalisation of General Reserves in the ratio of one share for three shares held. Find the value of shares:

(i) Before issue of bonus shares; and

(ii) After issue of bonus shares.

(b) Beeta Ltd. capital is ₹ 11,00,000 divided in shares of ₹ 10 each. Of these, 40,000 shares are 8% preference and remaining are equity shares.

The average profit (after tax @ 50%) earned during past 3 years is ₹ 1,50,000. In future, expenses will increase by ₹ 12,000.

The expected yield for risk capital is 10%, net of tax.

Find the value of equity shares.

2. Balance Sheet of Shubhangi Co. Ltd. as 31st March, 2015 is as follows:

Liabilities	₹	Assets	₹	₹
Share Capital:		**Fixed Assets:**		
Equity Share Capital	3,00,000	Goodwill		30,000
Preference Share Capital	2,00,000	Land		2,00,000
Reserves and Surplus:		Building		2,50,000
General Reserve	1,50,000	Furniture		75,000
Capital Reserve	50,000	**Current Assets and**		
Profit and Loss A/c	1,27,500	**Loans and Advances:**		
Current Liabilities and Provisions:		Debtors	1,20,000	
Creditors	1,17,500	*Less*: R.D.D.	20,000	1,00,000
Provisions for Taxation Current Year	75,000	Stock		1,30,000
		Cash		75,000
		Bills Receivable		50,000
		Bank		1,10,000
	10,20,000			**10,20,000**

The following information is available.

(a) The reasonable return on capital invested in the class of business done by the company is 10%.

(b) 50% provision has been made in accounts for income tax and adequate provision has been made for depreciation.

(c) In future, cost reduction scheme will save ₹ 25,000 expenditure.

You are required to value the goodwill by:

(a) Five years purchase of super profit method.

(b) Capitalisation of super profit method. **(May 2007)**

3. The Asia Ltd. is to be absorbed by the India Ltd. In order to determine the purchase consideration, the two companies considered it necessary to value the goodwill attaching to the business of the Asia Ltd. It is agreed that the basis of the calculation of the goodwill shall be three years purchase of the average annual super profits, the profits being averaged for over 5 years.

The profits of Asia Ltd. for the last five years before charging income tax at 50% are respectively ₹ 4,00,000, ₹ 4,96,000, ₹ 3,52,000, ₹ 5,60,000 and ₹ 4,32,000 for each of the above five years.

Two of the Directors of Asia Ltd. will be appointed to the Board of India Ltd. on absorption and it is considered that their services have been worth ₹ 48,000 each per annum. In the past, no charge was made against the profits of Asia Ltd. for the services of the Directors concerned.

The average capital invested in net tangible assets over the period is ₹ 10,96,000, the normal return to be expected from the particular type of business carried on by the Asia Ltd. is 10%.

Calculate the goodwill of Asia Ltd. based on the above information.

4. A company desirous of selling its business to another company has earned an average profit in the past of ₹ 1,50,000 p.a. It is considered that such average profit fairly represents the profit likely to be earned in the future, except that:

(a) Director's fees ₹ 10,000 charged against such profit will not be payable by the purchasing company whose existing board can easily cope with the additional administrative work at present fees payable to the Directors.

(b) Rent at ₹ 20,000 p.a. which had been paid by the vendor company will not be a charge in the future, since the purchasing company owns its own premises and can supply the accommodation necessary of the staff and the equipment of the vendor company.

The value of the net tangible assets of the vendor company at the proposed date of sale was ₹ 15,00,000 and it was considered that a reasonable return on capital invested for this type of company, was 10%.

The profit of vendor company would in no way be affected by the sale of its business to the purchasing company and goodwill existed and was to be paid for on the basis that the vendor company was a continuing enterprise.

Calculate the value of goodwill be capitalisation of expected future net profits (ignore taxation).

5. Rama is running a property business whose assets and liabilities as on March 31, 2015 are as under:

Particulars	₹	₹
Current Assets:		
Stock-in-hand	30,000	
Sundry Debtors less Provision for Doubtful Debts	40,000	
Cash and Bank Balances	30,000	1,00,000
Fixed Assets:		
Goodwill	20,000	
Plant & Machinery less Depreciation	40,000	
Land & Building	40,000	1,00,000
		2,00,000
Represented by:		
Current Liabilities		
Sundry Creditors for Goods		60,000
Loans		40,000
Liabilities for Expenses		15,000
		1,15,000
Capital of Rama		85,000
		2,00,000

Krishna is interested in buying the business. The average return from the particular line of business is estimated at 20%. The pre-tax profits of the latest five years are found to be:

Year	₹
March 31, 2011	40,000
March 31, 2012	30,000
March 31,2013	3,20,000
March 31, 2014	30,000
March 31, 2015	33,000

Profits for the year ended March 31, 2011 include a capital profit of ₹ 10,000 and for the year ended March 31, 2015 are after adjustment of ₹ 7,500 being loss by fire. An average rate of 40% is payable as income tax.

Ascertain the goodwill payable by Krishna for the business, by capitalising the future maintainable post-tax profits on the basis of the past five year's average annual profits. Also value the goodwill at 5 years purchase of super profits.

6. Majumdar & Co. decides to purchase the business of Banerjee & Co. on 31/03/2015. Profits of Banerjee & Co. for the last 6 years were:

Year	₹
2009-10	10,000
2010-11	8,000
2011-12	12,000
2012-13	16,000
2013-14	25,000
2014-15	31,000

The following additional information about Banerjee & Co. were also supplied:

(a) A casual income of ₹ 3,000 was included in the profit of 2011-12 which can never be expected in future.

(b) Profit of 2012-13 was reduced by ₹ 1,000 as a result of an extraordinary loss by fire.

(c) After acquisition of the business, Majumdar & Co., has to pay an insurance premium amounting to ₹ 1,000 which was not paid by Banerjee & Co.

S. Majumdar, the proprietor of Majumdar & Co. was employed in a firm at a monthly salary of ₹ 1,000 p.m. The business of Banerjee & Co. was managed by a salaried manager who was paid a monthly salary of ₹ 400. Now, Mr. Majumdar decides to manage the firm after replacing the manager.

Compute the value of goodwill on the basis of 3 years purchase of the expected average profit for the last four years (ignore taxation).

7. The following is the Balance Sheet of Poddar Ltd. as on 31/12/2015.

Liabilities		₹	Assets		₹
Share Capital:			Goodwill		20,000
20,000 Equity Shares of ₹ 10 each		2,00,000	Building (at cost)		80,000
Profit & Loss A/c		40,000	Plant & Machinery (at cost)		50,000
Depreciation Fund:			Sundry Debtors	30,000	
Building	5,000		*Less:* Reserve for Bad Debts	3,000	27,000
Plant & Machinery	3,000	8,000	Stock-in-trade		43,000
Sundry Creditors		22,000	Cash at Bank		50,000
Bills Payable		4,000	Discount on Issue of Shares		10,000
Provision for Taxation		6,000			
		2,80,000			**2,80,000**

The profits of the past four years (before providing for taxation) were as follows:

2012 – ₹ 20,000; 2013 – ₹ 30,000; 2014 – ₹ 36,000 and 2015 – ₹ 40,000.

Compute the value of goodwill of the company assuming that the normal rate of return for this type of company is 10%. Income tax is payable @ 50% on the above profits.

You are requested to follow capitalisation of Future Profits Method.

8. The following is the Balance Sheet of Mr. C as on 31/03/2015:

Liabilities	₹	Assets	₹
Capital	1,64,000	Land and Building	36,000
General Reserve	40,000	Plant	54,500
Creditors	38,040	Investment	30,000
		Stock	26,350
		Bank	75,990
		Debtors	19,200
	2,42,040		**2,42,040**

The following were the net profits for the year ended:

Year	₹
2012-13	32,280
2013-14	36,870
2014-15	43,350

The above amounts include income from investment ₹ 10,800 each year.

You are required to ascertain the value of goodwill from the above business at 2 years purchase of the average super profit for 3 years, taking into account the fact that the standard rate of return on capital employed in such type of business is 10% and assuming that each year's profit is immediately withdrawn in full by Mr. C.

9. Calculate the goodwill as per:

(a) Annuity Method

(b) Five Year's Purchase of Super Profit Method; and

(c) Capitalisation of Super Profit Method for the details given hereunder:

	Particulars	₹
(i)	Capital employed	1,50,000
(ii)	Normal rate of profit	10%
(iii)	Present value of Annuity of Re. 1 for five years at 10%	3.78
(iv)	Net profit for 5 years:	
	1st year	14,400
	2nd year	15,400
	3rd year	16,900
	4th year	17,400
	5th year	17,900

The profit included non-recurring profits on an average basis of ₹ 1,000 out of which it was deemed that even non-recurring profits had a tendency of appearing at the rate of ₹ 600 p.a.

You are requested to calculate weighted average, allocating weight as 1, 2, 3, 4 and 5 respectively.

10. Mr. Wiseman has invested a sum of ₹ 2,00,000 in his own business which is a very profitable one. The annual profit earned from his business is ₹ 45,000 which includes a sum of ₹ 10,000 received as compensation of a part of his business premises.

As an alternative to his engagement in his business, he could have invested the money in long-term deposit with the bank earning a normal rate of interest of 10% and also could engage himself in employment thereby getting an annual salary income of ₹ 7,200. Considering 2% as a fair compensation for the risk involved in the business, calculate the value of goodwill of his business on capitalisation of Super Profits at the normal rate of interest (ignore taxation).

11. Following is the Balance Sheet of Happy and Lucky as at March 31, 2015:

Liabilities		₹	Assets	₹
Creditors		50,000	Cash and Bank	10,000
Loan from Bold @ 18%		3,00,000	Sundry Debtors	95,000
Capitals:			Stock	55,000
Happy	70,000		Factory Fixed Assets	2,00,000
Lucky	30,000	1,00,000	Land	50,000
			Goodwill	40,000
		4,50,000		**4,50,000**

Happy and Lucky shared profits and losses in the ratio of 3:2. On the date, they decided to admit Bold as a partner on the following terms and conditions:

(a) Stock, Factory Fixed Assets and Land are to be revalued at ₹ 50,000, ₹ 2,50,000 and ₹ 1,50,000 respectively.

(b) Provision for Doubtful Debts to be made at ₹ 3,000. Other assets and liabilities except Goodwill are to be taken at the Balance Sheet values.

(c) Goodwill is to be valued by Capitalisation of Future Maintainable Profits method.

(d) For the purpose of calculating Future Maintainable Profits, you are informed that:

(i) The trend revealed by the Revenue Statements for the three years ended March 31, 2003, will be maintained for the next four years.

(ii) Depreciation on Factory Fixed Assets is to be provided 20% on Reducing Balance Method with reference to the revalued figure.

(iii) The normal return expected in the line of business is 16.2/3%.

(e) The Revenue statements for the three years ended March 31, 2015 are summarised as under:

Particulars	2012-13 (₹)	2013-14 (₹)	2014-15 (₹)
Sales	5,50,000	6,00,000	6,50,000
Less: Cost of Sales	3,30,000	3,60,000	3,90,000
Gross Margin	2,20,000	2,40,000	2,60,000
Less: Expenses	50,000	54,000	58,000
Depreciation on Fixed Assets	20,000	20,000	20,000
Interest on Bold's Loan	90,000	72,000	54,000
Total Expenses	1,60,000	1,46,000	1,32,000
Net Profit	**60,000**	**94,000**	**1,28,000**

You are required to value goodwill of the firm for the purpose of admission of Bold in the firm.

12. Given below is the Balance Sheet of ABC Ltd. as on 31/3/2015.

Liabilities	₹	Assets	₹
Share Capital	20,00,000	Goodwill (at cost)	2,00,000
General Reserve	4,00,000	Building	5,92,000
12% Debentures	5,00,000	Plant and Machinery	8,28,000
Plant Loan	3,00,000	Debtors	9,50,000
Creditors	5,00,000	Stock	7,00,000
Provision for Tax	4,00,000	Trade Investments	2,00,000
Proposed Dividend	1,20,000	15% Non-trade investments (F.V. ₹ 2,00,000)	2,40,000
Outstanding Expenses	80,000	Bills Receivable	4,00,000
		Cash at Bank	1,40,000
		Preliminary Expenses	50,000
	43,00,000		**43,00,000**

XYZ Ltd. agreed to absorb the business of ABC Ltd. from details furnished below:

(a) Profit (after tax @ 50%) was as under:
2011-12 ₹ 2,20,000 (Loss on sale of car ₹ 30,000)
2012-13 ₹ 2,80,000 (Profit on sale of investments ₹ 10,000)
2013-14 ₹ 2,90,000 (Loss by theft ₹ 10,000)
2014-15 ₹ 5,30,000 (Loss by fire ₹ 40,000)

(b) Above profit includes income from trade investment @ ₹ 20,000 p.a.

(c) On 1/10/13, machinery was purchased at ₹ 1,00,000 but was charged to Profit and Loss Account. Depreciation on Machinery charged @ 20 p.a. under RBM.

(d) On 31/3/14, stock was overvalued by ₹ 20,000.

(e) During 2014-15, major repairs were carried out on building and ₹ 80,000 had been spent but charged to Building A/c. Building is depreciated @ 10%.

(f) The directors of XYZ Ltd. would be able to manage the business with their present directors.

(g) It has been found that ABC Ltd. never insured goods in the past but XYZ Ltd. would pay ₹ 10,000 p.a. as insurance premium.

(h) ABC Ltd. signed an agreement with Government of Tamil Nadu to supply goods on 29/3/2015. This could increase the income by ₹ 60,000 p.a.

(i) Assets are revalued as under:
Building appreciated by 25%. Plant and Machinery reduced to market price which is 20% below book value. Provisions for Bad Debts @ 2%. Stock at market price ₹ 6,00,000. Non-trade investment at market price ₹ 2,50,000. Market price of trade investment ₹ 2,20,000.

(j) Provision for discount on creditors @ 5%.

(k) Rate of income tax in the future is expected @ 40%.

(l) Calculate the value of goodwill as under:
(i) Super profit method: (a) based on 2 years purchase of super profit, (b) sliding scale of super profit 40% can be earned for 4 years, 30% for 3 years, 10% for 2 years and balance for 1 year AND (c) based on annuity rate: 2.7254.
(ii) Capitalisation of maintainable profit method.
(iii) 2 year's purchase of Future Maintainable Profit.
(iv) 3 year's purchase of average profit of the year.

You may assume that expected rate of return in this line of business is 20%. Closing capital employed shall be assumed as 'Average capital employed'.

13. Following is the balance sheet of Rambo Ltd as on 31st March, 2015.

Liabilities	₹	Assets		₹
Share Capital:		Goodwill		1,25,000
40,000 Equity Shares of ₹ 20 each		Land & Building	1,80,000	
₹ 10 paid up	5,00,000	*Less:* Provision for Depreciation	36,000	1,44,000
10,000, 10% Preference Shares of		Plant and Machinery	2,40,000	
₹ 100 each	1,00,000	*Less:* Provision for Depreciation	40,000	2,00,000
General Reserve	1,50,000	Investments:		
Dividend Equalisation Reserve	45,000	In Government Securities (for		1,00,000
Profit and Loss Account	1,50,000	Replacement of Plant &		
Workmen Compensation Fund	25,000	Machinery)		

Creditors	1,30,000	In Marketable Securities		1,00,000
Bills Payable	20,000	Stock-in-Trade		1,00,000
Other Provisional Liabilities	80,000	Debtors	3,60,000	
		Less: R.D.D.	30000	3,30,000
		Cash at Bank		75,000
		Preliminary Expenses		26,000
	12,00,000			**12,00,000**

Further Information:

(a) The profits earned by the company for the past three years were as under:

Year ended 31st March, 2012-13 ₹ 3,15,000

Year ended 31st March, 2013-14 ₹ 2,41,000

Year ended 31st March, 2014-15 ₹ 2,08,000

Profits given are profits before tax, which was 50% throughout but it is expected to be 40%.

(b) Rambo Ltd. had been carrying on business for the past several years. The company to be taken over by Jumbo Ltd. Company and for this purpose, you are required to value goodwill.

(c) The Jumbo Ltd. expects to carry on business with its own Board of Directors, without any addition. The Director's fees paid by Rambo Ltd. to its Directors amounted to ₹ 9,000 per annum.

(d) As on 31st March, 2015, Land & Building is considered worth ₹ 3,00,000 whereas Plant and Machinery is considered worth ₹ 1,80,000. There is sufficient provision for doubtful debts. There is no fluctuation in the values of investments and stock. Liability for compensation to worker is estimated as ₹ 5,000.

(e) The expected rate of return in similar business may be taken at 12% after taxation.

(f) On security of books, it was found that:

(i) Profit of 2012-13 includes profit on sale of car ₹ 10,000 and loss by theft ₹ 5,000.

(ii) Profit of 2013-14 was arrived at after charging purchase of furniture ₹ 40,000 to P & L A/c.

(iii) Furniture is to be depreciated by 10% p.a. under fixed installment method.

(iv) Profit of 2002-03 included dividend received on marketable securities ₹ 8,000.

(v) Stock as on 31/3/2001 was overvalued by ₹ 10,000.

You are required to value goodwill according to the above information:

(a) At 2 year purchase of super profit.

(b) Under Sliding scale method of valuation by purchasing 25% of the super profit each at 4 years, 2 year and one year respectively.

(c) Under Annuity Valuation of super profit. According to Annuity Tables if ₹ 1 is to be paid for 3 years at 8%, the value of goodwill is ₹ 2,577.

(d) Under Capitalisation of Future Maintainable Profit.

(e) 3 years purchase of future maintainable profit.

14. Shiva Anand Ltd. submits you the following Balance Sheet as on 31st March, 2015.

Liabilities		₹	Assets	₹
1,00,000 Equity Shares of ₹ 100			Goodwill	2,33,000
each fully paid		10,00,000	Building	2,60,000
75,000, 12% Preference Shares of			Machinery	19,50,000
₹ 10 each fully paid		7,50,000	Motor Car	26,000
Capital Reserve		1,50,000	Stock-in-trade	9,97,500

General Reserve		3,00,000	Book Debts	3,10,000
Profit and Loss A/c			Preliminary Expenses	3,12,500
Last Year's Balance	50,000		Underwriting Commission	4,000
Add: Current Year Profit	8,50,000	9,00,000	Discount on Issue of Debenture	4,000
12.5% Debentures		3,00,000		3,000
Secured Loans (other)		1,50,000		
Sundry Creditors		2,00,000		
Provision for Taxation		3,50,000		
		41,00,000		**41,00,000**

Other Information:

(a) The market value of the Building is ₹ 7,60,000 and that of Machinery is ₹ 15,00,000.

(b) 10% of the Book Debts are actually bad.

(c) No depreciation is charged for the current year on Fixed Assets. Depreciation to be charged @ 2.5% on Building and @ 10% on Machinery.

(d) In similar companies, the market value of shares of same denominating is ₹ 25 per share and dividend declared is 25%.

(e) Percentage of Income Tax is 50% and assumed will remain same in the coming year.

You are asked to calculate the value of goodwill:

(i) At five year's purchase of super profit.

(ii) Under Sliding Scale Method of Valuation by purchasing 20% of the super profit each at 5 years, 4 years, 3 years, 2 years and 1 year respectively.

15. Mr. Efficient has been carrying on business as manufacturer of Luxury Goods. He decided to sell his business to Mr. Excellent of 1st April, 2015. Mr. Excellent agrees to pay Goodwill a sum of equal to four year's purchase of average super profit of 3 years, in addition to the book value of all the assets and liabilities of the business.

Mr. Efficient's Revenue Statement for the past four years are as follows:

Particulars	2011-12	2012-13	2013-14	2014-15
Net Sales	5,00,000	6,00,000	7,00,000	8,00,000
Less: Cost of Sales	3,50,000	4,20,000	4,90,000	5,60,000
Gross Margin	1,50,000	1,80,000	2,10,000	2,40,000
Less: Other Expenses	1,00,000	1,20,000	1,40,000	1,60,000
Net Profit	50,000	60,000	70,000	80,000

It is estimated that, after the charge over, the sales would increase on an average only at ₹ 50,000 p.a. instead of past growth rate of ₹ 1,00,000 whereas the cost of sales to sales is estimated to decrease by 10% and the overheads are expected to be at the same rate to sales.

Expected Average Capital employed would be:

₹ 10,00,000 in 2015-16

₹ 12,00,000 in 2016-17

₹ 11,00,000 in 2017-18

The expected rate of return in this line of business would be 10%.

16. Tom, Dick and Harry are partners sharing profits and losses in the ratio of 5:3:2. Their Balance Sheet as on 30th September, 2015 was as under:

Liabilities		₹	Assets		₹
Partner's Capital:			Bank		10,000
Tom	1,00,000		Debtors	1,00,000	
Dick	50,000		*Less:* R.D.D.	5,000	95,000
Harry	35,000	1,85,000	Stock		65,000
Creditors		40,000	Vehicles (w.d.v.)		35,000
			Goodwill		20,000
		2,25,000			**2,25,000**

They decided to dispose of their business to Jack and Jill sharing profit and losses equally.

All the assets and liabilities are taken over at book. values except goodwill. Tom, Dick and Harry inform you that:

(a) The average capital invested in the business in the tangible assets other than goodwill has been ₹ 1,50,000 over a period of past 5 years.

(b) The partners had drawn salary amounting to ₹ 27,000 p.a. The normal remuneration could be expected to be around ₹ 36,000 per annum.

(c) The net profits as per the revenue statements after debiting the partners salaries actually drawn amounted to:

Years	₹
2010-11	1,00,000
2011-12	80,000
2012-13	90,000
2013-14	70,000
2014-15	60,000

The maintainable profits should be around 90% of the average profits after necessary adjustment of account of information:

(d) The yield in this line of business is 16%. You are asked to evaluate goodwill by:

(i) Purchase of super profits of past 5 years on selling goodwill by: 1st ₹ 20,000 for 5 years; 2nd ₹ 20,000 for 4 years; 3rd ₹ 20,000 for 3 years; 4th ₹ 20,000 for 2 years and balance for 1 year.

(ii) Capitalisation of maintainable profits.

(iii) Annuity valuation of super profits for a period of 3 years at 8% rate of interest. Rate of Annuity 3.60.

17. Negotiation is going on for transfer of X Ltd. on the basis of the Balance Sheet and additional information is as given below.

Liabilities	₹	Assets	₹
Share Capital (₹ 10 fully paid-up shares)	10,00,000	Goodwill	1,00,000
Reserve and Surplus	4,00,000	Land & Building	3,00,000
Sundry Creditors	3,00,000	Plant & Machinery	8,00,000
		Investments	1,00,000
		Stock	2,00,000
		Debtors	1,50,000
		Cash and Bank	50,000
	17,00,000		**17,00,000**

Profit before tax for 2014-15 amounted to ₹ 6,00,000 including ₹ 10,000 as interest on investment. However, an additional amount of ₹ 50,000 p.a. shall be required to be spent for smooth running of the business.

Market values of Land & Building and Plant & Machinery are estimated at ₹ 9,00,000 and ₹ 10,00,000 respectively. In order to match the above figures, depreciation to the extent of ₹ 40,000 should be taken into consideration. Income tax rate may be taken at 50%. Return on capital at the rate of 20% before tax be considered normal for this business at the present stage.

For the purpose of determining the rate of return, profits for this year after the aforesaid adjustments may be taken as expected average profits. Similarly, average trading capital employed is also to be considered on the basis of the position in this year. It has been agreed that four year's purchase of super profits shall be taken as the value of goodwill. You are required to calculate the value of goodwill of the company.

18. From the following information supplied to you, ascertain the value of goodwill of Anamika Ltd. which is carrying business as retail trader under the capitalization of profit method.

Balance Sheet as on March 31, 2015

Liabilities	₹	Assets	₹
Paid-up Capital:		Goodwill (at cost)	50,000
5,000 Equity Shares of ₹ 100 each fully paid	5,00,000	Land and Building (at cost)	2,20,000
Profit and Loss Appropriation A/c	1,13,300	Plant and Machinery (at cost)	2,00,000
Bank Overdraft	1,16,700	Stock-in-trade	3,00,000
Provision for Taxation	39,000	Book Debts	
Sundry Creditors	1,81,000	*Less*: Provision for Bad Debts	1,80,000
	9,50,000		**9,50,000**

The company commenced operations in 1985with a paid-up capital of ₹ 5,00,000. Profits for recent years (after taxation) have been as follows:

Years	₹
2011	(loss) 40,000
2012	88,000
2013	1,03,000
2014	11,600
2015	1,30,000

(a) The loss in 2011 occurred due to prolonged strikes.

(b) The income tax paid so far has been at the average rate of 40%, but it is likely to be 50% now onwards.

(c) Dividends were distributed at the rate of 10% at the end of the year ending March 31, 2009.

(d) The market price of shares is ruling at ₹ 125 at the end of the year ending March 31, 2009.

(e) Profit till 2015 had been ascertained after debiting ₹ 40,000 as remuneration to the managing director. The Government has approved a remuneration of ₹ 60,000 w.e.f. April 1, 2015.

(f) The company has been able to secure a contract for supply of material at advantageous price. The advantage has been valued at ₹ 40,000 p.a. for the next five years.

19. You are given Balance Sheet of the Expert Ltd. as on 30th September, 2015 and other information to calculate:

(a) Intrinsic value.

(b) Capitalised value of Maintainable Profit.

(c) Fair value of Equity Share.

Liabilities	₹	Assets	₹
Share Capital:		Fixed Assets	50,00,000
20,000 Equity Shares of ₹ 100 each		Investments (10%)	10,00,000
₹ 90 paid up	18,00,000	Current Assets	9,00,000
10,000,12% Preference Shares of ₹ 100 each	10,00,000	Preliminary Expenses	1,00,000
Debenture Redemption Reserve	6,00,000		
Debenture Premium	1,00,000		
General Reserve	6,00,000		
12% Redeemable Debenture	10,00,000		
Depreciation Fund	6,00,000		
Creditors	13,00,000		
	70,00,000		**70,00,000**

Other Information:

(a) Fixed Assets included plant, original cost of which was ₹ 10,00,000, market value of which was ₹ 16,00,000.

(b) Investments includes Investments of Debenture Redemption Reserve of ₹ 6,00,000.

(c) Profits of last three years were ₹ 5,00,000, ₹ 6,00,000 and ₹ 7,00,000.

(d) Last year's dividend on preference share is outstanding.

(e) Expected rate of return is 10%.

(f) The annual transfer to Reserve is ₹ 1,00,000 after providing for tax @ 50%.

(g) Goodwin is to be calculated at three years purchase of super profits.

20. X and his wife have all the shares of Greenland Industries Pvt. Ltd. which they wish to sell. The summarised Balance Sheet of the company as on 31/12/2015 is as follows:

Particulars	₹
Share Capital (₹ 10 per share)	1,00,000
General Reserve	30,000
Workmen's Compensation Fund	10,000
Profit and Loss Account	1,50,000
Bank Overdraft	10,000
Creditors	60,000
Total	**3,60,000**
Goodwill	20,000
Buildings	1,00,000
Plant & Machinery	80,000
Stock	1,00,000
Debtors	30,000
Cash	20,000
Discount on Debentures	10,000
Total	**3,60,000**

X further informs you that:

(a) The building was purchased in 1978 and its current market value is estimated at ₹ 2,00,000.

(b) Adequate depreciation has been written off on Plant and Machinery which is considered worth.

(c) Net Profit before the tax but after Director's remuneration for 2013, 2014 and 2015 were ₹ 42,000, 45,000 and ₹ 50,000.

(d) Director's remuneration considered reasonable and will be incurred in future also.

(e) Normal expected return in the industry is 10% of capital employed.

(f) Goodwill was to be valued at 3 year's purchase of super profit.

(g) There was a claim against the company for compensation payable to injured worker ₹ 10,000.

Assuming that stock has been correctly valued and adequate provision has been made for doubtful debts, you are required to work out valuation of shares.

21. From the Balance Sheet and other information from Hardik Ltd. as on 30th June, 2015, you are required to find out the fair value of an equity share.

Balance Sheet as on 30/06/2015

Liabilities	₹	Assets	₹
1,00,000 Equity Shares of ₹ 100 each		Goodwill	10,00,000
₹ 75 paid up	75,00,000	Building	40,00,000
1,00,000 Equity Shares of ₹ 100 each		Plant & Machinery	60,00,000
₹ 50 paid up	50,00,000	Investments	14,00,000
50,000, 12% Preference Shares of ₹ 100		Stock	42,00,000
each fully paid up (re. @ 12% premium)	50,00,000	Debtors	58,00,000
General Reserve	10,00,000	Cash on Hand	4,00,000
Profit and Loss A/c	5,00,000	Bank Balance	17,00,000
Provident Fund	1,00,000	Prepaid Insurance	2,00,000
Depreciation Fund:		Preliminary Expenses	3,00,000
Building	4,00,000		
Plant and Machinery	12,00,000		
Creditors	35,00,000		
Outstanding Expenses	5,00,000		
Bank Overdraft	3,00,000		
	2,50,00,000		**2,50,00,000**

Other Information:

(a) Building is revalued at ₹ 50,00,000.

(b) Goodwill should be valued at ₹ 7,50,000.

(c) Provision for Bad Debts is calculated at 5% on debtors.

(d) Employees claim for bonus for ₹ 9,00,000 is outstanding.

(e) Company's profit after tax for last years was ₹ 36,00,000.

(f) Expected rate of return is 10% on investments.

(g) One year dividend on preference share is outstanding.

(h) Company transfers ₹ 5,00,000 to General Reserve every year.

22. Mohan Ltd. manufactures machines, all of the same type. The summarised accounts for the year 2015 are as follows:

Trading and Profit & Loss Account

Particulars	₹	Particulars	₹
To Materials	48,000	By Sales (20 Machines)	80,000
To Labour	8,000		
To Fixed Overheads	11,600		
To Office Salaries	2,000		

To Director's Remuneration	4,000		
To Net Profit	6,400		
	80,000		**80,000**

Balance Sheet as at 31st December, 1997

Liabilities		₹	Assets	₹
Share Capital:			**Fixed Assets:**	
1,000 Shares of ₹ 1 each		1,000	Plant & Machinery	2,500
Profit and Loss A/c for the year	6,400		Vehicles	1,500
Less: Loss B/r	4,900	1,500	**Current Assets:**	
Creditors		17,000	Stock	11,000
Director's Loan		5,000	Debtors	7,000
			Bank Balance	2,500
		24,500		**24,500**

Shankar Ltd. is offered all the issued shares of Mohan Ltd. at their net assets value on 31st December, 2015 subject to the addition of goodwill valued at four times the projected earnings before taxation for 2016 earning to ascertain that:

(a) Based on firm order, 25 machines should be sold in 2016 at the 2015 prices.

(b) The percentage costs of production based on sales should remain steady apart from an anticipated increase in the labour rate of 12.5%.

(c) Fixed overheads will increase by ₹ 1,700 and office salaries by 10% and required to calculate value of:

(i) Goodwill

(ii) The price at which the shares offered by Mohan Ltd.

23. The following is the Balance Sheet of G Ltd. on 31st March, 2015.

Liabilities	₹	Assets	₹
10,000, 10% Cumulative Preference Shares		Goodwill	7,00,000
of ₹ 100 each	10,00,000	Land & Building (at cost)	9,00,000
2,00,000 Equity Shares of ₹ 10 each	20,00,000	Machinery	25,00,000
Profit and Loss A/c	10,00,000	Investment (at cost)	2,00,000
Bank Overdraft	20,00,000	(Market value ₹ 5,00,000)	
Creditors	3,00,000	Stock	10,00,000
		Debtors	7,00,000
		Bank Balances	3,00,000
	63,00,000		**63,00,000**

(a) Net Profits (after writing off goodwill each year by ₹ 1,00,000) were as follows: 2012-13 – ₹ 2,80,000, 2013-14 – ₹ 6,50,000 and 2014-15 – ₹ 11,00,000.

(b) Preference Dividend had been paid every year and on equity shares, it was paid at 10% 2013-14 only. Equity capital has not increased since the last five years. Dividend has been deducted in arriving at the profits figures mentioned above.

(c) Land and Building is valued at ₹ 10,00,000 and Machinery at ₹ 50,00,000. Annual depreciation on these assets will increase by ₹ 4,30,000 in future years.

(d) Worthless stocks carried forwards since 2009-10 are of the value of ₹ 9,00,000. These stocks have a realisable value of only ₹ 1,00,000. Find out the value of each equity share in the following cases:

(i) On Net Assets basis also capitalise value of maintainable profits assuming that 10% of maintainable profit is transferred to Reserve.

(ii) Confine on data given only.

(iii) Capitalisation rate being 8⅓%.

24. The following is the Balance Sheet of Alpha Ltd. as at 31st December, 2015.

Liabilities		₹	Assets	₹
Share Capital:			**Fixed Assets:**	
Equity Shares of ₹ 100 each	10,00,000		Land and Building	4,00,000
Less: Calls-in-arrears	1,00,000	9,00,000	Machinery	4,50,000
Reserve & Surplus:			Motor Car	25,000
General Reserve		3,50,000	Furniture	25,000
Profit and Loss Account		2,50,000	Investment (Face Value)	50,000
Sundry Creditors		5,00,000	**Current Assets:**	
			Stock	7,25,000
			Sundry Debtors	2,00,000
			Cash and Bank	1,05,000
			Miscellaneous Expenses:	
			Preliminary Expenses	20,000
		20,00,000		**20,00,000**

Additional information is as under:

(a) Fixed Assets are worth:

Building ₹ 6,00,000

Machinery ₹ 5,20,000

(b) All investments are non-trading investments and are to be valued at 20% cost. Dividend at uniform rate of 20% is earned on all investments.

(c) For the purpose of valuation of shares, goodwill to be valued on the basis of 3 years purchase of super profit based on average profit (after tax) of last 3 years.

(d) Depreciation on appreciated value of Land & Building and Machinery is not to be considered for valuation of goodwill.

(e) Profits (after tax) are as follows:

Years	₹
2013	3,80,000
2014	4,20,000
2015	5,00,000
Rate of Income Tax	50%

In similar business, return on capital employed is 20% (after tax).

(f) In 2013, Machinery (book value of ₹ 20,000) was sold for ₹ 29,000 but the proceeds were wrongly credited to Profit and Loss Account. The mistake has not yet been rectified.

Depreciation charged on machinery @ 10% p.a. on reducing balance method.

Find out the value of each fully paid and partly paid equity shares on net assets basis.

Note: Trends in profits value is to be ignored for the purpose of calculation of average profit.

25. Following is the balance sheet of Super Prospects Co. Ltd. as on 31st December, 2015.

Liabilities	₹	Assets	₹
Share Capital:		Land & Building (at cost)	30,000
3,000 5% Preference Shares of ₹ 10		Plant & Machinery (at cost less depreciation)	50,000
each fully paid	30,000	Furniture & Fixtures (at cost less depreciation)	10,000
9,000 Equity Shares of ₹ 10		6% Government Securities (normal value	12,000
each fully paid	90,000	₹ 10,000) (market value ₹ 14,000)	
Reserve	30,000	Debtors (all good)	39,000
Profit and Loss A/c	12,000	Stock	46,000
6% Debentures	20,000	Cash in Hand	5,000
Creditors	15,000	Preliminary Expenditure	5,000
	1,97,000		**1,97,000**

Find out the fair value of equity shares after considering the following information as: (i) intrinsic value method and (ii) on basis of yield.

(a) Average annual profit (before taxation) ₹ 51,200.

(b) Rate of income tax is 50%.

(c) ₹ 5,000 is transferred to general reserve every year.

(d) Normal return is 9% on capital employed.

(e) Goodwill is to be valued at 4 years purchase of super profits.

(f) Dividend declared by companies doing similar business is 10%.

(g) All assets are worth book value subject to following changes:

(i) The land and building is valued at ₹ 35,000.

(ii) Investment as given in the balance sheet.

26. WIMCOM Limited furnishes the following information and requests you to find out:

(a) Value of goodwill on the basis of capitalisation on future maintainable profits method.

(b) Value of shares.

Balance Sheet as on 31st March, 2015

Liabilities	₹	Assets	₹
Share Capital		Goodwill	2,50,000
10,000 Shares of ₹ 100 each	10,00,000	Property	2.88,000
General Reserve	3,00,000	Equipments	4,00,000
Profit and Loss Account	3,00,000	Investments	2,00,000
Workmen Fund for Compensation	1,40,000	Receivables	6,60,000
Loans	2,00,000	Inventory	4,00,000
Current Liabilities	4,60,000	Cash and Bank	1,50,000
		Capital Issues Expenses	52,000
	24,00,000		**24,00,000**

Further Information:

(a) The investments are earmarked to provide funds for replacement equipment as and when required.

(b) The provision already deducted from assets are:

Depreciation on Property	₹ 72,000
Depreciation on Equipments	₹ 80,000
Bad and Doubtful Debts	₹ 60,000

(c) The property is worth ₹ 6,00,000 and equipments are worth ₹ 3,60,000. Other assets are valued property.

(d) The liability for Workman Compensation is expected at ₹ 1,00,000.

(e) The expected rate of return is 12%.

(f) The profits of past three years (before tax @ 50%) have been:

Year ended on 31/3/2013	₹ 5,60,000
On 31/3/2014	₹ 5,46,000
On 31/3/2015	₹ 6,20,000

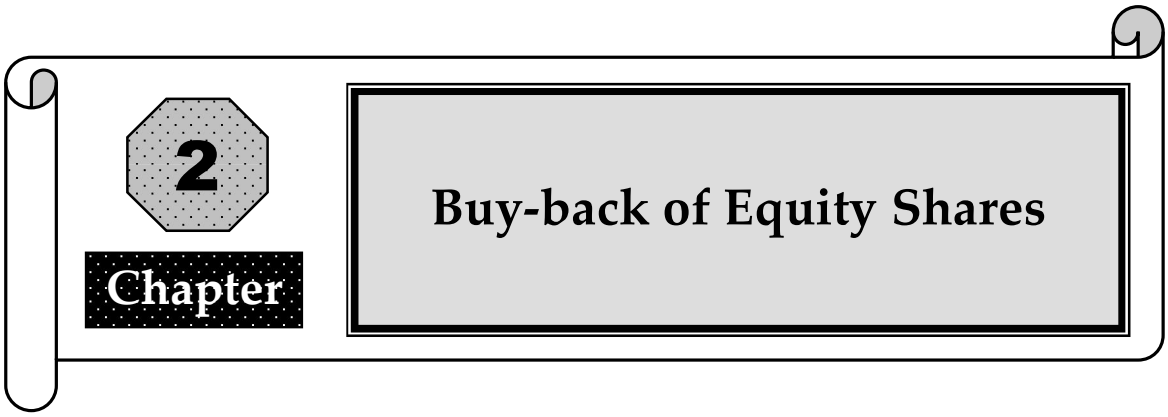
(g) The changes expected from ensuring year are:

(i) Increase rent for new office @ ₹ 18,000 p.a.

(ii) Increase in director's fees @ 24,000 p.a.

(iii) Reduction in publicity expenses @ 36,000 p.a.

(h) For the purpose of valuation, year end capital employed should be considered.



INTRODUCTION

Buy-back of shares means that any company may purchase their own shares or other specified securities. According to section 77A(1) of the Companies Act, 1999, a company may purchase its own shares or other securities out of:

(i) Its free reserves or

(ii) The securities premium account or

(iii) The proceeds of any shares or other specified securities. Specified securities include employees' stock option or other securities as may be notified by the Central Government from time to time. Buy-back of shares of any kind is not allowed out of fresh issue of shares of the same kind. In other words, if equity shares are to be bought back, preference shares or debentures may be issued for buy-back of equity shares. Companies are allowed to buy-back their own shares if they fulfil certain conditions as given in section 77A(2) of the Companies Act, 1999.

No company shall purchase its own shares or other specified securities unless:

(a) The buy-back is authorised by its articles.

(b) A special resolution has been passed in general meeting of the company authorising the buy-back.

(c) The buy-back is for less than 25% of the total paid-up capital and free reserves of the company.

(d) It also provides that buy-back shall not exceed 25% of total paid-up capital.

(e) The debt-equity ratio should not be more than 2:1 after such buy-back.

(f) All the shares or other specified securities for buy-back are fully paid up.

(g) The buy-back of the shares or other specified securities listed on any recognised stock exchange is in accordance with the regulations made by the Securities and Exchange Board of India (SEBI) in this behalf.

(h) The buy-back in respect of shares or other specified securities other than those specified in the clause.

(i) The buy-back should be completed within 12 months from the date of passing the special resolution.

SEBI GUIDELINES

The following are the important points:

1. Buy-back of shares cannot be from any person through negotiated deals whether on or after stock exchange or through spot transactions or through private management. Therefore, a company is required to make public announcement in at least one National Daily all with wide circulation where registered office of the company is situated.
2. Public announcement among other things specify the following:
   (a) Specified date, i.e., the date of the dispatch of the offer letter shall not be less than earlier than 30 days but not later than 42 days.
   (b) SEBI shall be informed by the company within seven working days from the date of public announcement.
   (c) The offer for buy-back shall remain open to the members for a period of not less than 15 days but not exceeding 30 days. However, the opening date for the offer shall not be earlier than 7 days or later than 30 days from the specified date.
   (d) The company shall complete the verification of offers within 15 days from the date of closure and shares lodged shall be deemed to have been accepted unless communication of rejection is made within 15 days from the date of closure.

The following entries are required in the buy-back of shares:

1. Entry for assets sold for buy-back:

Bank A/c	Dr.		
Profit & Loss A/c	Dr.		(In case of loss)
To Assets A/c			
To Profit & Loss A/c			(In case of profit)

2. Entry for issue of debentures or other securities for the purpose of buy-back:

Bank A/c	Dr.	
Discount on Issue A/c	Dr.	
To Debentures A/c		
To Other Securities A/c		
To Security Premium A/c		

3. Entry for the cancellation of shares bought back:

Equity Share Capital A/c	Dr.	
Free Reserves or Securities Premium A/c	Dr.	
To Shareholders A/c		

4. Entry for transfer of nominal value of shares bought back to CRR:

General Reserves A/c	Dr.	
Or Profit & Loss A/c	Dr.	
Or Any Other Reserve A/c	Dr.	
To Capital Redemption Reserve		

5. Entry for making the payment of buy-back shares:

Shareholders A/c	Dr.	
To Bank A/c		

6. Entry for expenses incurred in buy-back of shares:

Buy-back Expenses A/c	Dr.	
To Bank A/c		

7. Entry for transfer of buy-back of expenses to P & L A/c:

Profit & Loss A/c	Dr.	
To Expenses A/c		

ADVANTAGES OF BUY-BACK OF SHARES

1. The buy-back facility enable the companies to manage their cash effectively. Many companies in this country faced the problem of surplus cash without having any idea of where to invest them. It would be better for them to return surplus cash to shareholders rather than to go on spending simply for want to alternative.
2. Companies having large amount of free reserves are free to use funds to acquire shares and other specified securities under the buy-back process.
3. Buy-back shares is helpful to reduce its share capital.
4. Buy-back of shares is helpful to improve the values of shares.
5. Avoid high financial risk and ensure maximum return to the shareholders.
6. Buy-back of shares help the promoters to formulate an effective defence strategy against hostile takeover bids.

DISADVANTAGES OF BUY-BACK OF SHARES

1. All the control of buy-back of shares is in the hands of promoters, which result in weak position of minority shareholders of a company.
2. The promoters, before the buy-back, may understand the earnings by manipulating accounting policies and highlight other unfavourable factors affecting the earnings.
3. High buy-back of shares may lead to artificial manipulation of stock prices in the stock exchange. Confusion is much more.

LEGAL PROVISIONS OF BUY-BACK OF EQUITY SHARES UNDER INDIAN COMPANIES ACT, 1956

The provisions regulating buy-back of shares are contained in sections 77A, 77AA and 77B of the Companies Act, 1956. These were inserted by the Companies (Amendment) Act, 1999. The Securities and Exchange Board of India (SEBI) framed the SEBI (Buy-back of Securities) Regulations, 1999 and the Department of Company Affairs framed the Private Limited Company and Unlisted Public Company (Buy-back of Securities) Rules, 1999, pursuant to section 77A(2)(f) and (g) respectively.

(A) Objectives of Buy-back

Shares may be bought back by the company on account of one or more of the following reasons:

(i) To increase promoter's holding
(ii) Increase earnings per share
(iii) Rationalise the capital structure by writing off capital not represented by available assets
(iv) Support share value
(v) To thwart takeover bid
(vi) To pay surplus cash not required by business

In fact, the best strategy to maintain the share price in a bear run is to buy-back the shares from the open market at a premium over the prevailing market price.

(B) Resources of Buy-back

A company can purchase its own shares from:

(i) free reserves where a company purchases its own shares out of free reserves, then a sum equal to the nominal value of the share so purchased shall be transferred to the capital redemption reserve and details of such transfer shall be disclosed in the balance sheet; or

(ii) securities premium account; or

(iii) proceeds of any shares or other specified securities. A company cannot buy-back its shares or other specified securities out of the proceeds of an earlier issue of the same kind of shares or specified securities.

(C) Conditions of Buy-back

(a) The buy-back is authorised by the Articles of Association of the company;

(b) A special resolution has been passed in the general meeting of the company authorising the buy-back. In the case of a listed company, this approval is required by means of a postal ballot. Also, the shares for buy-back should be free from lock-in period/non-transferability. The buy-back can be made by a Board resolution if the quantity of buy-back is less than ten per cent of the paid-up capital and free reserves;

(c) The buy-back is of less than twenty-five per cent of the total paid-up capital and fee reserves of the company and that the buy-back of equity shares in any financial year shall not exceed twenty-five per cent of its total paid-up equity capital in that financial year;

(d) The ratio of the debt owned by the company is not more than twice the capital and its free reserves after such buy-back;

(e) There has been no default in any of the following:

(i) Repayment of deposit or interest payable thereon or

(ii) Redemption of debentures or preference shares or

(iii) Payment of dividend, if declared, to all shareholders within the stipulated time of 30 days from the date of declaration of dividend or

(iv) Repayment of any term loan or interest payable thereon to any financial institution or bank;

(f) There has been no default in complying with the provisions of filing of Annual Return, Payment of Dividend, and form and contents of Annual Accounts;

(g) All the shares or other specified securities for buy-back are fully paid up;

(h) The buy-back of the shares or other specified securities listed on any recognised stock exchange shall be in accordance with the regulations made by the Securities and Exchange Board of India in this behalf; and

(i) The buy-back in respect of shares or other specified securities of private and closely held companies is in accordance with the guidelines as may be prescribed.

(D) Disclosures in the Explanatory Statement

The notice of the meeting at which special resolution is proposed to be passed shall be accompanied by an explanatory statement stating:

(a) a full and complete disclosure of all material facts;

(b) the necessity for the buy-back;

(c) the class of security intended to be purchased under the buy-back;

(d) the amount to be invested under the buy-back; and

(e) the time limit for completion of buy-back.

(E) Sources from Where the Shares will be Purchased

The securities can be bought back from:

(a) existing security holders on a proportionate basis;

Buy-back of shares may be made by a tender offer through a letter of offer from the holders of shares of the company or

(b) the open market through:

(i) book building process;

(ii) stock exchanges or

(c) odd lots, that is to say, where the lot of securities of a public company, whose shares are listed on a recognised stock exchange, is smaller than such marketable lot, as may be specified by the stock exchange; or

(d) purchasing the securities issued to employees of the company pursuant to a scheme of stock option or sweat equity.

(F) Filing of Declaration of Solvency

After the passing of resolution but before making buy-back, file with the Registrar and the Securities and Exchange Board of India a declaration of solvency in Form 4A. The declaration must be verified by an affidavit to the effect that the Board has made a full inquiry into the affairs of the company as a result of which they have formed an opinion that it is capable of meeting its liabilities and will not be rendered insolvent within a period of one year of the date of declaration adopted by the Board, and signed by at least two directors of the company, one of whom shall be the managing director, if any.

No declaration of solvency shall be filed with the Securities and Exchange Board of India by a company whose shares are not listed on any recognised stock exchange.

(G) Register of Securities Bought Back

After completion of buy-back, a company shall maintain a register of the securities/shares so bought and enter therein the following particulars:

(a) the consideration paid for the securities bought back,

(b) the date of cancellation of securities,

(c) the date of extinguishing and physically destroying of securities and

(d) such other particulars as may be prescribed.

Where a company buys back its own securities, it shall extinguish and physically destroy the securities so bought back within seven days of the last date of completion of buy-back.

(H) Issue of Further Shares after Buy-back

Every buy-back shall be completed within twelve months from the date of passing the special resolution or Board resolution as the case may be.

A company which has bought back any security cannot make any issue of the same kind of securities in any manner whether by way of public issue, rights issue up to six months from the date of completion of buy-back.

(I) Filing of Return with the Regulator

A company shall, after the completion of the buy-back, file with the Registrar and the Securities and Exchange Board of India, a return in Form 4C containing such particulars relating to the buy-back within thirty days of such completion.

No return shall be filed with the Securities and Exchange Board of India by an unlisted company.

(K) Prohibition of Buy-back

A company shall not directly or indirectly purchase its own shares or other specified securities—

(a) through any subsidiary company including its own subsidiary companies; or

(b) through any investment company or group of investment companies; or

(L) Procedure for Buy-back

(a) Where a company proposes to buy-back its shares, it shall, after passing of the special/Board resolution make a public announcement at least one English National Daily, one Hindi National Daily and Regional Language Daily at the place where the registered office of the company is situated.

(b) The public announcement shall specify a date, which shall be "specified date" for the purpose of determining the names of shareholders to whom the letter of offer has to be sent.

(c) A public notice shall be given containing disclosures as specified in Schedule I of the SEBI regulations.

(d) A draft letter of offer shall be filed with SEBI through a merchant banker. The offer shall then be dispatched to members of company.

(e) A copy of Board resolution authorising the buy-back shall be filed with the SEBI and stock exchange.

(f) The date of opening of the offer shall not be earlier than seven days or later than 30 days after the specified date.

(g) The buy-back offer shall remain open for a period of not less than 15 days and not more than 30 days.

(h) A company opting for buy-back through the public offer or tender offer shall open an escrow account.

(M) Penalty

If a company makes default in complying with the provisions of the company or any officer of the company who is in default shall be punishable with imprisonment for term which may extend to two years; or with fine which may extend to fifty thousand rupees or both. The offence are of course compoundable under Section 621A of Companies Act, 1956.

SOURCES FOR BUY-BACK

Section 77A(1) – section 77A(1) of the Act provides that buy-back of shares can be financed only out of

(a) free reserves – where a company purchases its own shares out of free reserves, then a sum equal to the nominal value of the share so purchased is required to be transferred to the capital redemption reserve and details of such transfer should be disclosed in the balance sheet; or

(b) securities premium account; or

(c) proceeds of any shares or other specified securities.

It is provided that no buy-back of any kind of shares or other specified securities can be made out of the proceeds of the same kind of shares or same kind of other securities as it will frustrate the purpose sought to be achieved by an issue and will make no sense. It can, however, be used for buy-back of another kind of security.

PRE-REQUISITES OF A VALID BUY-BACK

Section 77A(2) – section 77A(2) of the Companies Act provides that a company can buy-back its shares only when:

(a) It is authorised by its Articles of Association. If no such provision exists, the Articles should be amended following the procedure laid down in section 31.

(b) A special resolution has been passed in general meeting of the company authorising the buy-back.

(c) Buy-back of the total paid-up capital and the free reserves has been made by the Board of Directors by means of a Board resolution passed at its meeting not exceeding 10% of the total paid-up equity capital and free reserves of the company and the Board exercises this power only if it had not made an offer for the buy-back of the share on its authority during the preceding 365 days.

(d) The overall limit to which buy-back of securities may be resorted to by a company is restricted to 25% of the company's paid-up capital and free reserves.

(e) The buy-back debt-equity ratio is within the permissible 2:1 ratio. The Central Government is empowered to relax the debt-equity ratio in respect of a class of companies but not in respect of any particular company.

(f) The impugned shares/securities must be fully paid up.

(g) The buy-back of the shares or other specified securities listed on any recognised stock exchange is in accordance with the SEBI (Buy-back of Securities) Regulations, 1998.

(h) The buy-back in respect of shares or other specified securities other than those listed on any recognised stock exchange shall additionally comply with the provisions of the Private Limited Company and Unlisted Public Company (Buy-back of Securities) Rules, 1999.

Section 77A(3) – According to section 77A(3) the notice containing the special resolution should be passed and should be accompanied by an explanatory statement stating:

(a) All material facts, fully and completely disclosed;

(b) The necessity for buy-back;

(c) The class of security intended to be purchased by the buy-back;

(d) The amount to be invested under buy-back;

(e) The time limit for completion of buy-back.

The company is also required to pass a special resolution in its general meeting after following the procedure laid down in sections 171, 172 and 173.

TIME LIMIT OF COMPLETION OF BUY-BACK

Section 77A(4) – section 77A(4) provides that every buy-back is required to be completed within 12 months from the date of passing the special resolution or the Board resolution, as the case may be or where the resolution is passed through postal ballot, the date of declaration of the result of the postal ballot, as the case may be.

MODES OF BUY-BACK

Section 77A(5) – section 77A(5) read with Regulation 4 of SEBI (Buy-back of Securities) Regulations, 1998, states that the securities can be bought back from:

(a) Existing security-holders on a proportionate basis, i.e., via tender offer. A tender offer is made when the number of shares to be bought back is large. Such an offer is a fixed price offer, i.e., the company fixes a particular price for the maximum number of shares it is willing to purchase and sends a letter of offer to all the non-promoter shareholders. It also fixes an outer time limit for accepting the offer. The offer price is usually fixed at a premium in order to encourage shareholders to surrender their shares. The company accepts the shares on a proportionate basis if the offer is oversubscribed. The company is allowed to buy back its shares on a proportionate basis in accordance with the provisions of Chapter III of the SEBI Regulations (Regulation 6). But if offer is undersubscribed, the company may either accept whatever is tendered or extend the time limit.

(b) Through open market:

(i) book building process in accordance with Regulation 17 – The book building process is a mechanism of price discovery which helps to determine market price of securities. If the book building option is used, a draft prospectus has to be filed with SEBI. The prospectus should contain all the details of the offer, except the price at which the securities will be offered (a price band is specified). The copy of the draft prospectus is filed with SEBI and is circulated among institutional buyers by a leading merchant banker acting as the book runner. Institutional investors specify the price as well as the volume of shares they intend to buy. The book runner, on receiving the above information, determines the price at which the offer is to be made to the public.

(ii) Stock exchanges in accordance with Regulation 15 – In an open market purchase, a company can buy its shares directly from the stock market through brokers. Open market purchases are resorted to when the number of shares to be bought back is relatively small. The company has to fix the maximum price for an open market offer; stipulate the number of shares it intends to purchase, and announce the closing date of buy-back of shares.

(c) Odd lots, i.e., where the lot of securities of a public company, whose shares are listed on a recognised stock exchange, is smaller than such marketable lot, as may be specified by the stock exchange. The shares of all the companies are presently traded at the stock exchanges in compulsory dematerialised form only and in case of demat shares, the market lot for all the companies is only one share. Hence, this mode of buy-back has become more or less redundant in the present scenario.

(d) The securities issued to employees of the company pursuant to a scheme of stock option or sweat equity. Out of the various methods enumerated above, only open market purchase method and tender offer method are being resorted to by the companies for buy-back and among these two, open market purchase method is most sought after because of its cost advantage.

OTHER FORMALITIES FOR BUY-BACK

Section 77A(6) – A declaration of solvency is required to be filed by the company with the Registrar and SEBI in the prescribed form Rule 5C and Form No. 4A of the General Rules and Forms before the buy-back is implemented to guarantee its solvency for at least a year after the completion of

buy-back. However, a company whose shares are not listed on the Stock Exchange is not required to file this declaration with SEBI.

Section 77A(7) – A company after the completion of buy-back is required to physically extinguish and destroy its securities within 7 days of the last day on which the buy-back process is completed.

Section 77A(8) – A company buying back its securities is prohibited from making a further issue of securities within a period of 6 months. It may, however, make a bonus issue and discharge its existing obligations such as conversion of warrants, stock option schemes, sweat equity or conversion of preference shares or debentures into equity shares.

Section 77A(9) – A company is also required to maintain a register containing the particulars of the bought back securities, including the consideration paid for them, the date of cancellation, the date of physically extinguishing and physically destroying securities and such other particulars as may be prescribed. section 77A(9) also states that such particulars are required to be entered in the register of buy-back of securities within 7 days of the date of completion of buy-back.

Section 77A(10) – On completion of the buy-back process, the company shall within a period of 30 days file with SEBI and the Registrar a return containing the particulars prescribed. A private company and a public company whose shares are not listed on a recognised stock exchange should file the return of buy-back with the Registrar only. Non-compliance with the above mentioned requisites is a punishable offence under section 77A(11) of the Companies Act.

Section 77AA – Section 77AA deals with transfer of certain sums to capital redemption reserve account. Where a company purchases its own shares out of free reserves, then a sum equal to nominal value of the shares purchased has to be transferred to the Capital Redemption Reserve Account referred to in clause (d) of the *proviso* to subsection (1) of section 80 and its details are required to be disclosed in the balance sheet. According to section 77AA, such a transfer of capital redemption reserve account will not be required when buy-back of securities is other than shares. According to section 77AA, the Central Government may, from time to time, notify other securities as specified securities and such notified securities may not be shares.

RESTRICTIONS ON THE MODES OF BUY-BACK

Section 77B – section 77B restricts modes of buy-back. The companies are restricted to buy back its shares,

(a) Through any subsidiary company including its own subsidiary company.

(b) Through any investment companies or group of investment companies.

(c) If a default has been made by it in respect of:
   (i) Repayment of deposit or interest payable thereon, or
   (ii) Redemption of debentures or preference shares, or
   (iii) Payment of dividend to any shareholder, or
   (iv) Repayment of any term loan, or
   (v) Interest payable thereon to any financial institution or bank.

(d) In case it has not complied with the provisions of sections 159, 207 and 211 of the Act.

(e) Moreover, a listed company is prohibited from buying back its securities through negotiated deals, spot transactions, private arrangements and insider dealings u/s Regulations 4(2) and 4(3).

RULES AND REGULATIONS OF SECURITIES AND EXCHANGE BOARD OF INDIA

Procedure for buy-back of securities of a company listed on a stock exchange is explained in Securities and Exchange Board of India (Buy-back of Securities) Regulations, 1998. In case of buy-back of equity shares or other specified securities of a Private Limited Company and Unlisted Public Limited Company, which are not listed on any recognised stock exchange, the Private Limited Company, and Limited Company (Buy-back of Securities) Rules, 1999 are applicable.

The various provisions for the procedure of buy-back under SEBI (Buy-back of Securities) Regulations 1998 are as follows:

Tender Offer

A company may buy back its shares from its existing shareholders on proportionate basis in accordance with the following provisions:

Regulation 7

The explanatory statement annexed to the notice under section 173 of the Companies Act shall contain the following disclosures:

(a) The maximum price at which the buy-back of shares shall be made and whether the Board of Directors of the company are being authorised at the general meeting to determine subsequently the specific price at which the buy-back may be made at appropriate time;

(b) If the promoter intends to offer their shares:
   (i) the quantum of shares proposed to be tendered, and
   (ii) the details of their transactions and their holdings for the last six months prior to the passing of the resolution for buy-back including information of number of shares acquired, the price and date of acquisition.

Regulation 8

(1) The company which has been authorised by a special resolution or a resolution passed by the Board of Directors at its meeting shall before buy-back of shares or other specified securities make a public announcement in at least one English National Daily, one Hindi National Daily and a Regional language daily all with wide circulation at the place where the Registered office of the company is situated and shall contain all the material information as specified in Schedule II.

(2) The public announcement shall specify a date, which shall be the "specified date" for the purpose of determining the names of the security holders to whom the letter of offer shall be sent.

(3) The specified date shall not be later than thirty days from the date of the public announcement.

(4) The company shall within seven working days of the public announcement file with the Board a draft letter of offer containing disclosures as specified in Schedule III through a merchant banker who is not associated with the company.

(5) The draft letter of offer referred to in sub-regulation (4) shall be accompanied with fees specified in Schedule IV.

(6) The letter of offer shall be dispatched not earlier than twenty-one days from its submission to the Board under sub-regulation (4). Provided that, if within twenty-one days from the date of submission of the draft letter of offer, the Board specifies modifications, if any, in the draft letter of offer (without being under any obligation to do so), the merchant banker and the

company shall carry out such modifications before the letter of offer is dispatched to the security holders.

(7) The company shall file along with the draft letter of offer, a declaration of solvency in the prescribed form and in a manner prescribed in subsection (6) of section 77A of the Companies Act.

Buy-back Offer Procedure under Tender Offer

Regulation 9

(1) The offer for buy-back shall remain open to the members for a period not less than fifteen days and not exceeding thirty days.

(2) The date of the opening of the offer shall not be earlier than seven days or later than thirty days after the specified date.

(3) The letter of offer shall be sent to the security holders so as to reach the security holders before the opening of the offer.

(4) In case the number of shares or other specified securities offered by the security holders is more than the total number of shares or other specified securities to be bought back by the company, the acceptances per security holder shall be equal to the acceptances tendered by the security holders divided by the total acceptances received and multiplied by the total number of shares or other specified securities to be bought back.

(5) The company shall complete the verifications of the offers received within fifteen days of the closure of the offer and the shares or other specified securities lodged shall be deemed to be accepted unless a communication of rejection is made within fifteen days from the closure of the offer.

Escrow Account

Regulation 10

(1) The company shall as and by way of security for performance of its obligations under the regulations, on or before the opening of the offer deposit in an escrow account such sum as specified in sub-regulation (2).

(2) The escrow amount shall be payable in the following manner—

(i) If the consideration payable does not exceed ₹ 100 crores – 25% of the consideration payable;

(ii) If the consideration payable exceeds ₹ 100 crores – 25% upto ₹ 100 crores and 10% thereafter.

(3) The escrow account referred in sub-regulation (1) shall consist of—

(a) Cash deposited with a scheduled commercial bank or;

(b) Bank guarantee in favour of the merchant banker; or

(c) Deposit of acceptable securities with appropriate margin, with the merchant banker, or

(d) A combination of (a), (b) and (c) above.

(4) Where the escrow account consists of deposit with a scheduled commercial bank, the company shall, while opening the account, empower the merchant banker to instruct the bank to issue a banker's cheque or demand draft for the amount lying to the credit of the escrow account, as provided in the regulations.

(5) Where the escrow account consists of bank guarantee, such bank guarantee shall be in favour of the merchant banker and shall be valid until thirty days after the closure of the offer.

(6) The company shall, in case the escrow account consists of securities, empower the merchant banker to realise the value of such escrow account by sale or otherwise and if there is any deficit on realisation of the value of the securities, the merchant banker shall be liable to make good any such deficit.

(7) In case the escrow account consists of bank guarantee or approved securities, these shall not be returned by the merchant banker till completion of all obligations under the regulations.

(8) Where the escrow account consists of bank guarantee or deposit of approved securities, the company shall also deposit with the bank in cash a sum of at least one per cent of the total consideration payable, as and by way of security for fulfilment of the obligations under the regulations by the company.

(9) On payment of consideration to all the security holders who have accepted the offer and after completion of all formalities of buy-back, the amount, guarantee and securities in the escrow, if any, shall be released to the company.

(10) The Board in the interest of the security holders may in case of non-fulfilment of obligations under the regulations by the company forfeit the escrow account either in full or in part.

(11) The amount forfeited under sub-regulation (10) may be distributed pro rata amongst the security holders who accepted the offer and balance, if any, shall be utilised for investor protection.

Payment to Security Holders

Regulation 11

(1) The company shall immediately after the date of closure of the offer open a special account with a banker to an issue registered with the Board and deposit therein, such sum as would, together with ninety per cent of the amount lying in the escrow account make up the entire sum due and payable as consideration for buy-back in terms of these regulations and for this purpose, may transfer the funds from the escrow account.

(2) The company shall within seven days of the time specified in sub-regulation (5) of Regulation 9 make payment of consideration in cash to those security holders whose offer has been accepted or return the shares or other specified securities to the security holders.

Extinguishment of Certificate

Regulation 12(1)

The company shall extinguish and physically destroy the security certificates so bought back in the presence of a Registrar to Issue or the Merchant Banker and the Statutory Auditor within fifteen days of the date of acceptance of the shares or other specified securities. Provided that the company shall ensure that all the securities bought back are extinguished within seven days of the last date of completion of buy-back.

Buy-back through Stock Exchange

Regulation 15

A company shall buy-back its shares or other specified securities through the stock exchange as provided hereunder:

(a) The special resolution shall specify the maximum price at which the buy-back shall be made;

(b) The buy-back of the shares or other specified securities shall not be made from the promoters or persons in control of the company;

(c) The company shall appoint a merchant banker and make a public announcement as referred to in Regulation 8;

(d) The public announcement shall be made at least seven days prior to the commencement of buy-back;

(e) A copy of the public announcement shall be filed with the Board within two days of such announcement along with the fees as specified in Schedule IV;

(f) The public announcement shall also contain disclosures regarding details of the brokers and stock exchanges through which the buy-back of shares or other specified securities would be made;

(g) The buy-back shall be made only on stock exchanges having nationwide trading terminals;

(h) The buy-back of shares or other specified securities shall be made only through the order matching mechanism except "all or none" order matching system;

(i) The company and the merchant banker shall submit the information regarding the shares or other specified securities bought back to the stock exchange on a daily basis and publish the said information in a national daily on a fortnightly basis and every time when an additional five per cent of the buy-back has been completed. Provided that where there is no buy-back during a particular period, the company and the Merchant Banker shall not be required to publish the details in a national daily.

(j) The identity of the company as a purchaser shall appear on the electronic screen when the order is placed.

Extinguishment of Certificates

Regulation 16

(1) Subject to the provisions of sub-regulations (2), the provisions of Regulation 12 pertaining to extinguishment of certificates shall be applicable *mutatis mutandis*.

(2) The company shall complete the verification of acceptances within fifteen days of the payout.

Buy-back through Book Building

Regulation 17 – 17(1) A company may buy back its shares or other specified securities through the book building process as provided hereunder:

(a) The special resolution passed by the Board of Directors at its meeting as referred to in Regulation 5A shall specify the maximum price at which the buy-back shall be made.

(b) The company shall appoint a merchant banker and make a public announcement as referred to in Regulation 8.

(c) The public announcement shall be made at least seven days prior to the commencement of buy-back.

(d) Subject to the provisions of subclause (i), (ii) and the provisions of Regulation 10, shall be applicable—

(i) The deposit in the escrow account shall be made before the date of the public announcement.

(ii) The amount to be deposited in the escrow account shall be determined with reference to the maximum price as specified in public announcement.

(e) A copy of the public announcement shall be filed with the Board within two days of such announcement along with the fees as specified in Schedule IV.

(f) The public announcement shall also contain the detailed methodology of the book building process, the manner of acceptance, the format of acceptance to be sent by the security holders pursuant to the public announcement and the details of bidding centres.

(g) The book building process shall be made through an electronically linked transparent facility.

(h) The number of bidding centres shall not be less than thirty and there shall be at least one electronically linked computer terminal at all the bidding centres.

(i) The offer for buy-back shall remain open to the security holders for a period not less than fifteen days and not exceeding thirty days.

(j) The merchant banker and the company shall determine the buy-back price based on the acceptances received.

(k) The final buy-back price, which shall be the highest price accepted shall be paid to all holders whose shares or other specified securities have been accepted for buy-back.

(2) The provisions of sub-regulation (5) of Regulation 9 pertaining to verification of acceptances and the provisions of Regulation 11 pertaining to opening of special account and payment of consideration shall be applicable *mutatis mutandis*.

Extinguishment of Certificates

Section 18

The provisions of Regulation 12 pertaining to extinguishment of certificates shall be applicable *mutatis mutandis*.

9 Maximum amount which a company can spend for a buy-back can be calculated as follows:

The maximum amount for buy-back will be lowest of following three:

A. Free reserves (including security premium):

General reserve	xxx	
Add: Profit and Loss A/c balance	xxx	
Add: Any other free reserve	xxx	
Add: Securities Premium A/c	xxx	
(A)		xxx

B. 25%of total paid-up capital + free reserve including security premium:

Equity share capital (paid up)	xxx	
Add: Preference share capital (paid up)	xxx	
Add: Free reserves + Securities premium	xxx	
TOTAL		xxx

(B) = TOTAL × 25/100

C. After buy-back, total paid-up capital + free reserve including securities premium should be at least ½ or more of the total loans (secured + unsecured):

Total paid-up capital + Free reserves including securities premium (From B)	xxx
Less: ½ of total loan (Secured + unsecured)	xxx
Add: Free reserves + Securities premium	xxx

The lowest of the above three (A/B/C) is the maximum amount that the company can spent for buy-back.

Problem No. 1:

The following balances appeared in the books of Aryan Ltd.

1,00,000 Equity Shares of ₹ 10 each	₹ 10,00,000
General Reserve	₹ 2,00,000
Profit & Loss Account	₹ 8,00,000

Ascertain the maximum number of equity shares, Aryan Ltd. can buy back at a price of ₹ 20 each.

(MU, Modified, April, 2010 (Old Course))

Solution: Aryan Ltd.:

Maximum number of shares the company can buy back:

1.	25% of Paid-up Equity Share Capital	25,000 shares
2.	Maximum amount payable on buy-back:	
	25% of Paid-up Share Capital and Free Reserves	
	Equity Share Capital	10,00,000
	General Reserves	2,00,000
	Profit & Loss Account	8,00,000
	Total	20,00,000
	25% of 20,00,000	5,00,000

Price payable per Equity Share = ₹ 20

Therefore, maximum number of shares $= \frac{5,00,000}{20}$

= 25,000

Conclusion: Therefore, maximum number of shares the company can buy-back

= least of the above

= 25,000

Problem No. 2

Yuvraj Ltd. furnishes the following information:

60,000 Equity Shares of ₹ 100 each fully paid-up.

General Reserve	₹ 36,00,000
Profit & Loss Account (Cr.)	₹ 40,00,000
Securities Premium	₹ 4,00,000
Secured Loan	₹ 40,00,000
Unsecured Loan	₹ 20,00,000

Keeping in view all the legal requirements, ascertain the maximum number of equity shares that can be bought back by the company at a price of ₹ 250 per share. **(MU, Modified, October., 2009)**

Solution: Calculation of maximum number of buy-back of shares

General Reserve	₹	36,00,000
Profit & Loss Account	₹	40,00,000
Free Reserves	₹	76,00,000
Add: Securities Premium	₹	4,00,000
	₹	80,00,000
Equity Share Capital (Paid up)	₹	60,00,000
Own Fund	₹	**1,40,00,000**

(a) 25% of own fund = 1,40,00,000 × 25/100
= 35,00,000

(b) Own Funds after buy-back of shares = (Own Funds – 50% of Long-term Loan)
= [1,40,00,000 – 50% (40,00,000 + 20,00,000)]
= (1,40,00,000 – 30,00,000)
= 1,10,00,000

(c) 25% of Equity Share Capital = 60,00,000 × 25%
= ₹ 15,00,000

Maximum number of shares @ nominal value = 15,00,000 ÷ 100
= 15,000

(d) Maximum number of shares that shall be bought back at offer price = $\frac{\text{Minimum of A and B}}{\text{Offer Price}}$

$= \frac{35,00,000}{250}$

= 14,000 shares

Problem No. 3

X Ltd. furnishes the following information:

80,000 Equity Shares of ₹ 10 each, ₹ 7 per share paid up: ₹ 5,60,000.

General Reserve: ₹ 80,000. Profit & Loss Account: ₹ 6,00,000,

Securities Premium: ₹ 1,20,000. Bank Loan (Secured): ₹ 3,00,000.

Unsecured Loan: ₹ 1,00,000.

Keeping in view the legal requirements, ascertain the maximum number of equity shares that can be bought back by the company at a price of 40 per share. **(MU, Modified, March, 2009)**

Solution:

Paid-up Capital			₹ 8,00,000
Free Reserves			
General Reserve	₹	80,000	
Profit & Loss Account	₹	6,00,000	

Securities Premium	₹ 1,20,000	₹ 8,00,000	
Own Fund		₹ 16,00,000	
25% of ₹ 16,00,000		= 4,00,000	... (i)
Own Fund after Buy-back:			
50% of Long-term Loan			
50% of 4,00,000 (3,00,000 + 1,00,000)		= 2,00,000	
16,00,000 – 2,00,000		= 14,00,000	... (ii)
25% of Equity Share Capital (fully paid up)			
25% of 8,00,000		= 2,00,000	
No. of Shares at Face Value		$= \frac{2,00,000}{10}$	
		= 20,000	
Amount of 20,000 shares at ₹ 40 per share		= (20,0000 × 40)	
		= 8,00,000	... (iii)
Maximum Buy-back		$= \frac{\text{Least of (i), (ii) and (iii)}}{\text{Offer Price}}$	
		$= \frac{4,00,000}{40}$	
		= 10,000 shares	

The company can buy-back 10,000 shares at ₹ 40 per share.

Problem No. 4

Following information is available from the books of a Company:

1,20,000 Equity Shares of ₹ 10 each: ₹ 12,00,000.

Securities Premium: ₹ 70,000.

General Reserves: ₹ 3,50,000.

The company decided to buy back 25% of the equity share capital at ₹ 12 per share.

Pass Journal Entries without narration. **(MU, Modified, October, 2008)**

Solution: **Journal**

Sr. No.	Particulars		Dr. (₹)	Cr. (₹)
1	Equity Shareholders A/c (30,000 × 10)	Dr.	3,00,000	
	Premium on Buy-back of Shares A/c (30,000 × 2)	Dr.	60,000	
	To Equity Shareholders A/c			3,60,000
2	Securities Premium A/c	Dr.	70,000	
	General Reserve A/c	Dr.	2,30,000	
	To Capital Redemption Reserve A/c			3,00,000
3	General Reserve A/c	Dr.	60,000	
	To Premium on Buy-back of Shares A/c			60,000
4	Equity Shareholders A/c	Dr.	3,60,000	
	To Bank A/c			3,60,000

Problem No. 5

A company buy-back 50,000 shares of ₹ 10 each at ₹ 25 per share.

The reserves of the company are as follows:

Securities Premium: ₹ 15,00,000. General Reserves: ₹ 23,00,000.

Pass Journal Entries in the books of a company without narration for buy-back of shares.

(MU, Modified, March, 2008)

Solution: **Journal**

Sr. No.	Particulars		Dr. (₹)	Cr. (₹)
1	Equity Share Capital A/c	Dr.	5,00,000	
	Premium on Buy-back of Shares A/c	Dr.	7,50,000	
	To Equity Shareholders A/c			12,50,000
2	Securities Premium A/c	Dr.	5,00,000	
	To Capital Redemption Reserve A/c			5,00,000
3	Securities Premium A/c	Dr.	7,50,000	
	To Premium on Buy-back of Shares A/c			7,50,000
4	Equity Shareholders A/c	Dr.	12,50,000	
	To Bank A/c			12,50,000

Problem No. 6

Following is the Balance Sheet of Suyog Ltd. as on 31st March, 2015.

Balance Sheet

Liabilities	(₹)	Assets	(₹)
Share Capital:		**Fixed Assets:**	
Authorised:		Land & Building	30,00,000
10,00,000 Equity Shares of ₹ 10 each	1,00,00,000	Plant & Machinery	30,00,000
Issued:		Furniture	22,00,000
8,00,000 Equity Shares of ₹ 10 each,		**Investments**	15,00,000
₹ 8 paid-up	64,00,000	**Current Assets:**	
Reserves:		Debtors	47,00,000
General Reserve	10,00,000	Bill Receivables	10,00,000
Profit & Loss A/c	50,00,000	Bank Balance	40,00,000
Securities Premium	20,00,000	Stock	20,00,000
Secured Loans:			
11% Debentures	20,00,000		
Unsecured Loans	20,00,000		
Current Liabilities:			
Creditors	15,00,000		
Bills Payable	15,00,000		
	2,14,00,000		**2,14,00,000**

The company decides to buy-back the maximum number of equity shares as may be permitted at a price of ₹ 20 per share.

Find out maximum number of shares to be bought back and pass Journal Entries and show the effect of buy-back on Share Capital Schedule and Reserves & Surplus Schedule.

(MU, Modified, October, 2007)

Solution:

1. Calculation of limit of 25% of own funds:

	Particulars		₹	₹
A.	Sources			
	(a) Free Reserves			
	General Reserve		10,00,000	
	Profit & Loss		50,00,000	
			60,00,000	
	(b) Securities Premium Account Balance		20,00,000	
			80,00,000	
B.	Paid-up Capital (Equity)	64,00,000		
	Add: Final Call	16,00,000	80,00,000	
C.	Total Own Funds (A + B)		1,60,00,000	
D.	Maximum amount of buy-back of all shares/securities (25% of Own Funds)			40,00,000

2. Calculation of minimum own funds remaining after buy-back:

Particulars	₹	₹
Debts = Debentures + Unsecured Loans = 40,00,000		
A. Calculate Minimum Own Funds = Debt ÷ 2 = ₹ 40,00,000 ÷ 2	20,00,000	
so as to satisfy the Debt Capital Ratio of 2 : 1		
B. Calculate required Post-buy-back Own Funds = 1,60,00,000 – 20,00,000		1,40,00,000

3. Calculation of limit of 25% of equity capital during year:

	Particulars	₹
A.	Maximum Nominal Value of Equity Shares which could be bought back during the year = 25% of Total Paid-up Equity Share Capital (25% × 80,00,000)	20,00,000
B.	Maximum Number of Equity Shares that can be bought back at par (20,00,000 ÷ ₹ 10)	2,00,000

4. Calculation of maximum possible buy-back amount:

Particulars	₹
2,00,000 shares × ₹ 20 offer price	40,00,000

Conclusion: Keeping in view all legal conditions, Suyog Ltd. can buy back 2,00,000 equity shares at a price of ₹ 20 each including premium of ₹ 10 per share.

Journal of Suyog Ltd.

Sr. No.	Particulars		Dr. (₹)	Cr. (₹)
1	Equity Share Final Call A/c	Dr.	16,00,000	
	To Equity Share Capital A/c			16,00,000
	(Being amount payable on final call on equity shares)			
2	Bank A/c	Dr.	16,00,000	
	To Equity Share Final Call A/c			16,00,000
	(Being amount received on final call on equity shares)			
3	Equity Share Capital A/c	Dr.	20,00,000	
	Premium on Buy-back of Shares A/c	Dr.	20,00,000	
	To Equity Shareholders A/c			40,00,000
	(Being amount payable on buy-back of 2,00,000 equity shares of ₹ 10 each at a premium of ₹ 10 each)			

4	Profit & Loss A/c To Capital Redemption Reserve A/c *(Being the amount equal to nominal value of shares bought back and capital redemption reserve created)*	Dr.	20,00,000	 20,00,000
5	Equity Shareholders A/c To Bank A/c *(Being the payment made to equity shareholders on buy-back)*	Dr.	40,00,000	 40,00,000
6	Securities Premium A/c To Premium on Buy-back of Shares A/c *(Being the premium on buy-back adjusted)*	Dr.	20,00,000	 20,00,000

Balance Sheet as on 31st March, 2009

Particulars	Notes	₹	₹
I. Share Capital			
Authorised: 10,00,000 equity shares of ₹ 10 each			**1,00,00,000**
Issued, Subscribed and Paid-up:			
6,00,000 shares of ₹ 10 each			60,00,000
			60,00,000
II. Reserves & Surplus			
General Reserve			10,00,000
Profit & Loss A/c		50,00,000	
Less: Transferred to CRR		20,00,000	30,00,000
CRR		NIL	
Add: Transferred from Profit & Loss A/c		20,00,000	20,00,000
			60,00,000

Problem No. 7

Following is the Balance Sheet of Indica Ltd. as on 31st December, 2015.

Balance Sheet

Liabilities	₹	Assets	₹
Share Capital		**Fixed Assets**	
Authorised:		Land & Building	40,00,000
10,00,000 Equity Shares of ₹ 10 each	1,00,00,000	Plant & Machinery	22,00,000
Issued, Subscribed and Called up:		Furniture	20,00,000
8,00,000 Equity Shares of ₹ 10 each,		**Investments**	20,00,000
₹ 8 per share paid up	64,00,000	**Current Assets, Loan and Advances**	
Reserves & Surplus:		Debtors	42,00,000
Profit & Loss A/c	50,00,000	Bill Receivables	10,00,000
Securities Premium A/c	30,00,000	Bank Balance	45,00,000
Secured Loans:		Stock	20,00,000
10% Debentures	30,00,000		
Unsecured Loans	10,00,000		
Current Liabilities and Provisions			
Sundry Creditors	20,00,000		
Bills Payable	10,00,000		
Provision for Tax	5,00,000		
	2,19,00,000		**2,19,00,000**

Keeping in view the legal requirement, ascertain the maximum number of equity shares that Indica Ltd. can buy back @ ₹ 20 per share.

Pass Journal Entries to record buy-back and show the effect of buy-back on Share Capital Schedule and Reserves & Surplus Schedule. **(MU, Modified, October, 2006)**

Solution: **Journal of Indica Ltd.**

Sr. No.	Particulars		Dr. (₹)	Cr. (₹)
1	Bank A/c (8,00,000 × 2)	Dr.	16,00,000	
	To Equity Share Capital A/c			16,00,000
	(Being final call received)			
2	Equity Share Capital A/c	Dr.	20,00,000	
	Premium on Buy-back A/c	Dr.	20,00,000	
	To Equity Shareholders A/c			40,00,000
	(Being 2,00,000 equity shares brought back)			
3	Securities Premium A/c	Dr.	20,00,000	
	To Premium on Buy-back A/c			20,00,000
	(Being premium on buy-back adjusted)			
4	Equity Shareholders A/c	Dr.	40,00,000	
	To Bank A/c			40,00,000
	(Being equity shareholder paid off)			
5	Profit & Loss A/c	Dr.	20,00,000	
	To Capital Redemption Reserve A/c			20,00,000
	(Being amount transferred to capital redemption reserve)			

Balance Sheet

Liabilities	(₹)
I. Share Capital	
Authorised:	**1,00,00,000**
Issued, Subscribed and Paid-up:	
6,00,000 Equity Shares of ₹ 10 each	**60,00,000**
II. Reserves and Surplus	
Securities Premium	10,00,000
Capital Redemption Reserve	20,00,000
Profit & Loss A/c	30,00,000
	60,00,000

Working Note:

Least of the following can be buy-back amount:

(i) Fee Reserve = Securities Premium + Profit & Loss A/c
= 30,00,000 + 50,00,000
= 80,00,000

(ii) 25% of Own Fund = 25% (Share Capital + Call-in-arrears + Free Reserve)
= 25% (64,00,000 + 16,00,000 + 80,00,000)
= 40,00,000

(iii) Own Fund = 50% of Borrowed Funds
= 50% of 40,00,000
= 20,00,000

(iv) Maximum Number of Shares = Maximum number of shares that can be bought back

$$= \frac{40,00,000}{20\,(\text{given})}$$

= 2,00,000 shares

Number of shares bought back do not exceed 25% of issued shares, i.e.,

8,00,000 × 25% = 2,00,000 shares.

Problem No. 8

The Balance Sheet of Manish Ltd. as on 31st March, 2015 is as follows:

Balance Sheet

Liabilities	₹	Assets	₹
Share Capital		**Fixed Assets**	
Authorised, Issued, Subscribed and Called up		Net Block	40,00,000
Equity Shares of ₹ 10 each	25,00,000	**Investments**	15,00,000
Reserves and Surplus		**Current Assets, Loans and Advances**	
Securities Premium	5,00,000	Current Assets	
General Reserve	10,00,000	(Including Bank Balance ₹ 15,00,000)	35,00,000
Profit & Loss A/c	10,00,000	Loans and Advances	5,00,000
Secured Loan			
10% Debentures	25,00,000		
Current Liabilities & Provisions			
Sundry Creditors	15,00,000		
Bills Payable	5,00,000		
	95,00,000		**95,00,000**

Keeping in view all the legal requirements, ascertain:

(i) Maximum number of equity shares that Manish Ltd. can buy back.

(ii) The maximum price it can offer.

Assume that the buy-back is carried out actually on the legally permissible terms, record the entries in the Journal of Manish Ltd. and show the effect of buy-back on Share Capital Schedule and Reserves & Surplus Schedule. **(MU, Modified, March, 2006)**

Solution: Calculation of maximum possible buy-back:

1. Calculation of limit of 25% of own funds:

(i) Sources:

(a) Free Reserves

General Reserves	₹ 10,00,000
Profit & Loss Account	₹ 10,00,000
	₹ 20,00,000
(b) Securities Premium Account Balance	₹ 5,00,000
	₹ 25,00,000
(ii) Paid-up Capital (Equity)	₹ 25,00,000
Total Own Fund	₹ 50,00,000
(iii) Maximum amount of Buy-back of all Shares Securities	
25% of Own Funds (25% × 50,00,000)	₹ 12,50,000

2. Calculation of minimum own funds remaining after buy-back:

(i) Minimum Own Funds = Debt ÷ 2
= ₹ 25,00,000 ÷ 2
= ₹ 12,50,000
so as to satisfy the Debt Capital Ratio of 2 : 1.

(ii) Required Post Buy-back Own Funds
= Own Funds before Buy-back – Minimum Own Funds
= 50,00,000 – 12,50,000
= 37,50,000

3. Calculation of limit of 25% of equity capital during the year:

(i) Maximum nominal value of equity shares, which could be bought back during financial year.
25% of Total Paid-up Equity Share Capital = 25% × 25,00,000
= 6,25,000

(ii) Maximum number of equity shares that can be bought back = 6,25,000 ÷ ₹ 10
= 62,500

4. Calculation of maximum possible offer price:

(i) The least of (1) and (2) amounts above is ₹ 12,50,000.

(ii) Maximum number of equity shares that can be bought back vide (3) (i) and (ii) above = ₹ 62,500

(iii) Maximum possible offer price = $\frac{\text{Least Amount as in (i)}}{\text{Maximum Number of Equity Shares as is (ii)}}$

$= \frac{12,50,000}{62,500}$

= ₹ 20

Conclusion: Keeping in view all legal conditions, Manish Ltd. can buy back 62,500 equity shares at a price of ₹ 20 each including premium of ₹ 10 per share.

Journal of Manish Ltd.

Sr. No.	Particulars		Dr. (₹)	Cr. (₹)
1	Equity Share Capital A/c	Dr.	6,25,000	
	Premium on Buy-back of Shares A/c	Dr.	6,25,000	
	To Equity Shareholders A/c			12,50,000
	(Being amount payable on buy-back of 62,500 equity shares of ₹ 10 each at a premium of ₹ 10 each)			
2	General Reserve A/c	Dr.	6,25,000	
	To Capital Redemption Reserve A/c			6,25,000
	(Being the amount equal to nominal value of shares bought back of general reserve transferred to capital redemption reserve)			
3	Equity Shareholders A/c	Dr.	12,50,000	
	To Bank A/c			12,50,000
	(Being the payment made to equity shareholders on buy-back)			
4	Securities Premium A/c	Dr.	5,00,000	
	General Reserve A/c	Dr.	1,25,000	
	To Premium on Buy-back of Shares A/c			6,25,000
	(Being the premium on buy-back adjusted from profits)			

Balance Sheet as on 31st March, 2009

Liabilities		₹
I. Share Capital		
Authorised:		
Issued, Subscribed and Paid up		
1,87,500 Equity Shares of ₹ 10 each		**18,75,000**
II. Reserves and Surplus		
Capital Redemption Reserve	6,25,000	
General Reserve	2,50,000	
Profit & Loss A/c	10,00,000	**18,75,000**

Problem No. 9

The Balance Sheet of AFCONS Ltd. as on 31st March, 2015 was as follows:

Balance Sheet

Liabilities	₹	Assets	₹
Equity Shares of ₹ 10 each	4,00,000	Net Block of Fixed Assets	7,50,000
Preference Shares of ₹ 100 each	1,00,000	Investment	50,000
Securities Premium	1,27,500	Current Assets	10,00,000
General Reserves	1,00,000		
Profit & Loss Account	1,22,500		
Debentures	8,00,000		
Current Liabilities	1,50,000		
	18,00,000		**18,00,000**

Keeping in view the legal requirement, ascertain the maximum number of equity shares that AFCONS Ltd. buys back @ ₹ 25 per share.

Pass Journal Entries to record buy-back and show the effect of Share Capital and Reserves & Surplus Schedule.

Solution: In the Books of AFCONS Ltd.

A. Maximum possible buy-back at an offer price of ₹ 25 per share

1. Calculation of limit of 25% of Own Funds:

(i) Sources			
(a) Free Reserves			
General Reserves	1,00,000		
Profit & Loss Account	1,22,500	2,22,500	
(b) Securities Premium Account Balance		1,27,500	
		3,50,000	
(ii) Paid-up Capital			
Equity Share Capital	4,00,000		
Preference Share Capital	1,00,000	5,00,000	
(iii) Total Own Funds (A + B)		8,50,000	
(iv) 25% of Own Funds (25% × 8,50,000)			2,12,500

2. Calculation of minimum Own Funds remaining after buy-back:

(i) Minimum Own Funds		8,50,000
Less: 50% of Debentures of ₹ 8,00,000		4,00,000

(ii) Calculation of required post buy-back own funds
= Own Funds before buy-back less minimum
own funds (8,50,000 less 4,00,000) 4,50,000

3. Calculation limit of 25% Equity Capital during year

$$= \left[\frac{25\% \text{ of paid - up Equity Capital}}{\text{Nominal Value per Equity Capital}} \times \text{Offer Price} \right]$$

$$= \left[\frac{1,00,000}{10} \times 25 \right] \quad 2,50,000$$

Conclusion:

$$\text{Maximum Possible Buy-back} = \left[\frac{\text{Least of the above 1 \& 2 \& 3}}{\text{Offer Price}} \right]$$

$$= \frac{2,12,500}{25} = 8,500 \text{ Equity Shares}$$

So, 8,500 equity shares of ₹ 10 each can be bought back at a premium of ₹ 15 each.

B. Journal

Sr. No.	Particulars		Dr. (₹)	Cr. (₹)
1	Equity Share Capital A/c	Dr.	85,000	
	Premium on Buy-back of Shares A/c	Dr.	1,27,500	
	To Equity Shareholders A/c			2,12,500
	(Being amount payable on buy-back of 8,500 equity shares of ₹ 10 each at a premium of ₹ 15 per share).			
2	Profit & Loss A/c	Dr.	85,000	
	To Capital Redemption Reserve A/c			85,000
	(Being the amount equal to nominal value of shares bought back out of Profit & Loss A/c transferred to Capital Redemption Reserve A/c)			
3	Securities Premium A/c	Dr.	1,27,500	
	To Premium on Buy-back of Shares A/c			1,27,500
	(Being premium on buy-back of shares adjusted)			
4	Equity Shareholders A/c	Dr.	2,12,500	
	To Bank A/c			2,12,500
	(Being the payment made on buy-back)			

C. Balance Sheet as on 31st March, 2015
(After Buy-back)

Liabilities		₹
I. Share Capital:		
Preference Shares of ₹ 100 each		1,00,000
Equity Shares of ₹ 10 each	4,00,000	
Less: Buy-back	85,000	3,15,000
		4,15,000
II. Reserves & Surplus:		
Capital Redemption Reserve		85,000
Securities Premium	1,27,500	
Less: Premium on Buy-back	1,27,500	Nil

General Reserves		1,00,000
Profit & Loss A/c	1,22,500	
Less: Capital Redemption Reserve	85,000	37,500
		2,22,500

GLOSSARY

- **Buy-back:** Purchasing back the shares from the shareholders.
- **Free Reserves:** The reserves which can be used freely for any purpose are called as free reserves.
- **Debt:** Loans taken
- **Sweat Equity Shares:** These are the shares issued to employees for their intellectual contribution.
- **Own Debentures:** Debentures issued and bought back.
- **Ex-interest Price:** It is a price which does not include interest for the specific period.
- **Cum-interest Price:** It is a price which includes interest for the specific period.

EXERCISES

Theory Questions

1. Write a note on Buy-back of Shares.
2. What do you mean by buy-back? Is it different from redemption?
3. Explain, in brief, the legal provisions regarding buy-back of shares as per the Companies Act, 1956.
4. What are the restrictions on the power of the company to buy back its shares, according to the provision of the Companies Act, 1956?
5. Explain the conditions which a company has to comply with, as per the provision of the Companies Act, regarding: (a) sources of buy-back and (b) the maximum limit for buy-back.
6. Enumerate the sources available for buy-back of shares.
7. What is the maximum limit upto which a company can buy its shares? Explain and illustrate.
8. Write a short note on Debt-Capital Ratio after buy-back.
9. Write a short note on buy-back of shares.

Objective Type Questions

(A) Fill in the Blank:

1. No company shall purchase its own shares unless the buy-back is of less than _____ per cent of the total paid-up capital and free reserves of the company.
2. Buy-back of equity shares in any financial year shall not exceed _____ per cent of its total paid-up equity capital in that financial year.
3. On buy-back of shares, there is a reduction in the share capital to the extent of the _____ of the value of shares bought back
4. Buy-back of shares leads to (increase/decrease) in the earnings per share (EPS).
5. No buy-back of any kind of shares shall be made out of the proceeds of an earlier issue of the (same/different) kind of shares.

6. No company shall purchase its own shares unless the buy-back is authorised by its _____ (articles/memorandum).
7. No company shall purchase its own shares unless a special resolution has been passed in _____ (General/Board) meeting of the company authorising the buy-back.
8. A buy-back of _____ per cent or less of the total paid-up equity capital and reserves of the company can be authorised by the Boards; and no special resolution need be passed in a general meeting.
9. Every buy-back shall be completed within _____ months from the date of passing the special resolution.
10. Where a company buy backs its own securities, it shall extinguish and physically destroy the securities so bought back within _____ days of the last date of completion of buy-back.
11. The buy-back of shares may be from the existing security holders on a _____ basis.
12. The buy-back of shares may be from the _____ (open/stock/commodities) market.
13. The buy-back of shares may be from _____ lots.
14. The buy-back of shares may be by purchasing the securities issued to employees of the company pursuant to a scheme of _____ or _____.
15. If the buy-back is at discount, the amount of discount is credited to _____ A/c.
16. While Investment Allowance Reserve (is/is not) a free reserve, Investment Allowance (Utilised) Reserve _____ (is/is not) a free reserve.

(B) State Whether the Following Statements are True or False:

1. The buy-back of shares has to be authorised by articles of association.
2. After buy-back of shares, the debt-equity ratio should not exceed 2 : 1.
3. Buy-back of shares is just the opposite of raising capital through the issue of shares.
4. Buy-back of shares decreases the Earning Per Share (EPS) of the company.
5. Buy-back has to be completed within 10 months from the date of passing the special resolution.
6. On the buy-back of shares by the company, there is reduction in share capital.
7. On the buy-back of shares by the company, there is a reduction in share capital to the extent of the price paid for the shares bought back.
8. Buy-back of equity shares can be made out of the proceeds of an earlier issue of preference share.
9. No company shall purchase its own share unless the ratio of the debt owed by the company is equal to the capital and its free reserves after such buy-back.
10. Only fully paid shares can be bought back.
11. A company cannot buy-back the shares issued to employees of the company under a scheme of stock option.
12. Equity shares can be bought back out of security premium account balance.
13. If equity have been bought back out of security premium, there is no need to make any transfer to capital redemption reserves.
14. Equity shares can be bought back only out of the proceeds of subsequent fresh issue of preference shares.
15. Capital redemption reserve account can be utilised for issuing partly paid bonus shares.

16. Where a company completes a buy-back of its shares, it shall not make a rights issue of the same kind of shares within a period of six months.
17. Where a company completes a buy-back of its shares, it can make a bonus issue of the same kind of shares even within a period of six months.
18. If any actual profit realized in cash on sale of fixed asset or investment is directly credited to capital reserves, it is taken as free reserves.

(C) Multiple Choice Questions:

1. Which of the following statements show the position after buy-back of shares?
   (a) There is a reduction in the share capital to the extent of the face value of the shares bought back.
   (b) There is a payment from the company to the extent of the price of the shares paid to the shareholders.
   (c) The shareholders whose shares are bought cease to be the shareholders of the company.
   (i) (a) and (b) (ii) (b) and (c)
   (iii) All of the above (iv) None of the above
2. Which of the following are the main objectives of buy-back of equity shares?
   (a) To reduce the earnings per share (EPS)
   (b) to reduce the share capital
   (c) To bring in additional cash in business
   (i) (a) and (b) (ii) (b) and (c)
   (iii) All of the above (iv) None of the above
3. Which of the following statements is true?
   (a) Buy-back is governed by Secs. 77A to 77B of the Companies Act
   (b) Buy-back is governed by Sec. 80 of the Companies Act
   (c) Buy-back is governed by Sec. 117C of the Companies Act
   (d) Buy-back is governed by Secs. 100 to 104 of the Companies Act
4. Which of the following statement is true?
   (a) Redemption of preference shares is known as Buy-back
   (b) Redemption of debentures is known as Buy-back
   (c) Purchase of own debentures is known as Buy-back
5. Which of the following statements is true?
   (a) Sec. 80 states that premium payable on buy-back should be provided out of the profits of the company or out of the company's security premium account
   (b) Companies Act is silent about how premium payable on buy-back should be provided
   (c) Companies Act states that buy-back cannot be made at a premium
   (d) None of the above
6. Which of the following statements is true?
   (a) Buy-back can be out of free reserves + securities premium
   (b) Buy-back can be only out of free reserves; it cannot be out of securities premium
   (c) Buy-back can only be out of security premium + capital reserves
   (d) None of the above

7. Which of the following statements is true?
   (a) Buy-back date is not known on the date of issue
   (b) Buy-back date is known on the date of issue
   (c) Buy-back date cannot be beyond 10 years from the date of issue
   (d) None of the above
8. Which of the following statements is true?
   (a) The buy-back must be authorised by the memorandum of association of the company
   (b) The buy-back must be authorised by the articles of association of the company
   (c) The buy-back must be authorised by the auditors of the company
   (d) The buy-back must be authorised by the central government
9. Which of the following statements is true?
   (a) The buy-back must be authorised by an ordinary resolution passed in general meeting
   (b) The buy-back must be authorised by a resolution passed unanimously in a board meeting
   (c) The buy-back must be authorised by a resolution passed with the consent of all members present in the meeting
   (d) The buy-back must be authorised by a special resolution passed in general meeting
10. According to Sec. 77A, buy-back should be _____.
   (a) less than twenty-five per cent of the total nominal capital and free reserves of the company
   (b) less than twenty-five per cent of the total issued and free reserves of the company
   (c) less than twenty-five per cent of the total paid-up and free reserves of the company
   (d) less than twenty-five per cent of the total paid-up capital and free reserves of the company
11. According to Sec. 77A, buy-back of equity shares in any financial year _____.
   (a) shall not exceed twenty-five per cent of its total paid-up equity capital and free reserves in that financial year
   (b) shall not exceed twenty-five per cent of its total paid-up equity capital less free reserves in that financial year
   (c) shall not exceed twenty-five per cent of its total paid-up equity capital in that financial year
   (d) shall not be less than twenty-five per cent of its total paid-up equity capital in that financial year
12. According to Sec. 77A, _____.
   (a) the ratio of the debt owed by the company should not be more than twice the capital and its free reserves after such buy-back
   (b) the ratio of debt owed by the company should not be more than twice the capital and its free reserves before such buy-back
   (c) the ratio of the debt owed by the company should not be less than half the capital and its free reserves before such buy-back
13. According to Sec. 77A, before buy-back, all the shares _____.
   (a) must be fully paid-up
   (b) must be fully issued and subscribed to the extent of the authorised capital
   (c) must be held by the same shareholders at least for one year
   (d) none of the above

14. According to Sec. 77A, every buy-back shall be _____.
    (a) completed within twelve months from the date of passing the special resolution
    (b) completed within twelve months from the date of authorisation by the Article of Association
    (c) completed with in twelve months from the date the shares becoming fully paid up
    (d) completed not before twelve months from the date of passing special resolution
15. According to Sec. 77A, the following methods can be adopted for buy-back:
    (a) buy-back from the existing security holders on a proportionate basis
    (b) buy-back from the open market
    (c) buy-back from odd lots
    (i) only (a) and (b) (ii) only (a) and (c)
    (iii) only (b) and (c) (iv) all of the above
16. Before making a buy-back, the company shall _____.
    (a) file with the Registrar and the Securities and Exchange Board of India a prospectus
    (b) file with the Registrar and the Securities and Exchange Board of India a statement in lieu of prospectus
    (c) file with the Registrar and the Securities and Exchange Board of India a declaration of insolvency
    (d) file with the Registrar and the Securities and Exchange Board of India a declaration of solvency
17. Where a company buy-back its own securities, _____.
    (a) it shall extinguish and physically destroy the securities so bought back within thirty days of the last date of completion of buy-back
    (b) it shall hold the securities so bought back in its physical custody for seven years from the last date of completion of buy-back
    (c) it shall reissue the securities so bought back within seven days of the last date of completion of buy-back
    (d) it shall extinguish and physically destroy the securities so bought back within seven days of the last date of completion of buy-back
18. A company can buy back _____.
    (a) equity shares (b) preference shares
    (c) Both the shares (d) None of the above
19. Equity shares can be bought back _____.
    (a) out of profits only
    (b) out of proceeds of fresh issue only
    (c) out of capital profits only
    (d) its free reserves; or the securities premium account; or the proceeds of shares
20. A company may purchase its own shares out of _____.
    (a) Its free reserves only (b) The securities premium account only
    (c) The proceeds of any shares only (d) Any or all of the above

(D) Match the Columns:

(I)

Column A	Column B
1. After buy-back of share	(a) No provision on Companies Act
2. Main objective of buy-back of equity shares	(b) Special resolution passed in general meeting
3. Buy-back is governed	(c) Shareholders whose shares are bought cease to be the shareholders of the company
4. How premium payable on buy-back should be provided	(d) Ordinary resolution passed in general meeting
5. Sources of buy-back	(e) Less than twenty-five per cent of the total paid-up capital and free reserves of the company
6. Buy-back dates	(f) Increases in earnings per share (EPS)
7. Buy-back must be authorized by	(g) Free reserves + securities premium
8. According to Sec. 77A, quantum of buy-back should be	(h) Cannot be beyond 10 years from the date of issue
	(i) Less than twenty-five per cent of the total nominal capital and free reserves of the company
	(j) Secs. 77A to 77B of the Companies Act
	(k) Not known on the date of issue
	(l) Sec. 80 of the Companies Act

(II)

Column A	Column B
1. Buy-back of shares should be authorised by	(a) Not known on date of issue of shares
2. Sections of Companies governing	(b) Articles of Association Buy-back of Shares
3. Sections of Companies governing Redemption of Preference Shares	(c) Known on date of issue of shares
4. Date of Buy-back of Shares	(d) Out of free reserves and security premium
5. Date of Redemption of Preference Shares	(e) Memorandum Association
6. Buy-back of Shares	(f) Secs. 77A-77B of Companies Act
7. Redemption on Preference Shares	(g) Out of free reserves excluding divisible profits
	(h) Secs. 80 and 80A of Companies Act
	(i) Only out of divisible profits

Practice Problems

1. The balance sheet of Shivani Ltd. as on 31st March, 2015 was as follows:

Liabilities	Amt. (₹)	Assets	Amt. (₹)
Equity Shares of ₹ 10 each	4,00,000.00	Fixed Assets	7,50,000.00
Preference Shares of ₹ 100 each	1,00,000.00	Investment	50,000.00
Securities Premium	1,27,500.00	Current Assets	10,00,000.00
General Reserve	1,00,000.00		
Profit and Loss Account	1,22,500.00		
Debentures	8,00,000.00		
Current Liabilities	1,50,000.00		
	18,00,000.00		**18,00,000.00**

Keeping in view the legal requirements, ascertain the maximum number of equity shares that Shivani Ltd. can buy back @ ₹ 25 per share.

Pass journal entries to record the buy-back and prepare balance sheet after buy-back.

2. The balance sheet of Ujjwala Ltd. as on 31-03-2015 is as follows:

Liabilities	Amt. (₹)	Assets	Amt. (₹)
Share Capital		**Fixed Assets**	
Authorised, Issued, Subscribed and		Net Block	40,00,000.00
Called up:		Investment	1,500,000.00
Equity Shares of ₹ 10 each	25,00,000.00	**Current Assets, Loans and Advances**	
Reserve and Surplus		Current Assets (including bank	
Security Premium	5,00,000.00	balance of ₹ 15,00,000)	3,500,000.00
General Reserves	10,00,000.00	Loans and Advances	5,00,000.00
Profit & Loss Account	10,00,000.00		
Secured Loans			
10% Debentures	25,00,000.00		
Current Liabilities and Provisions:			
Sundry Creditors	15,00,000.00		
Bills Payable	5,00,000.00		
	95,00,000.00		**95,00,000.00**

Keeping in view all the legal requirements, ascertain:

(a) the maximum number of equity shares that Ujjwala Ltd. can buy back.

(b) the maximum price it can offer.

Assume that the buy-back is carried out actually at the legally permissible terms, record the entries in the journal of Ujjwala Ltd.

3. Following is the balance sheet of Sagar Ltd. as on 31-12-2004:

Liabilities	Amt. (₹)	Assets	Amt. (₹)
Share Capital:		**Fixed Assets:**	
Authorised:		Land and Building	40,00,000.00
10,00,000 Equity Shares ₹ 10 each	1,00,00,000.00	Plant and Machinery	22,00,000.00
Issued, Subscribed and Called up:		Furniture	20,00,000.00
8,00,000 Equity Shares of ₹ 10 each,		Investment	20,00,000.00
₹ 8 per share paid-up	64,00,000.00	**Current Assets, Loans and Advances:**	
Reserve and Surplus:		Debtors	42,00,000.00
Profit and Loss Account	50,00,000.00	Bills Receivables	10,00,000.00
Security Premium Account	30,00,000.00	Bank Balance	45,00,000.00
Secured Loans:		Stock	20,00,000.00
10% Debentures	30,00,000.00		
Unsecured Loan	10,00,000.00		
Current Liabilities and Provisions:			
Sundry Creditors	20,00,000.00		
Bills Payable	10,00,000.00		
Provision for Tax	5,00,000.00		
	3,19,00,000.00		**2,19,00,000.00**

Keeping in view the legal requirement, ascertain the maximum number of equity share that Sagar Ltd. can buy-back.

Pass journal entries to record the buy-back.

4. Following is the summarised balance sheet of Rajendra Ltd. as on 31st March, 2015:

Liabilities	Amt. (₹)	Assets	Amt. (₹)
40,000 Equity Shares of ₹ 100 each		**Fixed Assets**	1,20,00,000.00
fully paid	40,00,000.00	Investment	88,00,00.00
20,000, 10% Redeemable Preference		Stock	14,00,000.00
Shares of ₹ 100 each fully paid	20,00,000.00	Debtors	14,00,000.00
Capital Redemption Reserve	4,00,000.00	Bank Balance	4,00,000.00
Security Premium	3,20,000.00		
General Reserve	8,00,000.00		
Profit and Loss Account	4,00,000.00		
11% Debentures	40,00,000.00		
Creditors	41,60,000.00		
	1,60,80,000.00		**1,60,80,000.00**

On the same date, it was decided to buy back the maximum number of equity shares at the maximum price possible under the law.

In case shortage of fund, of bank overdraft was to be arranged.

The company decided to utilise profit and loss account to be arranged.

Pass journal entries for the above transactions.

5. Y Ltd. makes a offer of 2,00,000 shares for buy-back. It received in all 3,00,000 shares from various shareholders Mr. Prudent one of the shareholders offered 250 shares. Calculate the number shares to be bought back.

[Ans.: 167 shares]

6. M Ltd. has furnished the following information.

Paid up Capital: ₹ 15,000. Free Reserves: ₹ 36,000. No. of Shares: 1,500. Face Value per share: 10. Price settled ₹ 150 per share.

[Ans.: Maximum number of shares that is bought back: 375. Number of shares to be bought back: 85]

7. Vijay Ltd. passed a resolution for buying back 50,000 equity shares of ₹ 5 each fully paid at a premium of 20%. For this purpose, it issued 11% preference shares of ₹ 100 each at par which were fully subscribed. The company has sufficient balances in revenue reserves and securities premium.

Pass Journal Entries in the books of the company.

[Ans.: Buy-back Claim: ₹ 3,00,000. Issue of Preference Share Capital: ₹ 3,00,000. Premium on Buy-back: ₹ 50,000]

8. Neha Ltd. resolved to buy-back 60,000 of its fully paid equity shares of ₹ 10 each at 20% premium. The company issued 2,000 14% preference shares of ₹ 100 each as par. The company uses ₹ 1,70,000 of its balance in securities premium apart from its sufficient balance in general reserve regarding buy-back.

Pass Journal Entries in the books of the Company.

[Ans.: Proceeds of Fresh Issue of ₹ 2,00,000. CRR ₹ 4,00,000]

9. KV Ltd. furnishes you with the following Balance Sheet as at 31st March, 2009.

(₹ in crores)

	₹	₹
Sources or Funds:		
Share Capital: Authorised		200
Issued:		
12% Preference Shares of ₹ 100 each fully paid	150	
Equity Shares of ₹ 10 each fully paid	50	200
Reserves and Surplus:		
Capital Reserve	30	
Securities Premium	50	
General Reserves	520	600
Total		**800**
Applications of Fund:		
Fixed Assets at Cost	200	
Less: Provision for Depreciation	150	50
Investments at Cost (Market Value ₹ 400 Cr.)		200
Current Assets	630	
Less: Current Liabilities	80	550
Total		**800**

The company redeemed preference on 1st April, 2009. It also bought back 100 lakh equity shares of ₹ 10 each at ₹ 50 per share. Payments were made out of bank balance which is included in current assets.

Pass Journal Entries in the books of the company.

10. Following is the Balance Sheet of Rajesh Ltd. as on 31st March, 2009:

Liabilities	₹	Assets	₹
Equity Share Capital (₹ 10 each)	10,00,000	Land & Building	20,00,000
Capital Redemption Reserve	3,60,000	Plant & Machinery	10,00,000
Securities Premium	2,00,000	Furniture & Fixtures	10,00,000
General Reserve	8,00,000	Vehicles	4,00,000
Profit & Loss A/c	3,00,000	Trade Investments	4,00,000
Revaluation Reserve	2,60,000	Non Trade Investments	4,00,000
Export Profits Reserve	4,00,000	Current Assets:	
Investment Allowance Reserve	1,00,000	Stock	4,00,000
Investment Allowance Reserve (Utilised)	1,40,000	Debtors	3,00,000
12% Debentures	35,00,000	Cash/Bank	15,00,000
Bank Loans	3,40,000		–
	74,00,000		**74,00,000**

You are required to calculate as per law the maximum possible buy-back of equity shares of the company of ₹ 50 per share. Also pass necessary Journal Entries in the books of the company.

[Hint: Free Reserves available for Buy-back, Securities Premium, General Reserve, Profit & Loss Account Balance. Investment Allowance Reserve (utilised), Capital Redepmption Reserve, Revaluation Reserve, Export Profits Reserve and Investment Allowance Reserve are not available for buy-back.]

[Ans.: Maximum No. of Equity Shares that can be bought back:

$$= \frac{\textbf{25\% of 10,00,000}}{\textbf{10}} = \frac{\textbf{2,50,000}}{\textbf{10}} = \textbf{25,000 shares]}$$

11. KV Ltd. furnishes you with the following Balance Sheet as at 31st March, 2009.

(₹ in crores)

	₹	₹
Sources of Funds:		
Share Capital:		
Authorised		200
Issued:		
12% Preference Shares of ₹ 100 each fully paid	150	
Equity Shares of ₹ 10 each fully paid	50	200
Reserves and Surplus:		
Capital Reserve	30	
Securities Premium	50	
General Reserves	520	600
Total		**800**
Application of Fund:		
Fixed Assets at Cost	200	
Less: Provision for Depreciation	150	50
Investments at Cost (Market Value ₹ 400 Cr.)		200
Current Assets	630	
Less: Current Liabilities	80	550
Total		**800**

The company redeemed preference on 1st April, 2009. It also bought back 100 lakh equity shares of ₹ 10 each at ₹ 50 per share. Payments were made out of bank balance which is included in current assets.

Pass Journal Entries in the books of the company.

12. Laxmi Ltd. resolved to buy-back 6,00,000 of its fully paid equity shares of ₹ 10 each at ₹ 12 per share. For this purpose, it issued 20,000 14% preference shares of ₹ 100 each at par, the total sum being payable with applications. The company uses ₹ 18,00,000 of its balance in Securities Premium Account apart from its adequate balance in General Reserve Account to comply with the legal formalities regarding buy-back.

Pass Journal Entries regarding buy-back of shares.

13. Following is the Balance Sheet of L J Ltd. as on 31st March, 2009.

Liabilities	₹	Assets	₹
2,00,000 Equity Shares of ₹ 10 each	20,00,000	Fixed Assets	28,00,000
Securities Premium	2,00,000	Investments	16,00,000
General Reserve	8,00,000	Current Assets	24,00,000
Profit & Loss Account	10,00,000		
14.5% Debentures	16,00,000		
Creditors	12,00,000		
	68,00,000		**68,00,000**

Calculate:

(i) Maximum number of equity shares that can.be bought.

(ii) Maximum price the company can offer.

(iii) Pass Journal Entries.

(iv) Prepare Balance Sheet after buy-back.

[Ans.: Buy-back Amount: ₹ 10,00,000. Number of shares that can be bought back: 50,000]

14. Following is the Balance Sheet of Danny Ltd. as on 31st March, 2009:

(₹ '000)

	₹
Liabilities:	
Issued and Paid-up Capital:	
3,00,000 Equity Shares of ₹ 10 each	3,000
General Reserve	100
Securities Premium	5
10% Debentures	1,400
Sundry Creditors	1,560
	6,065
Assets:	
Land & Building	630
Plant & Machinery	2,350
Furniture & Fittings	350
Investments	370
Stock	1,200
Sundry Debtors	590
Cash and Bank Balance	575
	6,065

On 1st April, 2009; the shareholders of the company have approved the scheme of Buy-back of equity shares as under:

(i) 15% of the equity shares would be bought back at ₹ 11 per share.

(ii) Balance in the general reserve and securities premium account may be utilised to the fullest extent for this purpose.

(iii) Issue 12% redeemable preference shares of ₹ 10 each as per the requirements.

Pass the Journal Entries to record the above transactions and prepare the Balance Sheet of the company immediately after the buy-back of shares.

[Ans.: Buy-back Claim: ₹ 4,95,000. Capital Redemption Reserve: ₹ 60,000. Balance Sheet Total: ₹ 59,60,000]

15. The Balance Sheet of Sunlight Ltd. as on 31st March, 2009 stood as under:

Liabilities	₹	Assets	₹
Share Capital:		Fixed Assets	2,73,60,000
20,00,000 Equity Shares of ₹ 10 each fully paid	2,00,00,000	Investments	75,00,000
General Reserve	25,00,000	Stock	47,80,000
Premium on Securities	22,00,000	Debtors	40,20,000
Profit & Loss Account	15,00,000	Cash & Bank Balances	15,40,000

9% Debentures	75,00,000		
Term Loans	80,00,000		
Creditors	29,00,000		
Provisions for Tax	6,00,000		–
	4,52,00,000		**4,52,00,000**

At a meeting of the shareholders held on the date of the above stated Balance Sheet, the following decisions were taken:

(i) 15% of the paid-up shares would be bought back @ ₹ 16 each.

(ii) 10% debentures of ₹ 20,00,000 at a premium of 15% would be issued to finance the buy-back.

(iii) General reserve would be used leaving a balance of ₹ 10,00,000.

(iv) Investments worth ₹ 20,00,000 would be sold out for ₹ 28,00,000.

You are required to pass the necessary Journal Entries to give effect to the above transactions and also to present the Balance Sheet after the buy back.

[Ans.: Claim: ₹ 48,00,000. Capital Redemption Reserve: ₹ 30,00,000. Balance Sheet Total: ₹ 4,35,00,000]

16. Rudra Ltd. has the following capital structure on 31st March.

(₹ in crores)

	₹
Equity Share Capital (Shares of ₹ 10 each)	300
Reserves:	
General Reserve	270
Securities Premium	100
Profit & Loss Account	50
Export Reserve (Statutory Reserve)	80
Loan Funds	800

On the recommendation of the Board of Directors, the shareholders have approved vide resolution at their meeting on 10th April, a proposal to buy-back the maximum permissible equity shares considering the huge cash surplus following sale of one of the Company's divisions.

The market price was around ₹ 25 and in order to induce existing shareholders to offer their shares for buy back, it was decided to offer a price of 20% above the market price.

Advice the Company on the maximum number of equity shares that can be bought back and record Journal Entries for the same assuming the buy-back has been completed in full within the next 3 months.

If borrowed funds were ₹ 1,200 lakhs and ₹ 1,500 lakhs respectively would your answer change?

Make suitable assumption wherever necessary.

[Ans.: Buy-back Claim: ₹ 180 crores. Capital Redemption Reserve: ₹ 60 crores]

17. Z Ltd. furnishes the following information:

Free Reserve: ₹ 7,00,000. Paid up Capital: ₹ 5,00,000.

Price per share settled: ₹ 1,200.

Calculate:

(a) Maximum buy-back.

(b) Number of shares to be bought back.

18. Following information is extracted from the books of Alpha Ltd.:

	₹
Equity Share Capital (₹ 10)	10,00,000
Security Premium	2,00,000
General Reserve	10,00,000
Profit & Loss Account	1,00,000
Investment Allowance Reserve	2,00,000
Capital Redemption Reserve	1,50,000
Non-trade Investments	2,00,000

The Company has decided to sell non-trade investments at ₹ 3,00,000. Price per share settled ₹ 20.

Find out the number of shares that can be bought and pass Journal Entries in the books of the Company.

19. Shruti Ltd. resolved to buy-back 60,000 of its fully paid equity shares of ₹ 10 each at ₹ 12 per share. For this purpose, it issued 2,000 11.5% preference shares of ₹ 100 each at par. Entire amount was payable on application. The company has ₹ 1,70,000 in Securities Premium Account which was to be used for buy-back. The company had sufficient balance in revenue reserve to meet the legal formalities for buy-back. Pass Journal Entries in the books of the company.

[Ans.: Nominal Value of Equity Shares bought back ₹ 6,00,000
Proceeds of Fresh Issue 200 × 100 ₹ 2,00,000
Free Reserves (Capital Redemption Reserve to be created) ₹ 4,00,000

20. Following is the Balance Sheet of Efficient Ltd. as on 31st March, 2009:

Liabilities	₹	Assets	₹
150,000 Equity Shares of ₹ 10 each	5,00,000	Goodwill	1,00,000
3,000 Preference Shares of ₹ 100 each	3,00,000	Land & Building	2,00,000
Profit & Loss Account	60,000	Plant & Machinery	3,00,000
12% Debentures	1,00,000	Vehicles	2,00,000
Creditors	1,40,000	Bank	3,00,000
	11,00,000		**11,00,000**

The company has decided to buy-back 10,000 equity shares at 10% premium. The company issued 800 preference shares of ₹ 100 each at 10% premium payable as ₹ 20 on application and the balance on allotment. Sufficient profits were used to supplement the new issue. Pass Journal Entries in the books of the company and prepare Balance Sheet after buy-back.

[Ans.: Nominal Value of Equity Shares bought back 10,000 × 10 ₹ 1,00,000
Proceeds of Fresh Issue ₹ 80,000
Free Reserves ₹ 20,000
Balance Sheet Total ₹ 10,78,000
Capital Redemption Reserve ₹ 20,000]

21. Following is the Balance Sheet of Buy-back Ltd. as on 31st March, 2009:

Liabilities	₹	Assets	₹
Equity Share Capital (₹ 10 each)	25,00,000	Fixed Assets	25,00,000
Securities Premium	50,000	Investments	1,50,000
Revenue Reserve	7,50,000	Cash/Bank	7,50,000

Profit & Loss Account	50,000	Debtors	3,25,000
Current Liabilities	7,00,000	Stock	3,25,000
	40,50,000		**40,50,000**

The company decided to buy-back 50,000 equity shares at ₹ 16 per share. Investments were sold for ₹ 2,50,000. The company decided to make a fresh issue of 14% preference shares of ₹ 100 each at 20% premium after utilising the securities premium fully and half of revenue reserve and Profit & Loss Account Balance.

Pass Journal Entries in the books of the company.

22. The Balance Sheet of Jigna Ltd. was as follows:

Balance Sheet as on 31st March, 2009

Liabilities	₹	Assets	₹
Equity Shares of ₹ 10 each	6,00,000	Fixed Assets (WDV)	16,00,000
Preference Shares of ₹ 100 each	2,00,000	Investments	2,00,000
Securities Premium	3,00,000	Current Assets	15,00,000
General Reserve	2,00,000		
Profit & Loss Account	2,00,000		
13.5% Debentures	16,00,000		
Creditors	2,00,000		
	33,00,000		**33,00,000**

Required:

(a) Ascertain the maximum number of equity shares that can be bought back at ₹ 30 per share.

(b) Pass Journal Entries in the books of the company.

(c) Prepare Balance Sheet of the company after buy-back.

[Ans.: (a) Limit on maximum number of shares that can be bought back

$= \mathbf{15,000\ shares}$

(b) Buy-back amount $= \mathbf{15,000 \times 30}$

$= \mathbf{₹\ 4,50,000}$

(c) Limit $= \mathbf{25\%\ of\ own\ funds}$

$= \mathbf{25\%\ 15,00,000}$

$= \mathbf{₹\ 3,75,000}$

(d) The company can buy $= \dfrac{\mathbf{3,75,000}}{\mathbf{30}}$

$= \mathbf{12,500\ shares\ only]}$

23. Following is the Balance Sheet of Hind Ltd. as on 31st March, 2009.

Liabilities	₹	Assets	₹
5,000 Equity Shares of ₹ 100 each	5,00,000	Land & Building	5,00,000
2,000 Preference Shares of ₹ 100 each	2,00,000	Plant & Machinery	3,00,000
Securities Premium	40,000	Furniture & Fixtures	2,00,000
Sinking Fund	50,000	Investments (M.V. ₹ 1,10,000)	1,00,000
Revenue Reserve	1,00,000	Stock	1,75,000
Profit & Loss Account	40,000	Debtors	1,75,000
Creditors	2,00,000	Bank	50,000

Bills Payable	2,00,000		
Bank Loan	1,70,000		–
	15,00,000		**15,00,000**

It was resolved to buy-back the maximum number of equity shares at the maximum price possible under the law. Investments have been sold out at the market value.

Pass Journal Entries in the books of the company and prepare a Balance Sheet after buy-back.

[Ans.: 1,250 equity shares can be bought back maximum amount of buy-back 25% of 9,30,000 = 2,32,500]

ACCOUNTING FOR SHARES

Floatation of a Company

This mainly involves preparation of necessary documents like Memorandum of Association, Articles of Association and filing them with the Registrar of companies along with requisite fee. Then the company will be issued a certificate of incorporation which brings the company into existence as a legal person. The company's life commences from the date mentioned in the certificate of incorporation. A private company can commence business right from the date of its incorporation. But in case of a public company, it has to wait for a certificate of commencement of business also. That certificate will be issued if the following conditions are satisfied.

- Shares which have to be paid for in cash must have been allotted upto the amount of the minimum subscription.
- Directors must have paid in cash the application and allotment money in respect of the shares contracted to be taken by them for cash.
- No money is liable to become refundable to the applicants by reason of failure to apply for or to obtain permission for shares or debentures to be dealt in on any recognised stock exchange.

This certificate is a conclusive evidence of formation of a company.

Shares

Total capital of a company is divided into units of small denomination which are called as shares. If the share capital of a company is 5,00,000, then it can be divided into 50,000 shares of ₹ 10 each, if issued at face value. The Companies Act provides that the shares or other interest of any member in a company shall be movable property, transferable in the manner provided by the Articles of the company and that each share in a company shall be distinguished by its appropriate number.

Classes of Shares

The Companies Act provides for two classes of shares: equity and preference shares. Preference shareholders enjoy preferential treatment with regard to payment of dividend and return of capital at the time of winding up of the company.

Equity shareholders enjoy voting rights. But there is no obligation to the company to pay dividends at a fixed rate every year. Even at the time of winding up of a company, they receive their capital only after payment to preference shareholders.

Share Capital

The Capital raised by the company by the issue of shares is known as share capital.

(a) Authorised or Nominal Share Capital: Authorised or Nominal share capital is the share capital which the company is authorised to issue by its memorandum of association. It is the maximum amount up to which a company is authorised to issue shares to the public without altering the memorandum of association.

(b) Issued Capital: The nominal value of the shares which are offered to the public for subscription is called issued capital.

(c) Subscribed Capital: The nominal value of the shares taken up by the public is subscribed capital. Subscribed capital will be equal to issued capital when all the shares offered to the public are taken up by the public.

(d) Called up Capital: Called up capital is that part of the subscribed capital which has been called up. The called up capital will be equal to the subscribed capital when the board of directors have called up the total amount payable in the shares.

(e) Paid-up Capital: The part of the called up share capital which has been paid up by the shareholders is called paid-up capital.

Issue of Shares

The Companies Act stipulates that when shares are issued to public for cash, the company has to come out with prospectus. Prospectus is defined by section 2(36) as "A prospectus means any document described or issued as prospectus and includes any notice, circular, advertisement or other document inviting deposits from public or inviting offers from the public for the subscription or purchase of any shares or debentures of a corporate body."

Prospectus contains the details such as the number and class of shares offered and the manner in which the amount of shares is payable by the public.

Public apply for shares of a company in an application form in a prescribed format. When an application is accepted, it is an allotment.

The application should be filed with the company or its bankers and should be accompanied by the application money. The application money is fixed by the company and should not be less than 5% of nominal value of the shares.

If the company asks the subscriber to pay a minimum amount along with the application and the rest in 2 or more instalments, then 1st instalment is called 'Application money' and 2nd instalment – share allotment money; 3rd instalment – share first call and 4th instalment – share second call.

Accounting treatment for these transactions is as follows:

On receipt of application money (which must be deposited in a scheduled bank)

- Bank Account Dr.
  To Share Application Account

(Being share application money received and deposited in a bank)

REDEMPTION OF PREFERENCE SHARES

As per the Companies Act, 1956 as amended in 1988, only preference shares which are redeemable within 20 years can be issued. The preference shares may be redeemed at par or at premium. Redemption may be done from the proceeds of fresh issue of shares or undistributed profits. The premium on redemption of preference shares may be adjusted against the Share Premium A/c or the Profit and Loss A/c.

Section 80 of the Companies Act allows a company, if authorised by the articles of association, to issue preference shares which can be redeemed by the company according to terms of the issue subject to the following legal restrictions:

(i) Shares cannot be redeemed unless they are fully paid up.

(ii) Shares can be redeemed only out of the profits of the company which would otherwise be available for dividend or out of the proceeds of a fresh issue of shares made for the purpose of redemption.

(iii) To the extent that the shares are redeemed out of profits, capital redemption account must be credited, debiting the profit and loss account, general reserve or other accounts showing profits otherwise available for distribution of dividends.

(iv) Before the shares are redeemed, the premium, if any, payable on redemption must be provided for out of the profits of the company or out of the share premium account.

Accounting Entries – On Redemption

1. Preference Share Capital A/c Dr.
   To Preference Shareholders A/c
   (Being amount payable on redemption of preference shares transferred to Shareholders A/c)
2. Preference Shareholders A/c Dr.
   To Bank A/c
   (Being the amount due on redemption paid)

For Premium on Redemption

1. Redeemable Preference Share Capital A/c Dr.
   Premium on Redemption of Preference Shares A/c Dr.
   To Preference Shareholders A/c
   (Being the amount payable on redemption transferred to Shareholders A/c)
2. Preference Shareholders A/c Dr.
   To Bank A/c
   (Being the payment made to Preference Shareholders)
3. Profit and Loss A/c Dr.
   or
   Share Premium A/c Dr.
   To Premium on Redemption of Preference Shares A/c
   (Being the premium on redemption adjusted against Profit and Loss A/c and Share Premium A/c)

Capital Redemption Reserve

Where the preference shares are redeemed without there being a corresponding issue of shares and the redemption is made out of distributable profits, the 'gap' created in the capital needs to be

filled up. For this purpose, an amount equal to the face value of the shares redeemed is transferred to Capital Redemption Reserve from the undistributed profits such as the credit balances in Profit and Loss account, General Reserve, Dividend Equalisation reserve.

The accounting entries for this are as follows:

General Reserve A/c	Dr.	
(or) P & L A/c	Dr.	
To Capital Redemption Reserve		

(Being the amount transferred to Capital Redemption Reserve A/c)

The reasons behind the creation of the Capital Redemption Reserve are:

(a) To keep the capital intact, when the shares are redeemed out of the undistributed profits of the company.

(b) To protect the interest of the creditors of the company, as the directors may distribute divisible profits by way of dividend

ISSUE OF BONUS SHARES

Bonus shares are allotted to the existing shareholders without any consideration being received from them, if authorised by the articles of association. They are issued to capitalise the profits of the company. Bonus shares can be issued only out of free reserves built out of the genuine profits or share premium collected in cash.

As per Chapter XV of Guidelines for Bonus Issues given by SEBI, a listed company proposing to issue bonus shares shall comply with the following:

(a) No company shall, pending conversion of FCDs/PCDs, issue any shares by way of bonus unless similar benefit is extended to the holders of such FCDs/PCDs, through reservation of shares in proportion to such convertible part of FCDs or PCDs.

(b) The shares so reserved may be issued at the time of conversion(s) of such debentures on the same terms on which the bonus issues were made.

The bonus issue shall be made out of free reserves built out of the genuine profits or share premium collected in cash only.

Reserves created by revaluation of fixed assets are not capitalised.

The declaration of bonus issue, in lieu of dividend, is not made.

The bonus issue is not made unless the partly paid shares, if any existing, are made fully paid up.

The Company:

(a) Has not defaulted in payment of interest or principal in respect of fixed deposits and interest on existing debentures or principal on redemption thereof and

(b) Has sufficient reason to believe that it has not defaulted in respect of the payment of statutory dues of the employees such as contribution to provident fund, gratuity, bonus etc.

A company which announces its bonus issue after the approval of the Board of Directors must implement the proposal within a period of six months from the date of such approval and shall not have the option of changing the decision.

The Articles of Association of the company shall contain a provision for capitalisation of reserves, etc. If there is no such provision in the Articles, the company shall pass a Resolution at its general body meeting making provisions in the Articles of Associations for capitalisation.

Consequent to the issue of Bonus shares if the subscribed and paid-up capital exceed the authorised share capital, a Resolution shall be passed by the company at its general body meeting for increasing the authorised capital.

A Certificate duly signed by the issuer company and countersigned by statutory auditor or by Company Secretary in practice to the effect that all the above provisions have been complied with shall be forwarded to the Board.

Illustration 1: Phoolandevi Ltd. has issued 50,000 12% redeemable preference shares of ₹ 10 each, ₹ 8 paid. In order to redeem these shares now being redeemable, the company issued for cash 30,000 equity shares of ₹ 10 each at a premium of ₹ 2/- per share. Out of the proceeds, preference shares were redeemed, balance being met out of the General Reserve which stood at ₹ 2,50,000. The company then declared the bonus issue of 20,000 ordinary shares to the existing ordinary shareholders out of reserve created for redemption purpose.

Pass the necessary journal entries giving effect to the above transactions. **(T.Y. BAF, Modified)**

Solution: **Journal Entries**

	Particulars		Debit	Credit
1	**For final call made on partly paid preference shares:**			
	Cash/Bank A/c (50,000 × 2)	Dr.	1,00,000	
	To 12% Preference Share Capital A/c			1,00,000
2	**For fresh issue of shares:**		3,60,000	
	Cash/Bank A/c	Dr.		
	To Share Capital A/c (30,000 × 10)			3,00,000
	To Share Premium A/c (30,000 × 2)			3,00,000
3	**For redemption of preference shares:**			
	(a) For premium payable		No entry	
	(b) For transfer of preference share capital to holders:			
	12% Preference Share Capital A/c	Dr.	5,00,000	
	To Preference Shareholders A/c			5,00,000
	(c) For payment:			
	Preference Shareholders A/c	Dr.	5,00,000	
	To Cash/Bank A/c			5,00,000
	(d) For CRR:			
	Normal Value of Preference Shares Redeemed = Fresh Issue + CRR			
	∴ 5,00,000 = 3,00,000 + CRR			
	∴ CRR = 2,00,000			
	General Reserve A/c	Dr.	2,00,000	
	To CRR A/c			2,00,000
4	**For issue of bonus shares:**			
	(a) For appropriation of bonus shares:			
	CRR A/c	Dr.	2,00,000	
	To Bonus to Shareholders A/c (20,000 × 10)			2,00,000
	(b) For actual issue:			
	Bonus to Shareholders A/c	Dr.	2,00,000	
	To Equity Share Capital A/c			2,00,000

Illustration 2: Young Turks Ltd. decided to redeem their preference shares as on March, 2015 on which date their position was as under:

Balance Sheet as at 31.3.2015

Liabilities		₹	Assets	₹
Share Capital:			Cash and Bank Balances	1,40,000
4,000 Equity Shares of ₹ 100 each		4,00,000	Others	8,60,000
4,000 6% Redeemable Preference Shares of ₹ 50 each, ₹ 25 per share paid		1,00,000		
2,000 7% Redeemable Preference Shares of ₹ 100 each fully paid		2,00,000		
Reserves and Surplus:				
Securities Premium A/c	10,000			
Capital Redemption Reserve A/c	90,000			
Dividend Equalisation Reserve	1,10,000	2,10,000		
Sundry Liabilities		90,000		
		10,00,000		**10,00,000**

The redemption is to be made at a premium of 5%. The capital redemption reserve appearing in the balance sheet is the reserve brought into being as a result of a redemption which took place in 2004. To enable the redemption to be carried out, the company decides to issue sufficient number of new equity shares at a discount of 10%. The redemption is duly carried out. Show journal entries relating to the redemption and new issue and also the balance sheet after redemption. Ignore the question of dividend upto the redemption. **(T.Y.B.Com., Modified, M.U.)**

Solution: **Young Trucks Ltd.**

5% of 2,00,000 = 10,000 Premium payable on Redemption

Free Share Premium

Nominal value = Fresh issue + CRR

2,00,000 = Fresh issue + 1,10,000 (Dividend Equalisation Reserve)

∴ Fresh issue = 90,000

₹ 1,00,000 Fresh equity issued at 10% discount

	Issue Price	Proceeds fo Fresh Issue means
At Par	100	100
At Premium	110	100
At Discount	90	90

Journal Entries

	Particulars			Debit	Credit
1	**For fresh issue:**				
	Cash/Bank A/c	Dr.		90,000	
	Discount on Issue of Shares A/c	Dr.		10,000	
	To Equity Share Capital A/c				1,00,000
2	**For premium:**				
	Share Premium A/c	Dr.		10,000	
	To Premium on Redemption of Preference Shares A/c				10,000
3	**For transfer:**				
	7% Preference Share Expenses A/c	Dr.		2,00,000	
	Premium on Redemption of Preference Shares A/c	Dr.		10,000	
	To Preference Shareholders A/c				2,10,000

4	**For payment:**			
	Preference Shareholders A/c	Dr.	2,10,000	
	To Cash/Bank A/c			2,10,000
5	**For CRR:**			
	Dividend Equalisation Reserve A/c	Dr.	1,10,000	
	To CRR A/c			1,10,000

Illustration 3: The Balance Sheet of Redemption Limited as at 31st March, 2015 was as under:

Liabilities		₹	Assets	₹
10,000 Equity shares of ₹ 10			Fixed Assets	2,62,000
each fully paid up		1,00,000	Sundry Debtors	90,000
11% Redeemable Preference			Stock	30,000
Shares of ₹ 100 fully called up	1,00,000	1,00,000	Investments	30,000
Less: Calls-in-arrears			Bank Balance	4,000
at the rate of ₹ 20 per share	6,000	94,000		
10% preference shares of ₹ 10				
each fully paid up (Irredeemable)		1,00,000		
General Reserve		40,000		
Profit and Loss Account		20,000		
Share Premium		5,000		
Capital Reserve		30,000		
Sundry Creditors		27,000		
		4,16,000		**4,16,000**

Redeemable preference shares were due for payment on 1st April, 2015 at a premium of 10%.

Company sent reminders for the final call on remaining 300 redeemable preference shares and could collect money from shareholders holding 200 shares at the rate of ₹ 20 per share and forfeited the defaulting 100 shares.

Company sold all investments and could recover 90% of the cost of such investments.

Company issued adequate number of new equity shares at par, to the extent, available profits were insufficient to back up the redemption.

One shareholder holding 10 redeemable preference shares could not be traced and payment due to him on redemption could not be made to him.

Draft journal entries. Show your assumptions and prepare the balance sheet of the company after redemption. **(T.Y.BAF/B.Com., Modified M.U.)**

Solution: Working Notes

(1) Total 11% Preference Shares 1,000
(–) Forfeited 100
Fully paid up/To be redeemed 900

(2) 900 × 100 = 90,000 Preference Share Capital
10% Premium = 9,000 Total Payable
99,000

(3) Total Payable 99,000
(–) Not paid (10 × 110) 1,100
97,900
General Reserve 40,000
P & L A/c 20,000

(4) N. Value = Fresh issue + CRR
90,000 = Fresh Issue + 53,000
∴ Fresh Issue = 37,000

	60,000	
(–) Premium on Redn.	4,000	(9,000 – 5000)
(–) Loss on Sale of Invest.	3,000	
Available for CRR	53,000	

Journal Entries in the Books of Redemption Ltd.

	Particulars			Debit	Credit
1	**For final call money received on 200 preference shares:**				
	Cash/Bank A/c (200 × 10)	Dr.		4,000	
	To Calls-in-arrears A/c				4,000
2	**For forfeiture of 100 shares:**				
	11% Preference Share Capital A/c (100 × 10)	Dr.		10,000	
	To Shares Forfeiture A/c (100 × 80)				8,000
	To CRR A/c (100 × 20)				2,000
3	**For fresh issue:**				
	Cash/Bank A/c	Dr.		37,000	
	To Equity Share Capital A/c				37,000
4	**For sale of investments:**				
	Cash/Bank A/c	Dr.		27,000	
	Profit and Loss A/c (Loss on Sale)	Dr.		3,000	
	To Investments				30,000
5	**For premium:**				
	Share Premium A/c	Dr.		5,000	
	General Reserve A/c	Dr.		4,000	
	To Premium on Redemption A/c				9,000
6	**For transfer:**				
	11% Preference Share Capital A/c	Dr.		90,000	
	Premium on Redemption of Preference Share A/c	Dr.		9,000	
	To Preference Shareholders A/c				99,000
7	**For payment:**				
	Preference Shareholders A/c	Dr.		97,900	
	To Cash/Bank A/c				97,900
8	**For CRR:**				
	General Reserve A/c (40,000 – 4,000)	Dr.		36,000	
	Profit and Loss A/c (20,000 – 3,000)	Dr.		27,000	
	To CRR A/c				53,000
9	**Share Forfeiture A/c**	Dr.		8,000	
	To Capital Reserve A/c				8,000

Illustration 4: The Bharat Aluminium Co. Ltd. whose issued share capital on 31st December, 2015 consisted of 12,000, 8% Redeemable preference shares of ₹ 100 each fully paid and 40,000 Equity shares of ₹ 100 each ₹ 80 paid up, decided to redeem Preference shares at a premium of ₹ 10 per share. The company's balance sheet as on 31st December, 2015 showed a general reserve of ₹ 18,00,000 and a capital reserve of ₹ 17,00,000. The redemption was effected partly out of profits and partly out of the proceeds of a new issue of 6,000 7½% cumulative preference shares of ₹ 100 each at a premium of 25 per share. The premium payable on redemption was met out of the premium received on the new issue.

On 1st April, 2016, the company at its general meeting resolved that all the capital reserves be applied in the following manner: (i) the declaration of bonus at the rate of ₹ 20 per share on equity

shares for the purpose of making the said equity shares fully paid; and (ii) the issue of bonus shares to the equity shareholders in the ratio of one share for every four shares held by them. **(CA Modified)**

Solution: **Bharat Aluminium Ltd.**

(1) Fresh Issue		
6,000 × 100 =	6,00,000	Face Value
6,000 × 25 =	1,50,000	Share Premium
	7,50,000	Total Cash Reserve

(3) For CRR
NV = FI + CRR
12,00,000 = 6,00,000 + CRR
∴ CRR = 6,00,000

(2)	Premium on Redemption	1,20,000
	12,000 shares × 10/-	Share Premium

Journal Entries

	Particulars			Debit	Credit
1	**For fresh issue:**				
	Cash/Bank A/c	Dr.		7,50,000	
	To Share Capital A/c (75% Preference Shares)				6,00,000
	To Share Premium A/c				1,50,000
2	**For premium:**				
	Share Premium A/c	Dr.		1,20,000	
	To Premium on Redemption A/c				1,20,000
3	**For transfer:**				
	8% Preference Share Capital A/c	Dr.		12,00,000	
	Premium on Redemption of Preference Capital A/c	Dr.		1,20,000	
	To Preference Shareholders A/c				13,20,000
4	**For payment:**				
	Preference Shareholders A/c	Dr.		13,20,000	
	To Cash/Bank A/c				13,20,000
5	**For CRR:**				
	General Reserve A/c	Dr.		6,00,000	
	To CRR A/c				6,00,000
6	**For appropriation of bonus:**				
	(a) To convert partly paid equity shares into fully paid:				
	(i) For final call made:				
	Equity Share Final Call A/c	Dr.		8,00,000	
	To Equity Share Capital A/c				8,00,000
	(ii) For appropriation of bonus amount:				
	General Reserve A/c	Dr.		8,00,000	
	To Bonus to Shareholders A/c				8,00,000
	(iii) For distribution of bonus amount in payment of final call:				
	Bonus to Shareholders A/c	Dr.		8,00,000	
	To Equity Share Final Call A/c				8,00,000
7	(a) For issue of fully paid bonus shares:				
	CRR A/c	Dr.		6,00,000	
	Share Premium A/c (15,000 – 12,000)	Dr.		30,000	
	Capital Reserve A/c	Dr.		3,70,000	
	To Bonus to Shareholders A/c				10,00,000

	(b) For actual issue:				
	Bonus to Shareholders A/c	Dr.		10,00,000	
	To Equity Share Capital A/c				10,00,000

Illustration 5: The summarised Balance Sheet of Ivory Towers Ltd. as on 31st March, 2015 was as follows:

Liabilities	₹	Assets	₹
Issued Share Capital:		Goodwill	7,000
40,000 6% Redeemable Preference Shares of		Preliminary Expenses	2,850
₹ 1/- each fully paid (Redeemable on		Sundry Assets	1,58,000
April 29, 2014 at a premium of 5%)	40,000	Balance at Bank	27,250
60,000 Ordinary shares of ₹ 1 each fully paid	60,000		
Securities Premium	20,000		
Profit and Loss A/c	23,000		
Creditors	52,100		
	1,95,100		**1,95,100**

As a part of the arrangement to effect the redemption of preference shares on April 29, it was decided to provide for that part of preference shares which could not otherwise be redeemed by issuing new preference shares. Before doing so it had, however, been decided to write off the goodwill, preliminary expenses and discount on debentures (referred to below) in such a way that the number of new shares to be issued should be the minimum possible.

The transactions during April were:

(a) On April 4, the company issued for cash ₹ 12,000 7% debentures, at a discount of 2½%.

(b) On April 6, goodwill, preliminary expenses and discount on debentures were written off.

(c) On April 12, the company issued at par, for cash (paid in full on allotment), the minimum number of new 8% preference shares of ₹ 1 each necessary to provide for the redemption of those preference shares which could otherwise be not redeemed.

(d) On April 29, the company redeemed the 6% preference shares together with one month's dividend thereon.

(e) On April 30, the company made a bonus issue to the ordinary shareholders of the fully paid share of ₹ 1 for every five shares held.

You are required to set out, for the information of directors, a proforma summarised Balance Sheet of the company as it would appear immediately after completion of the above transactions. In the meantime, you are to append explanatory schedule in regard to each item in which an alteration occurs. **(CA/CS Modified)**

Solution: **Journal of Ivory Towers Ltd.**

	Particulars			Debit	Credit
1	For issue of debenture at discount:				
	Cash/Bank A/c (12,000 – 300)	Dr.		11,700	
	Discount on Debenture A/c	Dr.		300	
	To 7% Debentures				12,000
2	(a) Profit and Loss A/c	Dr.		7,000	
	To Goodwill A/c	Dr.			7,000
	(b) To write off preliminary expenses and discount on debentures:				
	Share Premium A/c	Dr.		3,150	

	To Preliminary Expenses				2,850
	To Discount on Debentures				300
3	NV of preference shares redeemed = Fresh issue + CRR				
	40,000 = Fresh Issue + 15,800 (P & L) (23,000 – 7,000 – 200) Dividend				
	∴ Fresh issue = 24,200 (Goodwill)				
	Cash/Bank A/c	Dr.		24,200	
	To 8% New Preference Share Capital A/c				24,200
4	(a) For premium:				
	Share Premium A/c	Dr.		2,000	
	To Premium on Redemption A/c				2,000
	(b) For transfer:				
	6% Preference Capital A/c Share Premium A/c	Dr.		40,000	
	Premium on Redemption A/c	Dr.		2,000	
	To Preference Shareholders A/c				42,000
	(c) For payment:				
	Preference Shareholders A/c	Dr.		42,000	
	To Cash/Bank A/c				42,000
	(d) For CRR:				
	Profit and Loss A/c	Dr.		15,800	
	To CRR A/c				15,800
	(e) For one month dividend to preference shareholders:				
	Profit and Loss A/c	Dr.		200	
	To Cash/Bank A/c				200
5	(a) For appropriation of bonus amount:				
	CRR A/c	Dr.		12,000	
	To Bonus to Shareholders A/c				12,000
	(a) For actual issue:				
	Bonus to Shareholders A/c	Dr.		12,000	
	To Equity Share Capital A/c				12,000
	Bonus Shares 60,000				
	Old Equity Shares Nil				
	(+) New Equity Shares 60,000				
	Total No.				
	Existing : Given				
	5 : 1				
	60,000 : (?)				
	12,000 × ₹ 1 = 12,000 – CRR				

Illustration 6: Footfault Ltd. had equity capital of ₹ 2,00,000 divided into shares of ₹ 100 each, 11% cumulative redeemable preference shares of ₹ 100 each for ₹ 1,00,000 and ₹ 50,000 and ₹ 40,000 respectively to the credit of Profit and Loss Account and General Reserves as on 31st March, 2015. It had also ₹ 8,000 to the credit of Share Premium Account.

As per the agreement with the preference shareholders, the Directors decided to redeem the shares on 1.4.2015 at a premium of 10%. It was also decided to sell certain investments whose book and market values on 31.3.2015 were ₹ 40,000 and ₹ 50,000 respectively to enable redemption.

For purposes of redemption, the Board decided to utilise free reserve to the minimum extent possible. It was decided to issue right equity shares at a premium of 20% to finance (provide funds for) the redemption.

After redemption, the Board decided to issue bonus shares to equity holders in the ratio of 2 for 5.

Holders of 10 preference shares were not traceable.

Show the necessary Journal entries to record the above transactions in the books of Footfault Ltd. and also how the items will appear in the Balance Sheet of the company.

(T.Y. B.Com., Modified, M.U.)

Solution:

	Particulars			Debit	Credit
1	**For fresh issue of equity shares:**				
	Cash/Bank A/c	Dr.		60,000	
	To Equity Share Capital A/c				50,000
	To Share Premium A/c				10,000
2	**For sale of investments:**				
	Cash/Bank A/c	Dr.		50,000	
	To Investments A/c				40,000
	To Profit and Loss A/c				10,000
3	**For premium on redemption:**				
	Share Premium A/c	Dr.		10,000	
	To Premium on Redemption of Preference Shares A/c				10,000
4	**For transfer amount payable to preference shareholders:**				
	11% Cumulative Redeemable Preference Share Capital A/c	Dr.		1,00,000	
	Premium on Redemption A/c			10,000	
	To Preference Shareholders A/c				1,10,000
5	**For payment to preference shareholders:**				
	Preference Shareholders A/c	Dr.		99,000	
	To Cash/Bank A/c				99,000
6	**For transfer to CRR:**	Dr.			
	Profit and Loss A/c/General Reserve A/c			50,000	
	To Capital Redemption Reserve A/c				50,000
7	**For issue of bonus shares:**	Dr.			
	(a) Capital Redemption Reserve A/c			50,000	
	Share Premium A/c (8,000 + 10,000 – 10,000)			8,000	
	General Reserve A/c			40,000	
	Profit and Loss A/c			2,000	
	To Bonus to Equity Shareholders A/c				1,00,000
	(b) Bonus to Equity Shareholders A/c	Dr.		1,00,000	
	To Equity Share Capital A/c				1,00,000

(1)	NV of Preference Share to be redeemed	=	Fresh Issue + CRR
	1,00,000	=	50,000 + CRR
	∴ CRR	=	50,000

(2)	Total Payable		1,10,000
	(–) Unpaid 100 × 100 =	10,000	
	Premium	1,000	11,000

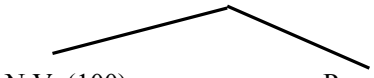
(3)	Bonus issue		
		Held	Bonus
		5	: 2

Paid	99,000

25,000 : ?
= 10,000 Bonus shares
= 10,000 ×10
Value 10,000 × 10 = 1,00,000

(4) Fresh Issue:

Amount Required Redemption (1,00,000 + 10,000)	1,00,000
(–) Sale of Investments	50,000
Shortfall – Fresh issue (120)	60,000



N.V. (100) 50,000 | Premium (20)

Illustration 7: The following is the Balance Sheet of Alpha Plus Ltd. as at 31st March, 2015.

Liabilities	₹	Assets	₹
10,000 Equity Shares of ₹ 100 each fully paid	10,00,000	Fixed Assets	20,00,000
5,000 Redeemable Preference Shares of ₹ 100 each fully paid	5,00,000	Investments (Market value ₹ 2,20,000)	2,00,000
Sinking Fund	1,00,000	Current Assets:	
Securities Premium	80,000	Stock	3,50,000
General Reserve	2,00,000	Debtors	3,50,000
Profit and Loss Account	80,000	Bank Balance	1,00,000
Current Liabilities	10,40,000		
	30,00,000		**30,00,000**

Redeemable Preference Shares are to be redeemed at a premium of 10%. Fresh issue of Equity shares to be made to the extent required in terms of provisions of Companies Act, 1956. All investments to be sold at the market value. Temporary bank overdraft was to be arranged in case of shortage of funds.

Company redeemed the preference shares on 1st April, 2015, except in case of one shareholder holding 100 preference shares, who could not be traced. Subsequently, company issued bonus shares in the ratio of one Equity Share for every four Equity Shares held.

Pass journal entries to record the above transactions and prepare a Balance Sheet after giving effect of those entries. **(T.Y.BAF/B.Com., Modified, M.U. & P.U.)**

Solution: Working Notes

1. Premium on Redemption = Share Premium + Profit (Existing + Expected)
   (80,000 + Nil)
   = 50,000 + Nil

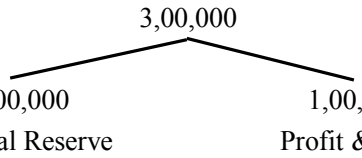
2. NV of Preference Shares to be redeemed = Proceeds of Fresh Issue + Profit Available for Dividend

General Reserve	2,00,000
Profit & Loss	1,00,000
	(80,000 + 20,000)

   5,00,000 = 2,00,000 + 3,00,000

∴ 2,000 Equity Shares of ₹ 100/- = 2,00,000

Profit Available for Dividend



Journal of Alpha Plus Ltd.

	Particulars		L.F.	Debit	Credit
1	**For fresh issue of shares:**				
	Cash/Bank A/c	Dr.		2,00,000	
	To Equity Share Capital A/c				2,00,000
2	**For sale of investments:**				
	Cash/Bank A/c	Dr.		2,20,000	
	To Investments A/c				2,00,000
	To Profit and Loss A/c				20,000
3	**For write off premium on redemption:**				
	Share Premium A/c	Dr.		50,000	
	To Premium on Redemption A/c				50,000
4	**For transfer amount payable to Preference Shareholders A/c:**				
	Preference Share Capital A/c	Dr.		5,00,000	
	Premium on Redemption A/c	Dr.		50,000	
	To Preference Shareholders A/c	Dr.			5,50,000
5	**For payment to Preference Shareholders:**				
	Preference Shareholders A/c	Dr.		5,39,000	
	To Cash/Bank A/c				5,39,000
6	General Reserve A/c	Dr.		2,00,000	
	Profit and Loss A/c	Dr.		1,00,000	
	To CRR A/c				3,00,000
7	**Issue of bonus shares:**				
	Bonus : Existing				
	1 : 4				
	(3,000) 12,000				
	∴ 3,000 Equity Shares of ₹ 100/- = ₹ 3,00,000/-				
	(a) CRR A/c	Dr.		3,00,000	
	To Bonus to Equity Shareholders A/c				3,00,000
	(b) Bonus to Equity Shareholders A/c	Dr.		3,00,000	
	To Equity Share Capital A/c				3,00,000

Illustration 8: The following is the summarised Balance Sheet of Apro Engineers Ltd. as at 31st March, 2015:

Balance Sheet

Liabilities		₹	Assets	₹
Share Capital			Fixed Assets	27,00,000
Issued, subscribed and paid up		18,00,000	Investment (against Reserve)	2,00,000
Equity shares (fully paid)			Current Assets	11,00,000
9% Redeemable Preference Shares				
of ₹ 100/- fully called	1,80,000			

Less: Calls-in-arrears	2,000	1,78,000		
Revenue Reserve		13,50,000		
Current Liabilities		4,50,000		
Securities Premium		2,22,000		
		40,00,000		**40,00,000**

100 Preference Shares on which the last call of ₹ 20 was not paid, were forfeited by the Board of Directors on 30th April, 2015.

The Directors redeemed the remaining preference shares at a premium of 10% on 30th September, 2015. For this purpose, 10,000 Equity Shares of ₹10 each were issued at a premium of 10% and were fully paid up within 30th July, 2015.

Current assets before redemption of preference shares included ₹ 2,00,000 in current account with bankers. Company closes its accounts on 31st March.

Pass necessary journal entries including those relating to cash for recording the above transactions and show the resultant balance after redemption in the following accounts. (i) Securities Premium, (ii) Revenue Reserve and (iii) Bank Account.

Solution:

	Particulars			Debit	Credit
10.04.15	**Forfeiture of Shares:**				
	9% Preference Share Capital A/c (100 × 100)	Dr.		10,000	
	To Calls-in-arrears A/c (100 × 20)				2,000
	To Share Forfeiture A/c (100 × 80)				8,000
30.07.15	**Fresh Issue of Shares:**				
	Cash/Bank A/c	Dr.		1,10,000	
	To Equity Share Capital A/c				1,00,000
	To Share Premium A/c				10,000
30.09.15	**Transfer Amount Payable to Profit Shareholders A/c:**				
	9% Preference Share Capital A/c	Dr.		1,70,000	
	Premium on Redemption A/c	Dr.		17,000	
	To Preference Shareholders A/c				1,87,000
	Write off premium on Redemption:				
	Share Premium A/c	Dr.		17,000	
	To Premium on Redemption A/c				17,000
	Transfer to CRR:				
	Revenue Reserve A/c	Dr.		70,000	
	To CRR A/c				70,000
	Payment to preference shareholder:				
	Preference Shareholders A/c	Dr.		1,87,000	
	To Cash/Bank A/c				1,87,000

Premium on Redemption = Share Premium + Profit
(Existing + Expected)
(2,22,000 + 10,000)

NV of Preference Shares to be redeemed = Proceeds of fresh investment + Profit available for dividend

1,70,000
(1,800 sh. – 100 sh.) × ₹ 100 = 1,00,000 + 70,000 (Reserve transferred to CRR)
(10,000 sh. × 10/-)

Bank A/C

Particulars	Amount	Particulars	Amount
To Opening Balance b/d	2,00,000	By Preference Shareholders	1,87,000
To Fresh Issue	1,10,000	By Balance c/f	1,23,000
	3,10,000		**3,10,000**

Revenue Reserve

Particulars	Amount	Particulars	Amount
To CRR	70,000	By Opening Balance b/d	13,50,000
To Balance c/f	12,80,000		
	13,50,000		**13,50,000**

Share Premium

Particulars	₹	Particulars	₹
To Premium on Redemption	17,000	By Balance b/d	2,22,000
To Balance c/f	2,15,000	By Cash/Bank	10,000
	2,32,000		**2,32,000**

Working Notes

1. Premium on Redemption = Share Premium + Profits
   (Existing + Expected)
   (29,000 + Nil)
   1,500 = 1,500 + Nil
2. NV of Preference Shares to be redeemed = Proceeds of fresh issue + Profit available for dividend
   30,000 = Nil + 30,000 (General Reserve Transfer to CRR)

Illustration 9: The following is the Balance Sheet of H Limited as on June 30, 2015:

Liabilities	₹	Assets		₹
Share Capital:		Fixed Assets		1,00,000
3,000 6% Redeemable Preference		Investments		21,000
Shares of ₹ 10 each fully paid	30,000	Current Assets:		
Equity Share Capital	60,000	Stock in trade	44,000	
Securities Premium Account	29,000	Sundry Debtors	26,000	
General Reserve	40,000	Cash at Bank	12,000	82,000
Profit and Loss Account Balances	24,500			
Sundry Creditors	19,500			
	2,03,000			**2,03,000**

The company exercised its option to redeem, on July 1, 2015, the whole of the Preference Share Capital at a premium of 5%.

To assist in financing the redemption, all the investments were sold, realising ₹ 19,500. On September 1, 2015, the company made a bonus issue of two Equity Shares fully paid for every five Equity Shares hold on that date.

The appropriate resolutions having been passed, the above transactions were duly completed.

You are required to show the journal entries to record the transactions in the books of the company and the Balance Sheet as it would appear after the completion of the transactions.

(CMA Modified)

Solution: **Journal of 'H' Ltd.**

	Particulars			Debit	Credit
1	**Sale of investments:**				
	Cash/Bank A/c	Dr.		19,500	
	Profit and Loss A/c	Dr.		1,500	
	To Investment A/c				21,000
2	**Transfer amount payable to Preference Shareholders A/c:**				
	6% Preference Share Capital A/c	Dr.		30,000	
	Premium on Redemption A/c	Dr.		1,500	
	To Preference Shareholders A/c				31,500
3	**Write off premium on redemption:**				
	Share Premium A/c	Dr.		1,500	
	To Premium on Redemption A/c				1,500
4	**Transfer to CRR:**				
	General Reserve A/c	Dr.		30,000	
	To CRR A/c				30,000
5	**Payment to Preference Shareholders A/c:**				
	Preference Shareholders A/c	Dr.		31,500	
	To Cash/Bank A/c				31,500
6	**Issue of Bonus Shares**				
	Bonus Existing				
	2 : 5				
	? : 6,000				
	∴ 2,400 Equity Shares of ₹ 10 fully paid = ₹ 24,000/-				
	(a) CRR A/c	Dr.		24,000	
	To Bonus to Equity Shareholder A/c				24,000
	(b) Bonus to Equity Shareholder A/c	Dr.		24,000	
	To Equity Share Capital A/c				24,000

Cash at Bank A/c

Particulars	Amount	Particulars	Amount
To Opening Balance	12,000	By Preference Shareholder	31,500
To Sale of Investment	19,500		
	31,500		**31,500**

Illustration 10: X Ltd. has the following balance sheet as on 31st March, 2015.

Liabilities	₹	Assets		₹
Share Capital:		Fixed Assets		22,00,000
Issued subscribed and fully paid up		Current Assets:		
10,000 Ordinary shares of ₹ 100 each	10,00,000	Stock and Debtors	5,00,000	
5,000 Preference Shares of ₹ 100 each	5,00,000	Cash/Bank	3,00,000	8,00,000
Capital Reserves	1,00,000			
Securities Premium Account	1,00,000			
General Reserve	2,00,000			
Profit and Loss Account	1,00,000			
Current Liabilities	10,00,000			
	30,00,000			**30,00,000**

The preference shares are to be redeemed at 10% premium. Fresh issue of Equity shares is to be made to the extent. It is required under the Companies Act for the purpose of this redemption. The

shortfall in funds for the purpose of the redemption after utilising the proceeds of the fresh issue are to be met by taking at a bank loan. Show journal entries. **(CMA/CA Modified)**

Solution: Working Notes

1. Premium on Redemption = Share Premium + Profit
   (Existing + Expected)
   (1,00,000 + Nil)
   50,000 = 50,000 + Nil
2. NV of Preference Share to be redeemed = Proceeds of fresh issue + Profit available for dividend
   2,00,000 + 3,00,000 (General Reserve = 2,00,000 + Profit and Loss = 1,00,000)
   5,00,000 =
   ∴ 2,000 Equity Shares of ₹ 100/- = 2,00,000
3. Amount resumed for redemption
   (5,00,000 + 50,000) = 5,50,000
   (–) Process of fresh issue = 2,00,000
   Amount of bank loan 3,50,000

Journal of 'X' Ltd.

	Particulars			Debit	Credit
1	**Fresh issue of shares:**				
	Cash/Bank A/c	Dr.		2,00,000	
	To Equity Share Capital A/c				2,00,000
2	**Transfer amount payable to Preference Shareholders A/c:**				
	Preference Share Capital A/c	Dr.		5,00,000	
	Premium on Redemption A/c	Dr.		50,000	
	To Preference Shareholders A/c				5,50,000
3	**Write off premium on redemption:**				
	Share Premium A/c	Dr.		50,000	
	To Premium on Redemption A/c				50,000
4	**Transfer to CRR:**				
	General Reserve A/c	Dr.		2,00,000	
	Profit and Loss A/c	Dr.		1,00,000	
	To CRR A/c				3,00,000
5	**Payment to Preference Shareholder:**				
	Preference Shareholders A/c	Dr.		5,50,000	
	To Cash/Bank				5,50,000
6	**Bank loan taken:**				
	Cash/Bank A/c	Dr.		3,50,000	
	To Bank Loan A/c				3,50,000

Working Notes:

Premium on Redemption = Share Premium + Profits
(Existing + Expected)
(Nil + Nil)
50,000 = Nil + 50,000 (Profit and Loss A/c)
N.V. Preference Shares to be deemed = Proceeds of fresh value + Profit available for dividend
10,00,000 = 5,00,000 + 5,00,000 (P & L A/c transferred to CRR)

Illustration 11: The summarised balance sheet of Prudent Company Ltd. on 30th June, 2015 was as follows:

Liabilities	₹	Assets	₹
Share Capital:		Sundry Assets	49,00,000
Authorised, Issued and Paid		Cash at Bank	7,00,000
1,00,000, 9% redeemable preference shares of ₹ 10 each	10,00,000		
2,50,000 Equity Shares of ₹ 10 each	25,00,000		
Current Liabilities	15,00,000		
Profit and Loss A/c	6,00,000		
	56,00,000		**56,00,000**

The conditions of issue of the redeemable preference shares provided for their being redeemed on 15th July, 2015, at a premium of 5 per cent. The profits available being not sufficient to redeem the whole issue, the company issued 5,000 10% preference shares of ₹ 100 each at par on 1st July, 2015 which were duly taken up and paid for. The redeemable preference shares were redeemed on the due date.

On 1st September, 2015, the company decided to utilise the capital redemption reserve account to issue ₹ 10 equity shares as bonus shares to the old equity shareholders.

Show journal entries to record the above transactions.

Solution: **Journal of Prudent Co. Ltd.**

	Particulars			Debit	Credit
1	**Fresh issue of share:**				
	Cash/Bank A/c	Dr.		5,00,000	
	To 10% Preference Share Capital				5,00,000
2	**Transfer amount payable to Preference Shareholder A/c:**				
	9% Preference Share Capital A/c	Dr.		10,00,000	
	Premium on Redemption A/c	Dr.		50,000	
	To Preference Shareholder A/c				10,50,000
3	**Write off premium of redemption:**				
	Profit and Loss A/c	Dr.		50,000	
	To Premium on Redemption A/c				50,000
4	**Transfer to CRR:**				
	Profit and Loss A/c	Dr.		5,00,000	
	To CRR A/c				5,00,000
5	**Payment of preference shareholder:**				
	Preference Shareholders A/c	Dr.		10,50,000	
	To Cash/Bank A/c				10,50,000
6	CRR A/c	Dr.		5,00,000	
	To Bonus to Equity Shareholders A/c				5,00,000
7	Bonus to Equity Shareholders A/c	Dr.		5,00,000	
	To Equity Share Capital				5,00,000
	(50,000 Equity Shares of ₹ 10 issued as Bonus Shares)				

Illustration 12: Traders Ltd. has an authorised capital of ₹ 2,50,000 comprising 50,000 6% Redeemable Cumulative Preference Shares of ₹ 1/- each and 2,00,000 Ordinary shares of ₹ 1/- each. The preference shares are redeemable on 1st July, 2014 at ₹ 1.05 per share. The summarised balance sheet of the company as on 31st December, 2014 was:

Liabilities		₹	Assets		₹
Share Capital issued and fully paid up:			Sundry Assets	1,96,700	
Preference	50,000		Investments	14,000	
Ordinary	1,00,000	1,50,000	Balance at Bank	28,000	2,38,700
Capital Reserve		9,500	*Less:* Creditors		16,700
General Reserve		20,000			
Profit and Loss A/c		42,500			
		2,22,000			**2,22,000**

The necessary resolutions were duly passed and the following transactions carried through on the dates stated:

(a) On 31st May, 2015 in order to provide cash towards the redemption of the preference shares:
  (i) all the investments were sold for ₹ 18,000 and
  (ii) 20,000 ordinary shares of ₹ 1 each were issued to existing shareholders at ₹ 1.25 per share payable in full forthwith and duly paid.

(b) On 1st July, 2015, the preference shares were duly redeemed, and

(c) On 30th September, 2015, a bonus issue of ordinary shares was made at the rate of one new share for every ten then held.

You are required to pass the necessary journal entries to record these transactions (including those relating to cash) having regard to the director's wishes that only the minimum reduction should be made in revenue reserves. **(T.Y.B.Com., Modified, M.U.)**

Working Notes

1. Premium on Redemption = Share Premium + Profit
   (Existing + Expected)
   (Nil + 5,000)
   2,500 = 2,500 + Nil
2. NV of Preference Share to be redeemed = Proceed of fresh issue + Profit available for dividend
   50,000 = 20,000 + 30,000

Solution: Journal of Traders Ltd.

	Particulars			Debit	Credit
31/5/15	**Fresh issue of shares:**				
	Cash/Bank A/c	Dr.		25,000	
	To Equity Shares Capital A/c				20,000
	To Share Premium A/c				5,000
31/5/15	**Sale of investment:**				
	Cash/Bank A/c	Dr.		18,000	
	To Investment A/c				14,000
	To Profit and Loss A/c				4,000
1/7/15	**Transfer amount payable to preference shareholder:**				
	6% Preference Share Capital A/c	Dr.		50,000	
	Premium of Redemption A/c	Dr.		2,500	
	To Preference Shareholders A/c				52,500
1/7/15	**Write off premium on redemption:**				
	Share Premium A/c	Dr.		2,500	
	To Premium on Redemption A/c				2,500
1/7/15	**Transfer to CRR:**				

	Profit and Loss A/c	Dr.		30,000	
	To CRR A/c				30,000
1/7/15	**Payment:**				
	Preference Shareholders A/c	Dr.		52,500	
	To Cash/Bank A/c				52,500
30/9/15	Issue of Bonus Shares				
	Bonus : Existing 1,00,000 - Balance Sheet				
	1 : 10 20,000 - Fresh Issue				
	(?) : 1,20,000 1,20,000				
	∴ 12,000 Equity Shares of ₹ 1/- = 12,000				
	(a) CRR A/c	Dr.		12,000	
	To Bonus to Equity Shareholder A/c				12,000
	(b) Bonus to Equity Shareholder A/c	Dr.		12,000	
	To Equity Share Capital				12,000

Illustration 13: Raj Rajeshwari Ltd. has been incorporated with an authorised share capital of ₹ 50,00,000. Its summarised balance sheet on 30th June, 2015 was as under:

Liabilities	₹	Assets	₹
Share Capital		Fixed Assets	5,00,000
Equity Share Capital	3,00,000	Investments	1,00,000
25,000 9% Redeemable Preference Shares	2,50,000	Current Assets (including bank balance ₹ 90,000)	4,00,000
Reserves and Surplus:			
Share Premium	1,50,000		
General Reserve	1,50,000		
Profit and Loss A/c	25,000		
Creditors	1,25,000		
	10,00,000		**10,00,000**

The company passed the following resolutions on 1st July, 2015:

(i) To redeem whole of the preference share capital at a premium of 10%.

(ii) To issue 1,000 equity shares of ₹ 100 each at a premium of ₹ 15 per share.

(iii) To sell the investments.

(iv) To issue bonus shares, fully paid, in the ratio of 1 : 2 to the existing shareholders, as increased by new issue.

Draft the journal entries and prepare the new balance sheet, having been informed that:

(a) All the resolutions have been given effect to.

(b) The new issue is fully subscribed and paid up.

(c) The investments are sold for ₹ 90,000. **(T.Y.BAF, Modified, M.U.)**

Solution: **Journal of Raj Rajeshwari Ltd.**

	Particulars			Debit	Credit
1	**Fresh issue of shares:**				
	Cash/Bank A/c	Dr.		1,15,000	
	To Equity Share Capital A/c				1,00,000
	To Share Premium A/c				15,000
2	**Sale of investments:**				
	Cash/Bank A/c	Dr.		90,000	

	Profit and Loss A/c	Dr.		10,000	
	To Investments A/c				1,00,000
3	**Transfer amount payable to preference shareholders:**				
	9% Preference Share Capital A/c	Dr.		2,50,000	
	Premium an Redemption A/c	Dr.		25,000	
	To Preference Shareholders A/c				2,75,000
4	**Write off premium on redemption:**				
	Share Premium A/c	Dr.		25,000	
	To Premium on Redemption A/c				25,000
5	**Transfer to CRR A/c:**				
	General Reserves A/c	Dr.		1,50,000	
	To CRR A/c				1,50,000
6	**Payment to Preference Shareholder A/c:**				
	Preference Shareholders A/c	Dr.		2,75,000	
	To Cash/Bank A/c				2,75,000
7	Issue of Bonus Shares				
	Bonus : Existing				
	1 : 2				
	(?) : 4,000 Shares [3,000 sh. (B/S) + 1,000 sh. (Fresh issue)]				
	∴ 2,000 Equity Shares of ₹ 100/- = 2,00,000				
	(a) CRR A/c	Dr.		1,50,000	
	Share Premium A/c	Dr.		50,000	
	To Bonus to Equity Shareholders A/c				2,00,000
	(b) Bonus to Equity Shareholders A/c	Dr.		2,00,000	
	To Equity Share Capital A/c				2,00,000

Illustration 14: Below is given the Balance Sheet of Mamta Co. Ltd. as on 31st March, 2015.

Liabilities	₹	Assets	₹
Authorised, Issued and Paid-up Capital:		Cash at Bank	2,20,000
1,00,000 Equity Shares of ₹ 10 each	10,00,000	Sundry Assets	16,00,000
4,000 5% Redeemable Preference Shares of ₹ 100 each	4,00,000		
Profit and Loss A/c	2,70,000		
Sundry Creditors	1,50,000		
	18,20,000		**18,20,000**

The preference shares fell due for redemption on 1st April, 2015. The shares were to be redeemed at a premium of 5%. As the profit balance was insufficient to redeem the preference shares, the company decided to issue for the purpose of redemption, 2,000 7½% Preference shares ₹ 100 each payable 25% on application, 50% on allotment and the balance on call. The share monies were duly collected and the preference shareholders were paid off. The company now decided to declare a bonus out of the credit balance of the Capital Redemption Reserve Account. Necessary arrangement were made and the Shareholders were given the bonus in the shape of 7 ½% Preference Shares. This wiped out of the entire balance of the Capital Redemption Reserve Account. You have been asked to give the Journal Entries recording the above transactions in the books of the company.

(T.Y.B.Com., Modified, P.U.)

Solution: **Journal of Mamta Ltd.**

	Particulars			Debit	Credit
1	**For fresh issue of shares:**				
	(a) Bank A/c (2,000 × 25)	Dr.		50,000	
	To Share Application A/c				50,000
	(b) Share Application A/c	Dr.		50,000	
	To 7½% Preference Share Capital A/c				50,000
	(c) Share Allotment A/c (2,000 × 50)	Dr.		1,00,000	
	To 7½% Preference Share Capital A/c				1,00,000
	(d) Bank A/c	Dr.		1,00,000	
	To Share Allotment A/c				1,00,000
	(e) Share final call (2,000 × 25)	Dr.		50,000	
	To 7½% Preference Share Capital A/c				50,000
	(f) Bank A/c	Dr.		50,000	
	To Share Final Call A/c				50,000
2	**For premium on redemption:**				
	Profit and Loss A/c	Dr.		20,000	
	To Premium on Redemption A/c (5% of 4,00,000)				20,000
3	**For transfer:**				
	5% Preference Share Capital A/c	Dr.		4,00,000	
	Premium on Redemption A/c	Dr.		20,000	
	To Preference Shareholders A/c				4,20,000
4	**For payment:**				
	Preference Shareholders A/c	Dr.		4,20,000	
	To Bank A/c				4,20,000
5	**For transfer to CRR:**				
	Profit and Loss A/c	Dr.		2,00,000	
	To CRR A/c				2,00,000
6	**Declaration of bonus:**				
	CRR A/c	Dr.		2,00,000	
	To Bonus to Shareholders A/c				2,00,000
7	**Issue of bonus shares:**				
	Bonus to Shareholders A/c.....	Dr.		2,00,000	
	To 7% Preference Share Capital A/c				2,00,000
	Preference Shares = Proceeds of Fresh Issue + CRR				
	4,00,000 = 2,00,000 + 2,00,000 (P & L)				
	(4,000 × 100) (2,000 × 100)				

Illustration 15: Change Ltd. had an issued share capital of ₹ 65,000 7% Redeemable Cumulative Preference Share of ₹ 10/- each and 22,500 ordinary shares of ₹ 10/- each. The preference shares are redeemable at a premium of 7½% on 1st August, 2015:

As on 31st July, 2015, the company's Balance Sheet showed the following position:

Liabilities	₹	Assets	₹
Issued Share Capital		Sundry Assets	3,46,000
6,500 7% Redeemable Cumulative		Balance at Bank	47,500
Preference Share of ₹ 10 fully paid	65,000		
22,500 Ordinary Shares of ₹ 10 each			
fully paid	2,25,000		

Profit and Loss A/c	46,000		
Sundry Creditors	57,500		
	3,93,500		**3,93,500**

In order to facilitate the Redemption of the Preference Shares, it was decided:

(a) to finance part of the redemption from Company Funds, subject to leaving a balance on Profit and Loss Account of ₹ 10,000 and

(b) to issue sufficient number of Ordinary Shares at a premium of ₹ 2.50 per share to raise the balance of funds required.

The Preference Shares were redeemed on the due date and the issue of ordinary shares was fully subscribed.

You are required to prepare:

(i) the necessary journal Entries to record the above transactions (including cash) and

(CA/T.Y.BAF, Modified)

Solution: **Journal of Change Ltd.**

	Particulars		Debit	Credit
1	**For fresh issue of shares:**			
	Bank A/c (2,900 × 12.50)	Dr.	36,250	
	To Equity Share Capital A/c			29,000
	To Share Premium A/c (2,900 × 2.50)			7,250
2	**For premium on redemption:**			
	Share Premium A/c	Dr.	4,875	
	To Premium on Redemption A/c			4,875
3	**For transfer:**			
	7% Preference Share Capital A/c	Dr.	65,000	
	Premium on Redemption A/c	Dr.	4,875	
	To Preference Shareholders A/c			69,875
4	**For payment:**			
	Preference Shareholders A/c	Dr.	69,875	
	To Bank A/c			69,875
5	**For CRR:**			
	Profit and Loss A/c	Dr.	36,000	
	To CRR A/c			36,000

NV of Preference Shares = Proceeds of Fresh Issue + CRR

65,000 = 29,000 + 36,000 (P & L)

(6,500 × 10) (2,900 × 10) (46,000 – 10,000)

Premium on Redemption = Share Premium + Profits

= (Existing + Expected) (7250 + Nil)

4875 = 4875 + Nil

Illustration 16: The summarised Balance Sheet of XYZ Ltd. as at 31st December, 2015.

Liabilities	₹	Assets	₹
Equity Shares of ₹ 10 each fully paid	9,00,000	Fixed Assets	20,00,000
8% Redeemable Preference Shares of ₹ 10		Current Assets	
each fully paid	9,00,000	(Including Bank Balance of ₹ 2,00,000)	5,80,000

General Reserve	3,60,000	Investments	2,70,000
Profit and Loss A/c	5,40,000		
Securities Premium A/c	27,000		
Creditors	1,23,000		
	28,50,000		**28,50,000**

The company exercises the option to redeem 8% Redeemable Preference Shares at 10% premium and for this purpose the company issued 45,000 Right Shares of ₹ 10 each at a premium of ₹ 10 per share. The right shares were fully paid in cash.

The company also sold out the investments at ₹ 3,42,000. All payments were made except for those holding 450 shares, who could not be found out.

The director then issued bonus shares to the shareholders after issue of new shares, at the rate of 2 shares for 3 shares held at 5% premium. The company decided to reduce the reserve to minimum.

Pass Journal entries in the books of XYZ Ltd. for above transactions and also prepare Balance Sheet of the company after redemption is completed. **(CA Modified)**

Solution: **Journal of XYZ Ltd.**

	Particulars		Debit	Credit
1	**For fresh issue:**			
	Bank A/c	Dr.	9,00,000	
	To Equity Share Capital A/c			4,50,000
	To Share Premium A/c			4,50,000
2	**Sale of investments:**			
	Bank A/c	Dr.	3,42,000	
	To Investment A/c			2,70,000
	To Profit and Loss A/c			72,000
3	**For premium on redemption:**			
	Share Premium A/c	Dr.	90,000	
	To Premium on Redemption A/c (10% of 9,00,000)			90,000
4	**For transfer:**			
	8% Preference Share Capital A/c	Dr.	9,00,000	
	Premium on Redemption A/c		90,000	
	To Preference Shareholders A/c			9,90,000
5	**For payment:**			
	Preference Shareholders A/c	Dr.	9,85,050	
	To Bank A/c (450 × 11 = 4,950)			9,85,050
	(9,90,000 × 4,950 = 9,85,050)			
6	**Transfer to CRR:**			
	Profit and Loss A/c	Dr.	4,50,000	
	To CRR A/c			4,50,000
7	**Declaration of bonus:**			
	Shareholders Bonus			
	3 : 2			
	1,35,000 : ?			
	(90,000)			
	× 10.5			

	Amount of Bonus 9,45,000			
	CRR A/c	Dr.	4,50,000	
	Share Premium A/c (27 + 450 – 90)	Dr.	3,87,000	
	General Reserve A/c	Dr.	1,08,000	
	To Bonus to Shareholders A/c			9,45,000
8	**Issue of bonus shares:**			
	Bonus to Shareholders A/c	Dr.	9,45,000	
	To Equity Share Capital A/c			9,00,000
	To Share Premium A/c			45,000
	NV of Preference Shares = Proceeds of fresh issue + CRR			
	9,00,000 = 4,50,000 + 4,50,000 (P & L)			

Illustration 17: The Balance Sheet of Avantika Ltd. as at 31st December, 2015 was as follows:

Liabilities	₹	Assets	₹
Authorised and Issued Capital		Land and Buildings	15,000
1,00,000 Ordinary Shares of ₹ 1 each		Machinery	75,000
fully paid	1,00,000	Stock	37,500
50,000 6% Redeemable Preference		Work-in-progress	30,000
Shares fo ₹ 1 each fully paid	50,000	Sundry Debtors	26,750
Sundry Creditors	42,500	Sinking Fund Investments	25,000
Sinking Fund (or Preference Shares	25,000	Cash at Bank	43,650
Redemption)			
Profit and Loss A/c	35,400		
	2,52,900		**2,52,900**

The directors have given notice to redeem the preference shares at premium of 5% as provided in the company's Articles of Association. The Sinking Fund Investments have been sold for ₹ 23,750. Prepare the ledger accounts necessary for recording the transactions relating to redemption and a summarised Balance Sheet showing the position after completing the above transactions.

(T.Y.BAF, Modified, M.U.)

Solution:

Sinking Fund Investment A/c

Particulars	₹	Particulars	₹
To Balance b/d	25,000	By Cash/Bank A/c	23,750
		By P & L A/c (loss)	1,250
	25,000		**25,000**

Cash/Bank A/c

Particulars	₹	Particulars	₹
To Balance b/d	43,650	By Preference Shareholders A/c	52,500
To Sinking Fund Investment A/c	23,750	By Balance b/d	14,900
	67,400		**67,400**

Sinking Fund

Particulars	₹	Particulars	₹
To CRR A/c	25,000	By Balance b/d	25,000
	25,000		**25,000**

Profit and Loss A/c

Particulars	₹	Particulars	₹
To Sinking Fund Investment A/c	1,250	By Balance b/d	35,400
To Premium on Redemption of Preference Shareholders	2,500		
To CRR A/c	25,000		
To Balance c/d	6,650		
	35,400		**35,400**

Premium on Redemption of Preference Shareholders A/c

	₹		₹
To Preference Shareholders A/c	2,500	By P & L A/c	2,500
	2,500		**2,500**

Preference Shareholders A/c

	₹		₹
To Cash/Bank A/c	2,500	By Preference Share Capital A/c	50,000
		By Prem on Redemption of Preference Share Capital A/c	2,500
	52,500		**52,500**

Illustration 18: A company issued ₹ 1,80,000 Redeemable Preference Shares at par on 1st January, 2012, redeemable at the option of the company on or after 31st December, 2014 in whole or in part. The following redemption were made out of profits.

On 30th June, 2015 ₹ 60,000

On 30th June, 2016 ₹ 40,000

In December, 2017, the company issued equity shares of the face value of ₹ 60,000 at a premium of 2% and on 31st December in the same year, it redeemed the balance of preference shares. Pass the necessary journal entries to record the above transactions.

Solution: **XYZ Ltd.**

Face value of Preference Shares to be redeemed = Fresh issue + CRR

(2015) 60,000 = Nil + [60,000] (CRR)

(2016) 40,000 = Nil + [40,000] (CRR)

(2017) 80,000 = 60,000 + [20,000] (CRR)

		Particulars			Debit	Credit
[I]	1.	Redeemable Preference Share Capital A/c	Dr.		60,000	
		To Preference Shareholder A/c				60,000
		[Being amount transfer to preference shareholder]				
	2.	Preference Shareholders A/c	Dr.		60,000	
		To Cash/Bank A/c				60,000
		[Being Preference Shareholders paid off]				
	3.	Free Reserves A/c	Dr.		60,000	
		To CRR A/c				60,000
		[Being the regd. C.R.R. created]				
[II]	1.	Redeemable Preference Share Capital A/c	Dr.		40,000	
		To Preference Shareholder A/c				40,000
		[Being amount transfer to Preference Shareholders]				

	2.	Preference Shareholders A/c	Dr.	40,000	
		To Bank A/c			40,000
	3.	Free Reserves A/c	Dr.	40,000	
		To CRR A/c			40,000
		[Being the regd. CRR created]			
[III]	1.	Bank A/c (60,000 + 2%)	Dr.	61,200	
		To Equity Share Capital A/c			60,000
		To Share Premium A/c			1,200
	2.	Redeemable Preference Share Capital A/c	Dr.	80,000	
		To Preference Shareholder A/c			80,000
		(1,80,000 – 60,000 – 40,000)			
		(total) (1992) (1994)			
	3.	Preference Shareholders A/c	Dr.	80,000	
		To Cash/Bank A/c			80,000
	4.	Free Reserves A/c	Dr.	20,000	
		To CRR A/c			20,000

Illustration 19: Enkay Ltd.'s Balance Sheet on 31st March, 2015 reads as under:

Liabilities	₹	₹	Assets	₹
Share Capital			Fixed Assets	8,00,000
(₹ 100 each)			Investments	1,00,000
Equity	5,00,000		Stock	80,000
Less: Calls-in-arrears	10,000	4,90,000	Debtors	4,00,000
10% Preference	3,00,000		Bank	2,00,000
Less: Calls-in-arrears	10,000	2,90,000		
Securities Premium		50,000		
Capital Reserve		1,00,000		
General Reserve		2,00,000		
12% Debentures		3,00,000		
Creditors		1,50,000		15,80,000
		15,80,000		**15,80,000**

On same date, Preference Shares are redeemable @ Premium of 10% and Debentures repayable at par.

The Calls-in-Arrear on both classes of shares are @ ₹ 40 per share.

To enable redemption, company took the following measures:

(i) The remainders for calls were sent to all shareholders. The shareholders holding 100 Equity Shares and 150 Preference Shares paid the amount.

(ii) The remaining Preference Shares were forfeited and cancelled.

(iii) The remaining Equity Shares were forfeited and re-issued later on receipt of ₹ 60 per share.

(iv) Investments were sold for ₹ 1,20,000.

(v) 1000 Equity Shares were issued for cash consideration @ 20% Premium. The issue was fully subscribed and paid for.

(vi) A special discount @ 5% was offered to customers for immediate payments 50% of customers in value accepted the offer.

(vii) Bank Overdraft was arranged for balance of funds required.

(viii) You are required to show Journal Entries.

Solution: **Enkay Ltd.**

	Particulars		Debit	Credit
1	(a) Cash/Bank A/c	Dr.	4,000	
	To Calls-in-arrears A/c (100 Equity Shares × 10/-)			4,000
	(b) Cash/Bank A/c	Dr	6,000	
	To Calls-in-arrears A/c (150 Preference Shares × 40/-)			6,000
2	10% Preference Share Capital A/c (100 × 100/-)	Dr.	10,000	
	To Calls-in-arrears A/c (100 × 40/-)			4,000
	To Capital Reserve (Share Forfeited) (100 × 60/-)			6,000
3	(a) Equity Share Capital A/c (150 × 100/-)	Dr.	15,000	
	To Share Forfeiture A/c. (150 × 100/-)			9,000
	To Calls-in-arrears Account (150 × 40/-)			6,000
	(b) Cash/Bank A/c (150 × 60/-)	Dr.	9,000	
	Share Forfeiture A/c (150 × 60/-)		6,000	
	To Equity Share Capital A/c (150 × 40/-)			15,000
	(c) Share Forfeiture A/c	Dr.	3,000	
	To Capital Reserve A/c (9,000 – 6,000)			3,000
4	Cash/Bank A/c	Dr.	1,20,000	
	To Investment A/c			1,00,000
	To Profit and Loss A/c (Profit)			20,000
5	Cash/Bank A/c (1,000 × 120/-)	Dr.	1,20,000	
	To Equity Share Capital A/c			1,00,000
	To Share Premium A/c (1,000,000 × 20/-)			20,000
6	Cash/Bank A/c (2,00,000 – 10,000)	Dr.	1,90,000	
	Profit and Loss A/c (Discount Allowed)	Dr.	10,000	
	To Sundry Debtors (50% of 4,00,000)			2,00,000
7	**Redemption of Preference Shares:**			
	(i) For premium payable on redemption:			
	Share Premium A/c	Dr.	29,000	
	(10% of 2,90,000) (2,900 Shares × 100 = 2,90,000)			29,000
	To Premium on Redemption A/c			
	(ii) For transfer on preference shares:			
	10% Preference Share Capital A/c	Dr.	2,90,000	
	Premium to Preference Shareholders A/c	Dr.	29,000	
	To Preference Shareholders A/c			3,19,000
	(iii) For payment made:			
	Preference Shareholders A/c	Dr.	3,19,000	
	To Cash/Bank A/c			3,19,000
	(iv) For CRR:			
	NV of Preference Share Redeemed = Fresh Issue + CRR			
	2,90,000 = 1,00,000 + CRR			
	∴ CRR = 1,90,000 (P & L 10,000)			
	(Profit M. Inv. 20,000 – Dis. All 10,000) (GR 1,80,000)			
	Profit and Loss Account	Dr.	10,000	
	General Reserve A/c	Dr.	1,80,000	
	To CRR A/c			1,90,000
8	**For redemption of debentures:**			
	12% Debentures A/c	Dr.	3,00,000	
	To Cash/Bank A/c			3,00,000

Cash/Bank A/c

Particulars	Amount	Particulars	Amount
To Opening Balance b/d	2,00,000	By Preference Shareholders	3,19,000
To Calls-in-arrears Recd. (Equity)	4,000	By Debenture Holders	3,00,000
To Calls-in-arrears Recd. (Preference)	6,000	By Balance c/f	30,000
To Reissue of Equity Share	9,000		
To Investment	1,20,000		
To New Equity Shares	1,20,000		
To Debtors	1,90,000		
	6,49,000		**6,49,000**

Illustration 20: Teebee Limited had issued 1,50,000 10% preference shares of ₹ 10 each, redeemable at premium of 10% on 31st December, 2015.

The Dividend for 2015 is yet to be paid.

The Company had adequate balance in General Reserves.

To provide funds for redemption, company:

(i) Sold investments costing ₹ 2,00,000 for ₹ 3,00,000.

(ii) Issued for cash – 2,500, 15% Debentures of ₹ 100 at par.

(iii) Issued – 50,000 equity shares of ₹ 10 at premium of ₹ 4 per share.

The payment of dividend, premium and capital was duly carried out.

Show journal entries. **(T.Y.B.Com., Modified, M.U.)**

Solution: **Teebee Limited**

	Particulars			Debit	Credit
1	(a) For dividend proposed:				
	General Reserve A/c	Dr.		1,50,000	
	To Proposed Divided A/c (10% of 15,00,000 capital)				1,50,000
	(b) For dividend paid:				
	Proposed Dividend A/c	Dr.		1,50,000	
	To Cash Bank A/c				1,50,000
2	**For sale of investments:**				
	Cash/Bank A/c	Dr.		3,00,000	
	To Investment A/c				2,00,000
	To Profit and Loss A/c (Profit on sale)				1,00,000
3	**For fresh issue of debentures:**				
	Cash/Bank A/c	Dr.		2,50,000	
	To 15% Debentures A/c (2,500 × 100/-)				2,50,000
4	**For fresh issue of equity shares:**				
	Cash/Bank A/c	Dr.		7,50,000	
	To Equity Share Capital A/c (50,000 × 10)				5,00,000
	To Share Premium A/c (59,000 × 4)				2,00,000
5	**For redemption:**				
	(a) For premium on redemption:				
	Share Premium A/c	Dr.		1,50,000	
	To Premium on Redemption A/c (10% of 15,00,000)				1,50,000
	(b) For transfer of Capital and Premium:			15,00,000	
	10% Preference Share Capital A/c			1,50,000	

	Premium on Redemption A/c				
	To Preference Shareholders A/c				16,50,000
(c)	For payment:				
	Preference Shareholders A/c	Dr.		16,50,000	
	To Cash/Bank A/c				16,50,000
(d)	For CRR:				
	General Reserve A/c	Dr.		10,00,000	
	To CRR A/c				10,00,000
	NV = FI + CRR				
	15,00,000 = 5,00,000 + CRR				
	∴ CRR = 10,00,000				

GLOSSARY

- **Redemption of Preference Shares:** Repayment of preference share capital.
- **Divisible Profits:** Profits available for distribution as dividend.
- **Dividend Equalisation Reserve:** Reserve created out of profits for equalising the rate of dividend.
- **Workmen's Compensation Fund:** It is the fund created for payment of compensation to the workers in case they receive any injury while on work.
- **Profit Prior to Incorporation:** It is the profit earned by a company upto the date of incorporation.
- **Bonus Shares:** It refers to capitalisation of reserves, i.e., conversion of reserves into share capital.
- **Forfeiture:** It is an act on the part of the Board of Directors which results into compulsory termination of membership and confiscation of property in shares of the defaulting member.

EXERCISES

Theory Questions

1. Explain the provisions of the Companies Act, 1956 regarding redemption of preference shares. ***(Oct. 97, Oct. 98, Apr. 99, Apr. 2001, Oct. 2001)***
2. Write a note on Capital Redemption Reserve. ***(Apr. 98)***
3. Distinguish between Redemption of Shares and Buy-back of Shares. ***(Oct. 2004)***
4. Give any two items each of 'Divisible Profits' and 'Non-divisible Profits' for the purpose of redemption of preference shares. ***(March 2006)***

Objective Type Questions

(A) Fill in the Blank:

1. _____ paid preference shares cannot be redeemed.
2. Redeemable preference shares can be redeemed out of _____ profit of the company.
3. If some shareholders cannot be paid because they cannot be traced etc., the credit balance in the preference shareholders account indicating such unpaid balance should be shown under _____ in the Balance Sheet.
4. If redeemable preference shares are redeemed at a premium, the premium must be provided for out the company's _____ account; or out of the profits of the company.

5. When redeemable preference shares are redeemed out of divisible profits of the company, an amount equal to the nominal value of the share redeemed must be transferred from the divisible profit to the _____ Account.
6. Redemption of preference shares is not taken to mean reduction of _____ capital of the company.
7. Preference shares, on which calls are in arrears, should be (ignored/considered) for the purpose of redemption.
8. Workmen's Compensation Fund balance (is/is not) divisible profit available for redemption of preference shares.
9. Shares Forfeited Account balance (is/is not) divisible profit available for redemption of preference shares.
10. Investment Fluctuation Reserve balance (is/is not) divisible profit available for redemption of preference shares.
11. Revaluation Reserve balance (is/is not) divisible profit available for redemption of preference shares.
12. Debenture Redemption Reserve balance (is/is not) divisible profit available for redemption of preference shares.
13. Preference shares redeemable within _____ years can be issued.
14. Capital redemption reserve may be used for issuing _____ shares. (bonus, rights)
15. Where a company redeems preference shares from out of profits it is necessary for the company to transfer the nominal value of shares redeemed to a _____ A/c.
16. A company may issue redeemable preference shares if so authorised by its _____.

[**Ans.:** 1. Partly, 2. Divisible, 3. Current Liabilities, 4. Security Premium, 5. Capital Redemption Reserve, 6. Authorised, 7. Ignored, 8. is, 9. is not, 10. is, 11. is not, 12. is not, 13. 20, 14. Bonus, 15. Capital Redemption Reserve, 16. Articles.]

(B) State Whether the Following Statements are True or False:

1. Redemption of redeemable preference shares can be made only out of the proceeds of fresh issue of equity shares.
2. A company can redeem only fully paid preference shares.
3. Premium payable on redemption of redeemable preference shares must be debited against profits only.
4. Capital redemption reserve account can be utilised for writing off miscellaneous expenditure and loss.
5. To the extent redemption of preference shares takes place from out of profits an equal amount should be transferred to General Reserve.
6. Transfer to capital redemption reserve account on redemption of preference shares can be made from Security Premium Account.
7. Capital redemption reserve account cannot be used for declaring bonus for making partly paid shares fully paid.
8. Partly paid preference shares cannot be redeemed.
9. Capital Redemption Reserve amount can be utilised for writing off share issue expenses.
10. On redemption of preference shares out of profits, a sum equal to the nominal value of shares so redeemed should be transferred from the Profit and Loss A/c to the General Reserve.

11. Redemption of preference shares shall be taken as reduction of company's authorised share capital.
12. Premium on redemption of preference shares can be met out of security premium account.
13. Redeemable preference shares can be issued if authorised by the Articles of Association of the company.
14. Redeemable preference shares can be redeemed only out of the profits of the company.
15. Dividend equalisation reserve can be used as divisible profits while redeeming preference shares.

[**Ans.:** **True:** 2, 7, 8, 12, 13,
False: 1, 3, 4, 5, 6, 9, 10, 11, 14, 15]

(C) Multiple Choice Questions:

1. The following statement is false.
   (a) A company can issue preference shares which are redeemable
   (b) A company can issue irredeemable preference shares
   (c) The maximum period for redemption is 10 years form the date of issue
   (d) All
2. The following statement is true.
   (a) Partly paid preference shares can be redeemed
   (b) Preference shares on which calls are unpaid can be redeemed
   (c) Only fully paid preference shares can be redeemed
   (d) None of the above.
3. Redeemable preference shares can be redeemed _____.
   (a) Only out of the proceeds of the fresh issue of shares
   (b) Only out of divisible profits
   (c) Out of fresh issue of shares and/or out of the divisible profits
   (d) None of the above
4. If Redeemable preference shares are redeemed at a premium, the premium cannot be provided for _____.
   (a) Out of the company's security premium account
   (b) Out of the profits of the company
   (c) Out of the proceeds of the fresh issue of shares at par
   (d) None of the above
5. Redemption of preference shares _____.
   (a) is taken to mean reduction of called up capital of the company to the extent of nominal value of shares redeemed
   (b) is not taken to mean reduction of authorised capital of the company
   (c) is taken to mean reduction of paid-up capital of the company to the extent of nominal value
   (d) is taken to mean reduction of paid-up capital of the company to the extent of divisible profits less nominal value of fresh share issued

6. Capital redemption reserve account can be used _____.
   (a) for declaring bonus for making partly paid shares fully paid
   (b) for issuing fully paid up bonus shares to the equity shareholders
   (c) partly for issuing fully paid up bonus shares to the equity shareholders and partly for declaring bonus for making partly paid shares fully paid
   (d) for none of the above
7. The following balance is not available for transfer to Capital Redemption Reserve.
   (a) General Reserve (b) Dividend Equalisation Fund
   (c) Revaluation Reserve (d) Profit and Loss Account
8. Which of the following balances is available for transfer to Capital Redemption Reserve?
   (a) Forfeited Shares Account (b) Profit prior to Incorporation
   (c) Investment Allowance Reserve (d) None of the above
9. When preference shares are redeemed out of profits, the amount equal to the nominal value of shares redeemed should be transferred to _____.
   (a) Capital Reserve Account (b) Capital Redemption Reserve Account
   (c) General Reserve Account (d) Sinking Fund Account
10. When preference shares are redeemed out of profit, the amount be transferred to Capital Redemption Reserve should be equal to _____.
   (a) Premium payable on redemption
   (b) Amount payable on redemption
   (c) The nominal value of shares redeemed
   (d) The nominal value of shares redeemed less premium received on fresh issue of shares
11. If preference shares are redeemed at premium, such premium may be provided out of _____.
   (a) Security Premium Account or Profit and Loss Account
   (b) Proceeds of fresh issue of shares
   (c) Forfeited Shares Account
   (d) Capital Redemption Reserve Account
12. Capital redemption reserve account _____.
   (a) May be created at the option of the company, on redemption of preference shares
   (b) Must be created to comply with law, on redemption of preference shares
   (c) Must be created to comply with law, on conversion of preference shares into equity shares
   (d) Is created out of Forfeited Shares Account, on forfeiture of shares
13. The Capital Redemption Reserve A/c can be used for _____.
   (a) Payment of dividend (b) Writing off accumulated losses
   (c) Issue of fully paid shares (d) For all of the above
14. Which of the following statements is false?
   (a) Proceeds of fresh issue of shares, for the purpose of redemption of preference shares, is equal to Face Value of shares, if shares are issued at par
   (b) Proceeds of fresh issue of shares, for the purpose of redemption of preference shares, is equal to Issue price of shares, if shares are issued at premium

(c) Proceeds of fresh issue of shares, for the purpose of redemption of preference shares, is equal to Face Value of shares Less Discount, if shares are issued at discount
(d) All of the above

15. Which of the following redeemable preference shares of ₹ 10 are eligible for redemption?
(a) On which application and allotment money of ₹ 5 has been paid by cheque
(b) On which application and allotment money of ₹ 8 has been paid in cash
(c) On which application and allotment money of ₹ 10 has been paid
(d) All of the above

16. If preference shares are redeemed by conversion into equity shares, then, the amount transferred to Capital Redemption Reserve is _____.
(a) Nil
(b) Equal to the face value of preference shares redeemed
(c) Equal to the face value of the equity shares issued
(d) Difference between the face value of the preference shares redeemed and the equity shares issued

17. Provisions regarding redemption of preference shares are given in _____.
(a) Section 78 of Companies Act, 1956 (b) Section 81 of Companies Act, 1956
(c) Section 77A of Companies Act, 1956 (d) None of the above

18. Balance of Capital redemption Reserve Account is shown under Liabilities side of the Balance Sheet under _____.
(a) Share Capital (b) Non-current Liabilities
(b) Reserves and Surplus (d) Current Liabilities

19. Balance of Capital Redemption Reserve Account can be utilised for _____.
(a) Payment of dividend
(b) Declaring bonus to make partly paid shares into fully paid-up shares
(c) (a) or (b)
(d) None of (a) or (b)

20. Profit on forfeiture of redeemable preference shares is credited to _____.
(a) Capital Reserve A/c (b) Capital Redemption Reserve A/c
(b) Profit and Loss A/c (d) General Reserve A/c

21. A company cannot issue _____.
(a) Redeemable cumulative preference shares
(b) Redeemable non-cumulative preference shares
(c) Redeemable participating preference shares
(d) Irredeemable preference shares

22. Preference shares can be redeemed _____.
(a) Out of profit only
(b) Out of proceeds of fresh issue only
(c) Out of capital profit only
(d) Out of proceeds of fresh issue and or profit otherwise available for distribution by way and dividend

23. To the extent preference shares have been redeemed out of profits, amount equal to the face value of preference shares redeemed should be transferred to _____.
    (a) Development Rebate Reserve (b) General Reserve
    (c) Sinking Fund (d) Capital Redemption Reserve
24. X Co. Ltd. has to redeem 1,000 preference shares of ₹ 100 each at 10% premium. It issues 5,000 equity shares of ₹ 10 each at 10%. General Reserve amount transferred to capital redemption reserve will be _____.
    (a) ₹ 1,00,000 (b) ₹ 50,000
    (b) ₹ 55,000 (d) ₹ 1,10,000
25. A company cannot issue redeemable preference shares for a period exceeding _____.
    (a) 6 years (b) 7 years
    (b) 8 years (d) 20 years
26. A company can issue redeemable preference shares _____.
    (a) only at par (b) only at premium
    (c) only at discount (d) All of the three
27. S. Ltd. issued 2,000, 10% Preference shares of ₹ 100 each at par, which are redeemable at a premium of 10%. For the purpose of redemption, the company issued 1,500 Equity Shares of ₹ 100 each at a premium of 20% per share. At the time of redemption of Preference Shares, the amount to be transferred by the company to the Capital Redemption Reserve Account will be _____.
    (a) ₹ 50,000 (b) ₹ 40,000
    (c) ₹ 2,00,000 (d) ₹ 2,20,000
28. Light Ltd. has 10,000 5% preference shares of ₹ 10 each to be redeemed after 5 years. The company forfeited 500 preference shares on which final call of ₹ 2 has not been received after due notice and cancelled these shares on account of redemption. Remaining shares were redeemed out of reserves of the company. The amount to be credited to capital redemption reserve will be _____.
    (a) ₹ 1,00,000 (b) ₹ 95,000
    (c) ₹ 99,000 (d) ₹ 99,500
29. Indigo ltd. had 9,000, 10% redeemable preference shares of ₹ 10 each, fully paid up. The company decided to redeem these preference shares at par by the issue of sufficient number of equity shares of ₹ 10 each fully paid up at a discount of 10%. The number of equity shares issued should be _____.
    (a) 9,000 (b) 11,000
    (c) 10,000 (d) None of the above
30. Ankush Ltd. had issued 10,000, 10% Redeemable Preference Shares of ₹ 100 each, fully paid up. The company decided to redeem these preference shares at par, by issue of sufficient number of equity shares of ₹ 10 each at a premium of ₹ 2 per share as fully paid up. The amount to be transferred to capital redemption reserve account will be: _____.
    (a) ₹ 10,00,000 (b) ₹ 12,00,000
    (c) ₹ 8,00,000 (d) Nil

31. Which of the following statements is NOT TRUE with regard to redemption of preference shares?
    (a) Partly paid shares cannot be redeemed
    (b) The redemption of preference shares shall be taken as reduction of company's authorised share capital
    (c) Preference share can be redeemed either out of the profit by capitalization or amount of fresh issue of shares
    (d) None of the above
32. When Redeemable Preference share are due for redemption, the entry passed is _____.
    (a) Debit Redeemable Preference Share Capital A/c; credit Cash A/c
    (b) Debit Redeemable Preference Share Capital A/c; credit Preference Shareholders A/c
    (c) Debit Preference Shareholders A/c; credit Cash A/c
    (d) Debit Preference Shareholders A/c; credit Capital Reduction A/c
33. Which of the following cannot be utilised for the redemption of preference share of a company?
    (a) Proceeds of fresh issue of shares
    (b) General Reserve
    (c) Securities premium on fresh issue of shares
    (d) Dividend equalisation reserve
34. Which of the following statements is false?
    (a) Redeemable preference share can be issued, if authorised by the articles of association
    (b) The bonus issue can be made out of securities premium collected only in cash
    (c) Redeemable preference share can be redeemed only when they are fully paid
    (d) Redeemable preference shares can be redeemed only out of profits of the company
35. The company has 2,500, 11% redeemable preference shares of ₹ 100 each. These shares were due to be redeemed at a premium of 10%. The company has the following profits:

    Profit prior to incorporation ₹ 40,000

    Capital Reserve ₹ 40,000

    Securities Premium ₹ 20,000

    General Reserve ₹ 85,000

    Profit and Loss Account ₹ 80,000

    As the divisible profits are inadequate, the company issued the sufficient number of equity share of ₹ 10 each at a discount of 10%. What were the numbers of shares issued?
    (a) 10,000 Equity Shares (b) 9,000 Equity Shares
    (c) 8,000 Equity Shares (d) 7,000 Equity Shares
36. A Ltd. Company has to redeem Redeemable Preference Shares of the value of ₹ 1,00,000 for which the company has issued 3,000 equity shares of ₹ 10 each at a premium of 10%. The amount to be transferred to Capital Redemption Reserve Account will be _____.
    (a) ₹ 1,00,000 (b) ₹ 70,000
    (c) ₹ 1,10,000 (d) ₹ 67,000
37. From which of the following accounts can transfer be made to capital redemption reserve on redemption of preference shares?
    (a) Securities Premium (b) Capital Reserve
    (c) Profit Prior to Incorporation (d) General Reserve

38. The term 'Divisible Profits' means _____.
    (a) Profit available to shareholders for distribution as dividend
    (b) Profit as per P & L A/c
    (c) Profit as per P & L Appropriation A/c
    (d) None of the above

39. A company has issued 20,000 equity shares of ₹ 10 each, at a premium of 10%, to redeem 30,000 preference shares of ₹ 10 each. The amount to be transferred to Capital Redemption Reserve is _____.
    (a) ₹ 2,00,000 (b) ₹ 2,20,000
    (c) ₹ 1,00,000 (d) None of the above

40-43: X Ltd. decides to redeem 13,000, 15% Preference Shares of ₹ 100 each at 10% premium. It has a General Reserve of ₹ 9,10,000 and Securities Premium of ₹ 20,000. The minimum number of Equity Shares of ₹ 10 each to be issued for the purpose of redemption.

40. If the new equity shares are to be issued at 25% premium;
    (a) 60,000 (b) 45,000
    (c) 40,000 (d) None of these

41. If the new equity shares are to be issued at 20% discount;
    (a) 40,000 (b) 62,500
    (c) 60,000 (d) None of these

42. If the new equity share are to be issued at par;
    (a) 50,000 (b) 60,000
    (c) 40,000 (d) None of these

43. If the new equity shares are to be issued at 30% premium;
    (a) 50,000 (b) 62,500
    (c) 35,000 (d) 39,000

44-49: Calculate the amount to be transferred to Capital Redemption Reserve Account in each of the following cases:

44. **Redeemable Preference Shares** **New Issue of Shares**
    ₹ 50,000 redeemable at par ₹ 30,000 at par
    (a) 50,000 (b) 30,000
    (c) 20,000 (d) None of these

45. **Redeemable Preference Shares** **New Issue of Shares**
    ₹ 50,000 redeemable at 5% premium ₹ 30,000 at par
    (a) 25,000 (b) 20,000
    (c) 22,500 (d) None of these

46. **Redeemable Preference Shares** **New Issue of Shares**
    ₹ 50,000 redeemable at par ₹ 30,000 at premium of 5%
    (a) 20,000 (b) 30,000
    (c) 21,500 (d) None of these

47. **Redeemable Preference Shares** **New Issue of Shares**
    ₹ 50,000 redeemable at par ₹ 30,000 at discount of 10%
    (a) 20,000 (b) 23,000
    (c) 27,000 (d) None of these

48. **Redeemable Preference Shares** **New Issue of Shares**
₹ 50,000 redeemable at 5% premium ₹ 30,000 at premium of 10%
(a) 20,000 (b) 25,000
(c) 22,000 (d) None of these

49. Determine the amount of fresh issue of shares from the following information relating to Shagoon Leather Works Ltd.:
1. Redeemable preference shares ₹ 2,00,000
2. Premium on redemption 10%
3. Divisible profits available ₹ 60,000
4. Balance in general reserve ₹ 40,000
5. Security Premium Accounts ₹ 25,000
6. Fresh issue to be made at a discount of 10%.
(a) Shares of a nominal amount of ₹ 1,00,000
(b) Shares of nominal amount of ₹ 1,11,111
(c) Shares of a nominal amount of ₹ 90,000
(d) None of the above

[**Ans.:** 1. (b), 2. (c), 3. (c), 4. (c), 5. (b), 6. (b), 7. (c), 8. (d), 9. (b), 10. (c), 11. (a), 12. (b), 13. (c), 14. (b), 15. (c), 16. (a), 17. (a), 18. (c), 19. (d), 20. (a), 21. (d), 22. (d), 23. (d), 24. (b), 25. (d), 26. (d), 27. (a), 28. (a), 29. (c), 30. (d), 31. (b), 32. (b), 33. (c), 34. (d), 35. (b), 36. (b), 37. (d), 38. (a), 39. (c), 40. (c), 41. (b), 42. (a), 43. (d), 44. (c), 45. (b), 46. (a), 47. (b), 48. (a), 49. (b)]

Hints:

40. (13,000 × 100) + (13,000 × 10) = 20,000 + 9,10,000 + (N × 10) + (N × 2.5) ∴ N = 40,000

41. (13,000 × 100) + (13,000 × 10) = 20,000 + 9,10,000 + (N × 10) + (N × 2) ∴ N = 62,500

42. (13,000 × 10) + (13,000 × 10) = 20,000 + 9,10,000 + (N × 10) ∴ N = 50,000

43. (13,000 × 10) = 9,10,000 + (N × 10) ∴ N = 39,000
New Premium (39,000 × 3) + Existing Premium ₹ 20,000 covers premium due of redemption (13,000 × 10). ∴ No need to use algebraic equation.

44. 50,000 – 30,000 = 20,000

45. 50,000 – 30,000; ignore premium on redemption

46. 50,000 – 30,000; ignore premium on issue.

47. 50,000 – 27,000 = 23,000; consider net proceeds = 30,000 × 90%

48. 50,000 – 30,000 = 20,000; ignore premium on both redemption as well as issue

49. 2,00,000 – (60,000 + 40,000) = 1,00,000 ÷ 90% = 1,11,111

(D) Match the Columns:

(I) Column A	**Column B**
1. Partly paid preference shares	(a) Does not result in reduction of authorised capital of the company
2. Irredeemable preference shares	(b) Existing Security Premium Account
3. Maximum period for redemption of preference shares	(c) Cannot be redeemed
4. Redemption of preference shares	(d) On redemption of preference shares out of divisible profits

5. If Redemption Preference shares are redeemed at a premium, the premium can be provided for out of	(e) Can be used only for issue of fully paid bonus shares
6. Amount equal to Nominal Value of shares redeemed transferred to Capital Redemption Reserve	(f) Results in reduction of paid-up capital of the company
7. Capital Redemption Reserve	(g) Can be used for declaring bonus for making partly paid shares fully paid
	(h) Cannot be issued
	(i) One redemption of preference shares out of proceeds of fresh issue of shares
	(j) 10 years from the date of issue

[**Ans.:** 1. (c), 2. (h), 3. (j), 4. (a), 5. (b), 6. (d), 7. (e)]

(II)

Group A	**Group B**
1. On forfeiture of preference shares for non-payment of call	(a) Nominal value of Preference shares redeemed Less Proceeds of new shares issued
2. Profit on forfeiture of preference shares	(b) Amount called up is debited to redeemable Preference Shares A/c
3. Divisible profit	(c) Proceeds of new shares issued Less Nominal value of Preference Shares redeemed
4. Profits not divisible	(d) Show under Current Liabilities in Balance Sheet
5. Transfer to Capital Redemption Reserve	(e) Transferred to Capital Redemption Reserve A/c
6. Unpaid balance in Preference Shareholders Account	(f) Show under Share Capital in Balance Sheet
	(g) Transferred to Capital Reserve A/c
	(h) Capital Reserve
	(i) Sinking Fund after deducting liability
	(j) Amount paid up is debited to Redeemable Preference Shares A/c

[**Ans.:** 1. (b), 2. (g), 3. (i), 4. (h), 5. (a), 6. (d)]

(III)

Group A	**Group B**
1. Dividend Equalisation Reserve	(a) CRR = NV of RP Shares Redeemed Less Amount Received on New Share Issue
2. Pre-incorporation profits	(b) Issue of Full Paid-up Bonus Shares
3. If preference shares redeemed entirely out of profits	(c) Divisible profits available for redemption of preference shares
4. If preference shares redeemed partly out of new issue at par	(d) CRR = 50,000 – 30,000 = ₹ 20,000
5. NV of Minimum New Share Issue	(e) Cannot be used for meeting premium payable on redemption of preference shares

6. Use of Capital Redemption Reserve
7. Premium received on new shares issued before redemption of preference shares
8. 5,000 preference shares of ₹ 10 each redeemable at par; New issue of 3,000 shares of ₹ 10 each at premium of 5%
9. 5,000 preference shares of ₹ 10 each redeemable at par; New issue of 3,000 shares of ₹ 10 each at discount of 5%

(f) CRR = Proceeds of New Shares Issue Less NV of RP Shares Redeemed
(g) Capital profits not available for redemption of preference shares
(h) NV of RP Shares Redeemed Less Divisible Profits
(i) Bonus for making partly paid-up shares fully paid
(j) Can be used for meeting premium payable on redemption of Preference Shares
(k) CRR = Nominal Value of Preference Shares Redeemed
(l) CRR - Price at which Preference Shares Redeemed
(m) CRR = 50,000 – 27,000 = ₹ 23,000
(n) CRR = 50,000 – 30,000 – 1,500 = ₹ 18,500

[**Ans.:** 1. (c), 2. (g), 3. (k), 4. (a), 5. (h), 6. (b), 7. (j), 8. (d), 9. (m)]

Practical Problems

I. Redemption Partly Out of Profit + New Issue

1. Change Ltd. has an issued share capital of 6,500 7% redeemable cumulative preference shares of ₹ 10 each and 22,500 ordinary shares of ₹ 10 each. The preference shares are redeemable at a premium of 7½% on 1st August, 2012.

As on 31st July, 2012 the company's Summary Balance Sheet showed the following position:

Liabilities	₹	Assets	₹
Issued Share Capital		Sundry Assets	3,46,000
6,500 7% redeemable cumulative		Balance at Bank	47,500
preference shares of ₹ 10 each fully paid	65,000		
22,500 ordinary shares of ₹ 10 each fully paid	2,25,000		
Profit and Loss Account	46,000		
Sundry Creditors	57,500		
	3,93,500		**3,93,500**

In order to facilitate the redemption of the preference shares, it was decided:

(a) to finance part of the redemption form company funds, subject to leaving a balance on Profit and Loss Account of ₹ 10,000 and

(b) to issue sufficient number of ordinary shares at a premium of ₹ 2.50 per share to raise the balance of funds required.

The preference shares were redeemed on the due date, and the issue of ordinary shares was fully subscribed.

You are required to prepare:

(i) the necessary journal entries to record the above transactions (including cash) and

(ii) the Balance Sheet as on completion.

[Ans.: CRR ₹ 65,000 – 29,000 = ₹ 36,000; B/S Total ₹ 3,59,875]

2. On 1st July, 2012, the following balance appeared in the books of Ltd.

Particulars	₹
6% Preference Share Capital	1,00,000
(Share of ₹ 100 each redeemable on 30-9-2012, at a premium of ₹ 10 per share)	
Security Premium A/c	50,000
Profit and Loss A/c (Cr.)	1,50,000

To provide a part of cash necessary for the repayment of Redeemable Preference Shares (which were redeemed on the due date), the company made an issue of 7% Preference Shares of ₹ 100 each at ₹ 105 per share payable in full on application

Application for 800 of the new shares were received on 1st August, 2012.

Show the Journal entries (including cash transactions) necessary to record the above transactions in the books of the company.

[Ans.: CRR ₹ 20,000]

3. X Ltd. has the following Summary Balance Sheet as on 31-3-2012:

Liabilities	₹	Assets	₹
Issued, subscribed and fully paid up		Fixed Assets (Tangible)	22,00,000
10,000 Equity Share of ₹ 100 each	10,00,000	Bank	8,00,000
5,000 Preference Shares of ₹ 100 each	5,00,000		
Capital Reserve	1,00,000		
Security Premium Account	1,00,000		
General Reserve	2,00,000		
Profit and Loss Account	1,00,000		
Creditors	10,00,000		
	30,00,000		**30,00,000**

The Preference Shares are to be redeemed at 10% Premium. Fresh issue of Equity Shares is to be made to the extent it is required under the Companies Act for the purpose of this redemption. The shortfall in funds for the purpose of the redemption after utilising the proceeds of the fresh issue are to be met by taking a Bank Loan.

Show Journal entries giving effect to the redemption and draw up the Balance Sheet of the company as it would appear immediately after the redemption.

[Ans.: CRR ₹ 3,00,000; B/S Total ₹ 30,00,000]

4. Spotlight Ltd. has issued share capital of 60,000 8% Redeemable Cumulative Preference Shares of ₹ 20 each and 4,00,000 Equity Shares of ₹ 10 each. The Preference Shares are redeemable at a premium of 5% on 1st January 2012.

As at 31st Dec. 2011, the company showed the following position.

Liabilities	₹	Assets	₹
Issue Share Capital:		Plant and Machinery	25,00,000
60,000 8% Redeemable cumulative		Furniture and Fixtures	9,00,000
preference shares of ₹ 20 each,		Stock	15,00,000
fully paid up	12,00,000	Debtors	14,00,000

4,00,000 Equity Shares of ₹ 10 each,		Investments	3,50,000
fully paid	40,00,000	Balance at Bank	3,50,000
Profit and Loss A/c	7,00,000		
Sundry Creditors	11,00,000		
	70,00,000		**70,00,000**

In order to facilitate the redemption of preference shares it was decide:

(a) to sell the investments for ₹ 3,00,000.

(b) to finance part of the redemption from company funds subject to leaving of balance of Profit and Loss account of ₹ 2,00,000.

(c) to issue sufficient equity shares of ₹ 10 each at a premium of ₹ 2 per share to raise the balance of funds required.

The Preference Shares were redeemed on due date. New Equity Shares were fully subscribed. You are required to prepare:

(i) Journal entries to record the above transactions, and

(ii) A memorandum balance sheet as on completion of redemption.

[Ans.: CRR ₹ 12,00,000 – ₹ 7,50,000 = ₹ 4,50,000; Fresh Issue ₹ 75,000 shares; B/S Total ₹ 65,90,000]

5. (Preference Dividend, O/s Calls): The undernoted balances were extracted form the ledger of Zee Ltd.:

No.	Particulars	₹
1	8% Redeemable Cumulative Preference Capital:	
	10,000 Shares of ₹ 100 each, fully called up	10,00,000
	Less: Calls unpaid at ₹ 25 per share	5,000
	Amount paid up	9,95,000
2	Security Premium Account	1,40,000
3	Development Rebate Reserve	5,00,000
4	General Reserve	3,40,000
5	Proposed Dividend since sanctioned on Cumulative Preference Shares	78,400

The directors redeemed the preference shares at a premium of 10% and for that purpose made a fresh issue of equity shares of ₹ 10 each at par for such amount as was necessary for the purpose after utilising the available sources to the maximum extent and satisfying the amount of preference dividend. ₹ 2,00,000 of the Development Rebate Reserve is free for distribution as dividend.

Give journal recording the above transactions. Company plans to forfeit the shares on which calls are unpaid.

[Ans.: Transferred to CRR ₹ 5,40,000; Preference Dividend paid ₹ 78,400]

II. Bonus

6. On Jan. 1, 2006 Shibpur Motor Ltd. issued 3,000 7% Redeemable Preference Shares of ₹ 10 each, all of which were taken up and fully paid. The Shares were issued on condition that the same at any time after March 31, 2011, could be redeemed at a premium of ₹ 4 per share.

On June 30, 2013 the company decided to redeem the shares. For the purpose, it issued 18,000 6% preference shares of ₹ 10 each at a premium of ₹ 1 per share on July, 15, 2013. The shares were subscribed and paid for by July 31, 2013. The 7% Redeemable Preference Shares were redeemed on the same date.

The company had balance of ₹ 28,000 in its Profit and Loss Account, On 1-9-2013, the company decided to issue 5,000 fully paid bonus shares of ₹ 10 each for allotment to equity shareholders in the ratio of one equity share for every four shares held. It had also a Reserve of ₹ 1,10,000.

Record the necessary journal entires in the books of the company.

[Ans.: CRR ₹ 30,000 – ₹ 18,000 = ₹ 12,000]

7. Share Narayan Mills Ltd. has an authorised capital of ₹ 2,50,000 comprising 50,000 6% preference shares of ₹ 1 each and 2,00,000 ordinary Shares of ₹ 1 each.

The preference shares are redeemable on 1st January 2013 at ₹ 1.05 per share.

The summarised Balance Sheet of the company as on 31st December, 2012 was as follows:

Liabilities	₹	Assets	₹
Preference Capital	50,000	Fixed Assets	1,96,700
Ordinary Capital	1,00,000	Investments	14,000
Capital Reserve	9,500	Cash at Bank	28,000
General Reserve	20,000		
Profit and Loss A/c	42,500		
Creditors	16,700		
	2,38,700		**2,38,700**

The necessary resolutions were duly passed and the following transactions carried through

(i) In order to provide cash towards the redemption of the preference shares (a) all the investments were sold for ₹ 18,000 and (b) 20,000 Ordinary Shares of ₹ 1 each were issued to existing shareholders at ₹ 1.25 per share payable in full forthwith and duly paid.

(ii) The preference shares were duly redeemed.

(iii) A bonus issue of ordinary shares was made at the rate of one new shares for every ten then held out of the reserve created for redemption purpose.

You are required to pass the necessary journal entries to record these transaction (including those relating to cash) having regard to the Director's wish that minimum reduction should be made in revenue reserves. Also show the Balance Sheet of the company after completion of these transactions.

[Ans.: CRR ₹ 30,000; B/S Total ₹ 2,15,200]

8. The following is the summarised Balance Sheet of Dude Ltd. as on 31st March, 2012:

Liabilities	₹	Assets	₹
5,000 Equity Shares of ₹ 100 each	5,00,000	Fixed Assets	9,00,000
3,000 8% Preference Shares of ₹ 100		Investment	2,00,000
each, ₹ 80 per share called and paid up	2,40,000	Stock	1,00,000
4,000 9% Preference Shares of ₹ 100		Sundry Debtors	2,00,000
each fully paid	4,00,000	Cash at Bank	3,00,000
Capital Reserve	1,00,000		
General Reserve	1,00,000		
Security Premium	60,000		
Profit and Loss Account	2,00,000		
Sundry Creditors	1,00,000		
	17,00,000		**17,00,000**

On 1st April, 2012, the company redeemed the fully paid Preference Shares at a premium of 10%. In order to pay off the preference shareholders, the company sold the investments realising ₹ 2,10,000 and also issued 2,000 7% Preference Shares of ₹ 100 each which were fully subscribed in cash.

On the same date, the company issued fully paid bonus shares in the ratio of one for every two shares held.

Show the Journal entries and also prepare a Balance Sheet of the company after the completion of the transactions which took place on 1st April 2012.

[Ans.: CRR ₹ 2,00,000; B/S Total ₹ 14,70,000]

9. The share capital of Caltex Ltd. consists of:

1,00,000 Equity Shares of ₹ 1 each fully paid, and

50,000 6% Preference Shares of ₹ 1 each fully paid, redeemable at a premium of 10%.

The company had a credit balance on Profit and Loss Account of ₹ 80,500 and a balance on General Reserve of ₹ 50,000.

The company resolved:

(a) To make a bonus issue of one share for every two held by the existing equity shareholders from General Reserve.

(b) To redeem the preference shares.

(c) To issue 30,000 equity shares of ₹ 1 each at a premium of 12½% in order to provide part of the funds necessary for the redemption of preference shares.

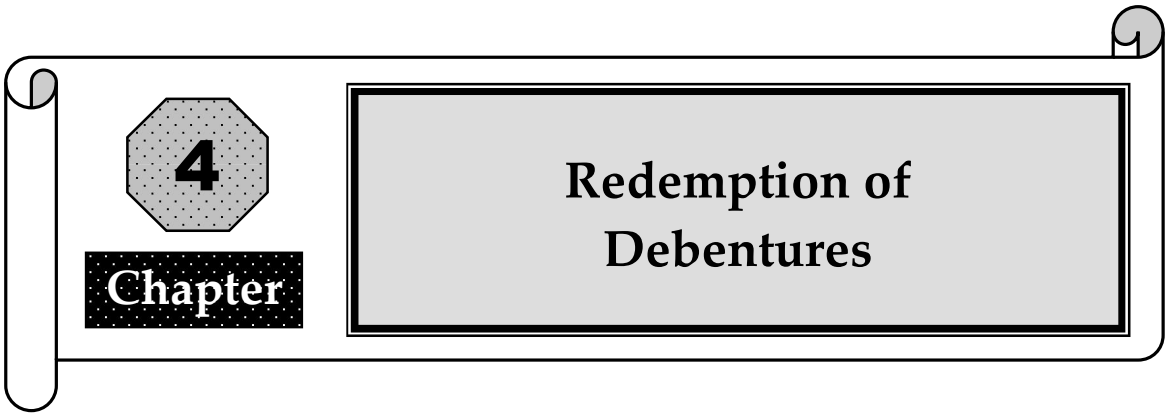
The resolutions were duly carried out. You are required to show the ledger accounts necessary to record the above transactions.

[Ans.: CRR ₹ 20,000]

10. The following is the Summary Balance Sheet of Mitra Ltd. as on 31st March, 2012:

Liabilities	₹	Assets	₹
5,000, 10% Preference Shares		Fixed Assets	13,70,000
of ₹ 100 each	5,00,000	Investment at Cost	
90,000 Equity Shares at ₹ 10 each	9,00,000	(Market Value – ₹ 2,80,000)	3,00,000
Securities Premium A/c	1,00,000	Stock	9,00,000
General Reserves	7,50,000	Debtors	1,00,000
Profit and Loss A/c	2,00,000	Cash at Bank	1,75,000
Creditors	4,00,000	Cash in Hand	5,000
	28,50,000		**28,50,000**

It was decided on 30th June 2012 to redeem the preference shares at a premium of 5%. To finance the redemption, all the investments were realised at market value and 10,000 equity shares were issued at ₹ 9 per share payable on application. The company also issued 10,000, 12% debentures of ₹ 100 each shares held on that date. It was also decided that only minimum reduction should be made in revenue reserves.



INTRODUCTION

In addition to the funds raised by issue of shares, companies have to borrow large amounts of money. It may not be possible for a few lenders to meet such loan requirements. Hence, a corporate loan may be divided into many units called "debentures". The debentures can be issued to a large number of persons. A person who purchases a debenture is called a debentureholder. The company issues to each debentureholder a debenture certificate under its seal as an acknowledgement of loan.

ISSUE OF DEBENTURES

There are no legal restrictions on the terms of issue of debentures. Hence, debentures may be issued: (a) at par or (b) at a premium or (c) at a discount.

(a) At Par: If debentures are issued at an amount equal to their face value, they are said to be issued at par (e.g., debentures of the face value of ₹ 10 issued for ₹ 10 only)

(b) At Premium: If debentures are issued at an amount higher than their face value, they are said to be issued at a premium (e.g., debentures of the face value of ₹ 10 issued for ₹ 12, i.e., at a premium of ₹ 2). Such premium on issue of debentures is a capital profit (like share premium) and hence cannot be used for paying dividends. It can be used for writing off preliminary expenses, discount and commission on issue of shares and debentures, or providing for premium payable on redemption of debentures or redeemable preference shares. The balance of the premium is shown under "Reserves and Surplus" on the liabilities side of the balance sheet.

(c) At Discount: If debentures are issued at an amount lower than their face value, they are said to be issued at a discount (e.g., debentures of, the face value of ₹ 10 issued for ₹ 9, i.e., at a discount of ₹ 1). Such discount on issue of debentures is a capital loss (like discount on issue of shares) to be written off over the period of debentures. The balance is to be shown under "Miscellaneous Expenditure (to be written off)" on the assets side of the balance sheet.

ACCOUNTING ENTRIES ON ISSUE

The following accounting entries are passed in different cases:

1. **Debentures Issued for Cash at Par:**

Bank A/c	Dr.	
To --% Debentures A/c		

2. Debentures Issued for Cash at Premium:

Bank A/c Dr.
To --% Debentures A/c
To Premium on Issue of Debentures A/c

3. Debentures Issued for Cash at Discount:

Bank A/c Dr.
Discount on Issue of Debentures A/c Dr.
To --% Debentures A/c

4. Issue of Debentures Repayable at Premium:

Bank A/c Dr.
Loss on Issue of Debentures A/c Dr.
To --% Debentures A/c
To Premium Due on Redemption of Debentures A/c

Notes:

(a) In (4) above, the amount of premium is debited to the Loss on Issue of Debentures A/c, which is a capital loss. Since the premium is payable on redemption in future, it is credited to the Premium Due on Redemption of Debentures A/c, which is in the nature of a provision for a future liability.

(b) In (4) above, the debentures are issued at par. However if the debentures are issued at premium, the amount of premium is credited to the Premium on Issue of Debentures A/c. If the debentures are issued at discount, the amount of discount will be debited to the Discount on Issue on Debentures Ale.

Illustration 1: What Journal entries would be made if a company issued 1,000 6% Debentures of ₹ 100 each: (a) at par, (b) at a premium of 10% and (c) at a discount of 10%?

Solution: **Journal of ..... Limited**

No.	Particulars		Debit (₹)	Credit (₹)
(a)	Bank A/c	Dr.	1,00,000	
	To 6% Debentures A/c			1,00,000
	[Being issue of 1,0006% Debentures of ₹ 100 each at Part]			
(b)	Bank A/c	Dr.	1.10,000	
	To 6% Debentures A/c			1,00,000
	To Premium on Issue of Debentures A/c			10,000
	[Being issue of 1,000 6% Debentures of ₹ 100 each at a premium of ₹ 10 per Debentures]			
	Note: Premium on Issue of Debentures is capital profit to be shown under the heading Reserves & Surplus in the Balance Sheet.			
(c)	Bank A/c	Dr.	90,000	
	Discount on Issue of Debentures A/c	Dr.	10,000	
	To 6% Debentures A/c			1,00,000
	[Being issue of 1,0006% Debentures of ₹ 100 each at a discount of ₹ 10 per Debenture]			
	Note: Discount on Issue of Debentures is a capital loss, to be shown under the heading Miscellaneous Expenditure [Not Written om in the Balance Sheet]			

REDEMPTION

The redemption (repayment) of debentures depends upon the type of debenture (irredeemable or redeemable) and terms of redemption (at par/premium/discount).

Redeemable debentures are to be redeemed (repaid) at a specified future date. The date of redemption is mentioned on the debenture certificate. Irredeemable Debentures are not to be redeemed at all as long as the company exists. These are repaid only when the company is wound up or liquidated.

If debentures are to be redeemed at their face value, they are said to be redeemable at par.

If debentures are to be redeemed at an amount higher than their face value, they are said to be redeemable at a premium. Such premium payable on redemption is a capital loss for the company. Such premium though payable on redemption must be provided as a liability at the time of issue itself.

If debentures are to be redeemed at an amount lower than their face value, they are said to be redeemable at a discount. Such discount is a capital profit for the company. However, such debentures are rarely issued in practice.

REDEMPTION OUT OF CAPITAL

Debentures may be redeemed out of capital or out of profits. On redemption, the debentureholders are paid out of the cash or bank account. This reduces the working capital available with the company. If no amount is set aside out of profits for such redemption, such redemption is said to be out of the capital of the company. The entries are as follows:

1. Amount Payable on Redemption:

(i) Redemption at Par:

Debentures A/c	Dr.	Face value of debenture redeemed
To Debentureholders A/c		

(ii) Redemption at a premium:

Debentures A/c	Dr.	Face value of debenture redeemed
Premium on Redemption of Debentures A/c	Dr.	Amount of premium
To Debentureholders A/c		Total

(iii) Redemption at a discount:

Debentures A/c	Dr.	Face value of debenture redeemed
To Debentureholders A/c		
To Profit on Redemption of Debentures A/c		Amount of discount

2. Payment:

Debentureholders A/c	Dr.	
To Bank A/c		

Illustration 2 (Redemption out of capital): On 1.1.2015, ABC Ltd. issued 400 8% Debentures of ₹ 1,000 each at a discount of 5%. These debentures were redeemed at a premium of 10% at the end of three years. Show the entries.

Solution: **Journal of ABC Limited**

Date	Particulars		Debit (₹)	Credit (₹)
2015				
Jan. 1	Bank A/c	Dr.	3,80,000	
	Loss on Issue of Debentures A/c	Dr.	60,000	
	To Debentures A/c			4,00,000
	To Premium on Redemption of Debentures A/c			40,000

	[Being 400 Debentures of ₹ 1,000 each issued at discount of 5% repayable at a premium of 10%]			
2015 Dec. 31	Profit and Loss A/c	Dr.	20,000	
	To Loss on Issue of Debentures A/c			20,000
	[Being 1/3rd loss on issue of debentures written off]			
2015 Dec. 31	Profit and Loss A/c	Dr.	20,000	
	To Loss on Issue of Debentures. A/c			20,000
	[Being 1/3rd loss on issue of debentures written off]			
2015 Dec. 31	Profit and Loss A/c	Dr.	20,000	
	To Loss on Issue of Debentures A/c			20,000
	[Being 1/3rd loss on issue of debentures written off]			
	Debentures A/c	Dr.	4,00,000	
	Premium on Redemption of Debentures	Dr.	40,000	
	To Debentureholders A/c			4,40,000
	[Being amount payable on redemption of debentures at premium of 10%]			
	Debentureholders A/c	Dr.	4,40,000	
	To Bank A/c			4,40,000
	[Being amount paid on redemption]			

Note: Loss on issue of debentures is equal to Discount on issue (10% of ₹ 4,00,000, ₹ 40,000 + Premium payable on redemption (5% of ₹ 4,00,000) ₹ 20,000 = Total loss of ₹ 60,000. This is written off equally (1/3) during the period of debentures, i.e., 3 years.

REDEMPTION OUT OF PROFITS

In this case, the debentureholders are paid out of the profits of the company. This may be done in following different ways: (a) create reserve out of the profits in the year of redemption. (b) create debenture redemption reserve out of profits of every year. (c) create sinking fund out of profits of every year.

RESERVE CREATED IN YEAR OF REDEMPTION

In this case, the redemption is made out of the profits earned during the year in which the debentures are redeemed. An amount equal to the face value of debentures redeemed is transferred from the profits to the General Reserve in the year of redemption. This ensures that such profits remain in the business and are not used for paying dividends. On the date of redemption of debentures, an amount equal to the face value of debentures redeemed is transferred from the profit and loss appropriation account to general reserve, by passing the following entry:

Profit and Loss (Appropriation) A/c Dr. Face value of debentures redeemed
To General Reserve A/c

Note: If the debentures are to be redeemed in yearly lots, this entry is passed every year for an amount equal to the face value of debentures redeemed in that year.

Illustration 3 (Redemption out of profit): On 31.12.2014, A Ltd. redeemed debentures of ₹ 1,00,000 issued on 1.1.2014 at a premium of 10% but of profits. Show the entries.

Solution: **Journal of A Ltd.**

Date	Particulars		Debit (₹)	Credit (₹)
2014 Dec. 31	Debentures A/c	Dr.	1,00,000	
	Premium on Redemption of Debentures	Dr.	10,000	
	To Debenture Holders A/c			1,10,000

	[Being amount payable on redemption of debentures at premium of 10%]		
	Profit and Loss (Appropriation) A/c Dr.	10,000	
	To Premium on Redemption of Debentures A/c		10,000
	[Being premium on redemption of debentures written off]		
	Debenture Holders A/c Dr.	1,10,000	
	To Bank A/c		1,10,000
	[Being amount paid on redemption]		
	Profit and Loss (Appropriation) A/c Dr.	1,00,000	
	To General Reserve A/c		1,00,000
	[Being transfer of an amount equal to face value of debentures redeemed]		

Note: The premium on redemption of debentures is adjusted against the P & L (Appropriation) A/c now, on the presumption that it was not written off in the earlier years.

Illustration 4 (Redemption in annual instalments/lots/drawings): On 1.1.2014, P Ltd. issued 4,000, 6% Debentures of ₹ 100 each at a discount of 10% repayable. in 4 years by annual equal instalments. Show the journal entries and ledger accounts. **(CA Modified)**

Solution: **Journal of P Ltd.**

Date	Particulars	Debit (₹)	Credit (₹)
2014			
Jan. 1	Bank A/c Dr.	3,60,000	
	Discount on Issue of Debentures Dr.	40,000	
	To 6% Debentures A/c		4,00,000
	[Bein debentures issued]		
Dec. 31	Debenture Interest A/c Dr.	24,000	
	To Bank A/c		24,000
	[Being interest paid on debentures: ₹ 40000 × 6%]		
	Debenture A/c Dr.	1,00,000	
	To Debenture Holders A/c		1,00,000
	[Being amount payable on redemption of 1/4th Debentures at par]		
	Debenture Holders A/c Dr.	1,00,000	
	To Bank A/c		1,00,000
	[Being amount paid on redemption]		
	Profit and Loss A/c Dr.	40,000	
	To Debenture Interest A/c		24,000
	To Discount on Issue of Debentures (See Note)		16,000
	[Being annual interest and proportionate discount on debentures adjusted]		
	Profit and Loss (Appropriation) A/c Dr.	1,00,000	
	To General Reserve A/c		1,00,000
	[Being transfer of an amount equal to face value of debentures redeemed]		
2015			
Dec. 31	Debenture Interest A/c Dr.	18,000	
	To Bank A/c		18,000
	[Being interest paid on debentures: ₹ 300.000 × 6%]		
	Debentures A/c Dr.	1,00,000	
	To Debenture Holders A/c		1,00,000
	[Being amount payable on redemption of 1/4th Debentures at par]		

	Debenture Holders A/c	Dr.	1,00,000	
	To Bank A/c			1,00,000
	[Being amount paid on redemption]			
	Profit and Loss A/c	Dr.	30,000	
	To Debenture Interest A/c			18,000
	To Discount on Issue of Debentures			12,000
	[Being annual interest and proportionate discount on debentures adjusted]			
	Profit and Loss (Appropriation) A/c	Dr.	1,00,000	
	To General Reserve A/c			1,00,000
	[Being transfer of an amount equal to face value of debentures redeemed]			
2016				
Dec. 31	Debenture Interest A/c	Dr.	12,000	
	To Bank A/c			12,000
	[Being interest paid on debentures: ₹ 2,00,000 × 6%]			
	Debenture A/c	Dr.	1,00,000	
	To Debenture Holders A/c			1,00,000
	[Being amount payable on redemption 1/4th Debentures at par]			
	Debenture Holders A/c	Dr.	1,00,000	
	To Bank A/c			1,00,000
	[Being amount paid on redemption]			
	Profit and Loss (Appropriation) A/c	Dr.	20,000	
	To Debenture Interest A/c			12,000
	To Discount on Issue of Debentures			8,000
	[Being annual interest and proportionate discount on debentures adjusted]			
	Profit and Loss (Appropriation) A/c	Dr.	1,00,000	
	To General Reserve A/c			1,00,000
	[Being transfer of an amount equal to face value of debentures redeemed]			
2017				
Dec. 31	Debenture Interest A/c	Dr.	6,000	
	To Bank A/c			6,000
	[Being interest paid on debentures: ₹ 1,00,000 × 6%]			
	Debenture A/c	Dr.	1,00,000	
	To Debentures A/c			1,00,000
	[Being amount payable on redemption of 1/4th Debentures at par]			
	Debenture Holder A/c	Dr.	1,00,000	
	To Bank A/c			1,00,000
	[Being amount paid on redemption]			
	Profit and Loss A/c	Dr.	10,000	
	To Debenture Interest A/c			6,000
	To Discount on Issue of Debentures			4,000
	[Being annual interest and proportionate discount on debentures adjusted]			
	Profit and Loss (Appropriation) A/c	Dr.	1,00,000	
	To General Reserve A/c			1,00,000
	[Being transfer of an amount equal to face value of debentures redeemed]			

Dr. 6% Debentures A/c Cr.

Date	Particulars	₹	Date	Particulars	₹
2014			2014		
Dec. 31	To Bank	1,00,000	Dec. 31	By Bank	3,60,000
	To Balance c/d	3,00,000	Jan. 1	By Discount on Issue of Debentures	40,000
		4,00,000			**4,00,000**
2015			2015		
Dec. 31	To Bank	1,00,000	Jan. 1	By Balance b/d	3,00,000
	To Balance c/d	2,00,000			
		3,00,000			**3,00,000**
2016			2016		
Dec. 31	To Bank	1,00,000	Jan. 1	By Balance b/d	2,00,000
	To Balance c/d	1,00,000			
		2,00,000			**2,00,000**
2017			2017		
Dec. 31	To Bank	1,00,000	Jan. 1	By Balance b/d	1,00,000
		1,00,000			**1,00,000**

Dr. Discount on Debentures A/c Cr.

Date	Particulars	₹	Date	Particulars	₹
2014			2014		
Jan. 1	To 6% Debentures	40,000	Dec. 31	By P & L A/c	16,000
				By Balance c/d	24,000
		40,000			**40,000**
2015			2015	By P & L A/c	12,000
Jan. 1	To Balance b/d	24,000	Dec. 31	By Balance c/d	12,000
		24,000			**24,000**
2016			2016		
Jan. 1	To Balance b/d	12,000	Dec. 31	By P & L A/c	8,000
				By Balance c/d	4,000
		12,000			**12,000**
2017			2017		
Jan. 1	To Balance b/d	4,000		By P & L A/c	4,000
		4,000	Dec. 31		**4,000**

Dr. Debenture Interest A/c Cr.

Date	Particulars	₹	Date	Particulars	₹
2014			2014		
Dec. 31	To Bank	24,000	Dec. 31	By & L A/c	24,000
		24,000			**24,000**
2015			2015		
Dec. 31	To Bank	18,000	Dec. 31	By P & L A/c	18,000
		18,000			**18,000**
2016			2016		
Dec. 31	To Bank	12,000	Dec. 31	By P & L A/c	12,000
		12,000			**12,000**

2017 Dec. 31	To Bank	6,000	2017 Dec. 31	By P & L A/c	6,000
		6,000			**6,000**

Note: Discount on debentures will be written off in proportion of the balance of Debentures A/c at each year end, i.e., 4 : 3 : 2 : 1. Thus, discount written off in the first year will be ₹ 40,000 × 4/10 = ₹ 16,000: in the second year ₹ 40,000 × 3/10 = ₹ 12,000 and so on.

DEBENTURE REDEMPTION RESERVE

In Illustration No.3, though the benefit of debentures is enjoyed for many years, the profits of only one year (year of redemption) are used for redemption. Instead, a fixed amount can be set aside out of the profits every year by making a transfer from the Profit and Loss Appropriation A/c to a Reserve A/c known as Debenture Redemption Reserve every year. The total value of debentures is divided by the period of debentures to arrive at the yearly instalment. Thus, in Illustration No. 3, the total value of debentures is ₹ 1,00,000 and the period is 5 years, so the fixed yearly instalment is ₹ 20,000. The yearly instalment is transferred from the Profit and Loss Appropriation Account to Debenture Redemption Reserve Account, every year by passing the following entry:

Profit and Loss A/c Dr. Annual instalment
To Debenture Redemption Reserve A/c

When the debentures are redeemed the balance of the Debenture Redemption Reserve is transferred to the General Reserve.

Debenture Redemption Reserve A/c Dr. Balance on date of redemption
To General Reserve A/c

SINKING FUND

If the fixed amount set aside out of profits every year is to be invested outside the business, a Sinking Fund or a Debenture Redemption Fund is created. Out of the fund, the company purchases either investments or an insurance policy. The income from the investments/policy is added back to the fund and again reinvested. The investments are sold or the policy is surrendered on the date of redemption in order to obtain money required to pay off the debentureholders. The entries are as follows:

1st Year :

1. **Annual Instalment:**
   Profit and Loss Appropriation A/c Dr. Annual instalment
   To Sinking Fund A/c
2. **Investment Made:**
   Sinking Fund Investments A/c Dr. Annual instalment
   To Bank A/c

2nd Year Onwards:

1. **Interest Received on Investment:**
   Bank A/c Dr. Amount of instalment
   To Sinking Fund A/c
2. **Annual Instalments:**
   Profit and Loss Appropriation A/c Dr. Annual instalment
   To Sinking Fund A/c

3. Investments Made:

Sinking Fund Investments A/c	Dr.	Annual instalment + Interest
To Bank A/c		

Year of Redemption

1. Interest Received on Investments:

Bank A/c	Dr.	Amount of interest
To Sinking Fund A/c		

2. Annual Instalment:

Profit and Loss Appropriation A/c	Dr.	Annual instalment
To Sinking Fund A/c		

3. Investment Sold:

Bank A/c	Dr.	Sale Price Received
To Sinking Fund Investments A/c		Cost
To Sinking Fund A/c		Profit

Note: In case of loss, the loss is debited to the Sinking Fund A/c.

4. Sinking Fund transferred to General Reserve:

Sinking Fund A/c	Dr.	Balance
To General Reserve A/c		Profit

Notes:

1. In case an insurance policy is purchased, a Sinking Fund Insurance Policy A/c is opened instead of Sinking Fund Investment A/c.
2. The Annual Instalment can be determined with reference to the factor in Sinking Fund Tables, by the formula:
   Annual Instalment = Amount of Redemption × Factor in S.F. Table

For example, the S.F. Table shows that 0.31720856 at 5% compound interest in 3 years will become ₹ 1. If amount of redemption. is ₹ 6,60,000, annual instalment to be made towards sinking fund is 6,60,000 × 0.31720856 = ₹ 2,09,357.65.

Illustration 5 (Sinking Fund): ITC Ltd. issued 1,100 5% debentures of ₹ 100 each on 1st January, 2012 redeemable at par. The company decided to set aside every year a sum of ₹ 34,893 to be invested @ 5% outside the business. The investments were sold at ₹ 71,580 at the end of the third year and the debentures were redeemed. Give journal entries. Also prepare Sinking Fund Account and Sinking Fund Investments Account. **(CMA Modified)**

Solution: **Journal of ITC Ltd.**

Date	Particulars		Debit (₹)	Credit (₹)
2012				
Jan. 1	Bank A/c	Dr.	1,10,000	
	To 5% Debentures A/c			1,10,000
	[Being 1,100 debentures of ₹ 100 each issued at par repayable at par]			
Dec. 31	Profit and Loss Appropriation A/c	Dr.	34,893	
	To Sinking Fund A/c			34,893
	[Being amount set aside from profits for redemption of debentures]			
	Sinking Fund Investments A/c	Dr.	34,893	
	To Bank A/c			34,893
	[Being amount invested out of sinking fund]			
2013				
Dec. 31	Bank A/c	Dr.	1,745	
	To Sinking Fund A/c			1,745
	[Being interest received on Sinking Fund Investments: 5% × 34 893]			

	Profit and Loss Appropriation A/c	Dr.	34,893	
	To Sinking Fund A/c			34,893
	[Being amount set aside from profits for redemption of debentures]			
	Sinking Fund Investments A/c	Dr.	36,638	
	To Bank A/c			36,638
	[Being amount invested out of sinking fund: 34,893 + 1,745]			
2014				
Dec. 31	Bank A/c	Dr.	3,577	
	To Sinking Fund A/c			3,577
	[Being interest received on Sinking Fund Investments: 5% × 71,531]			
	Profit and Loss A/c	Dr.	34,893	
	To Sinking Fund A/c			34,893
	[Being amount set aside from profits for redemption of debentures]			
	Bank A/c (sale price)	Dr.	71,58	
	To Sinking Fund Investments A/c (cost)			71,531
	To Sinking Fund A/c (profit)			49
	[Being amount received on sale of sinking fund investments]			
	5% Debentures A/c	Dr.	1,10,000	
	To Debenture Holders A/c			1,10,000
	[Being amount payable on redemption of debentures]			
	Debenture Holders A/c	Dr.	1,10,000	
	To Bank A/c			1,10,000
	[Being amount paid on redemption of Sinking Fund A/c on redemption of debentures]			
	Sinking Fund A/c	Dr.	1,10,050	
	To General Reserve A/c			1,10,050
	[Being transfer of Sinking Fund A/c on redemption of debentures]			

Dr. **Sinking Fund Account** **Cr.**

Date	Particulars	₹	Date	Particulars	₹
2012			2012		
Dec. 31	To Balance c/d	34,893	Dec. 31	By P & L Appropriation A/c	34,893
		34,893			**34,893**
2013			2013		
Dec. 31	To Balance c/d	71,531	Jan. 1	By Balance b/d	34,893
				By Bank (interest)	1,745
			Dec. 31	By P & L Appropriation A/c	34,893
		71,531			**71,531**
2014			2014		
Dec. 31	To General Reserve	1,10,050	Jan. 1	By Balance b/d	71,531
				By Bank (interest)	3,531
			Dec. 31	By P & L Appropriation A/c	34,893
				By SF Investment (profit)	49
		1,10,050			**1,10,050**

Dr. **Sinking Fund Investment Account** **Cr.**

Date	Particulars	₹	Date	Particulars	₹
2012			2012		
Dec. 31	To Bank A/c	34,893	Dec. 31	By Balance c/d	34,893
		34,893			**34,893**

2013			2013		
Jan. 1	To Balance b/d	34,893	Dec. 31	By Balance c/d	71,531
Dec. 31	To Bank A/c	36,638			
		71,531			**71,531**
2014			2014		
Jan. 1	To Balance b/d	71,531	Dec. 31	By Bank A/c (sale)	71,580
Dec. 31	To Sinking Fund (profit on sale)	49			
		71,580			**71,580**

Notes:

1. Interest on Sinking Fund Investments is credited to Sinking Fund A/c, and not to Interest Received A/c or Profit and Loss A/c.
2. Profit on sale of Sinking Fund Investment is credited to Sinking Fund A/c and not to Profit and Loss A/c.
3. In the second year, Investment is equal to yearly instalment (₹ 34,893) plus interest (₹ 1,745).
4. In the year of redemption, no investments are made.

Illustration 6: On 30th September, 2013, the following balance stood in the books of S.P. Ltd.

Particulars	₹	Particulars	₹
7% Second Mortgage Debenture Stock	4,00,000	Sinking Fund Investments:	
Income Received on Sinking Fund Investments	14,500	(a) ₹ 80,000, 5% State Development Loans	76,000
Discount of Issue of Debentures	25,000	(b) ₹ 90,000, 6% National Defence Bonds	1,00,000
Sinking Fund	3,65,500	(c) ₹ 70,000, 7% Plan Progress Loans	70,000
		(d) ₹ 1,80,000, 7½% Central Securities	1,85,000

On the same day, the investments were sold: the 5% State Development loans at 90, the 6% National Defence Bonds at par, the 7% Plan Progress Loans at 115 and the 7½% Central Securities at 120. On 1st Oct., 2013, the debentures of ₹ 3,00,000 were redeemed at a premium of 2½%. On the very same day, 8% Moon Landing Investments of ₹ 1,00,000 were purchased at a premium of 3%.

Annual contribution for redemption was ₹ 50,000. Ignore interest.

Prepare the following accounts: (i) Debenture Stock; (ii) Sinking Fund; (iii) Sinking Fund Investment and (iv) General Reserve. **(CA Modified)**

Solution:

Dr. 7% Debentures Stock Account Cr.

Particulars	₹	Particulars	₹
To Bank A/c	3,00,000	By Balance b/d	4,00,000
To Balance c/d	1,00,000		
	4,00,000		**4,00,000**

Dr. Sinking Fund Account Cr.

Particulars	₹	Particulars	₹
To General Reserve (on debenture redemption)	3,00,000	By Balance b/d	3,65,500
To Premium on redemption of debentures	7,500	By SF Investment (profit on sale)	27,500
To Discount on issue of debentures	18,750	By Interest of SF Investments	14,500
To Balance c/d	1,31,250	By P & L Appropriation A/c (yearly instalment)	50,000
	4,57,500		**4,57,500**

Dr. Sinking Fund Investment Account Cr.

Particulars	₹	Particulars	₹
To Balance b/d	4,31,000	By Bank A/c (investments sold)	4,58,500
To Sinking Fund (profit on sale)	27,500	By Balance c/d	1,03,000
To Bank A/c (purchase)	1,03,000		
	5,61,500		**5,61,500**

Notes:

1. Investments Sold:

5% State Development Loans:	₹ 80,000 × 90/100	=	72,000
6% National Defence Bonds:	₹ 90,000 at par	=	90,000
7% Plan Progress Loans:	₹ 70,000 × 115/100	=	80,500
7.5% Central Securities:	₹ 1,80,000 × 120/100	=	2,16,000
			4,58,500

   Profit = ₹ 4,58,500 – ₹ 4,31,000 (Cost) = ₹ 27,500

2. Premium on redemption of 3,000 debentures (₹ 7,500) and proportionate discount on issue of these 3,000 debentures (25,000 × 3/4 = ₹ 18,750) are adjusted against the Sinking Fund.
3. Amount equal to face value of debentures redeemed (₹ 3,00,000) is transferred from the Sinking Fund to the General Reserve on redemption.

Illustration 7 (Reserve Fund): The summarised Balance Sheet of Successful Ltd. on 31st December, 2014 was:

Liabilities	₹	Assets	₹
Share Capital:		Fixed Assets	2,10,000
Ordinary Shares of ₹ 1 each fully paid	2,00,000	Debentures Redemption	
General Reserve	80,000	Reserve Fund Investments	50,000
Debenture Redemption Reserve Fund	50,000	Current Assets Including Balance at Bank	2,40,000
Premium on Redemption of Debentures A/c	1,000		
5% Debentures	50,000		
Current Liabilities	1,19,000		
	5,00,000		**5,00,000**

The directors decided to – (a) repay the debentures including premium of 2 per cent. (b) Make a bonus issue to the ordinary shareholders of one share for every two shares held in order to capitalise part of the undistributed profits. The appropriate resolution were passed, the above transactions were duly completed. Deb. Redemption Reserve Fund Investments were sold for ₹ 50,000.

You are required to show: (a) The appropriate journal entries to record the transactions in the books of the company and (b) The Balance Sheet as it would appear after the completion of the transactions. **(T.Y.B.Com./BAF, Modified, M.U.)**

Solution: Journal of Successful Ltd.

Date	Particulars		Debits (₹)	Credit (₹)
2014				
Dec. 31	Bank A/c	Dr.	50,000	
	To Debenture Redemption Reserve Fund Investments A/c			50,000
	[Being sale of Debenture Redemption Reserve Fund Investments for redemption of debentures]			

	Debentures A/c	Dr.	50,000	
	Premium on Redemption of Debentures	Dr.	1,000	
	To Debenture Holders A/c			51,000
	[Being amount payable on redemption of debentures at a premium of 2%]			
	Debenture Holders A/c	Dr.	51,000	
	To Bank A/c			51,000
	[Being amount paid on redemption]			
	Debenture Redemption Reserve Fund A/c	Dr.	50,000	
	To General Reserve A/c			50,000
	[Being transfer of Debenture Redemption Reserve Fund A/c on redemption of debentures]			
	General Reserve A/c	Dr.	1,00,000	
	To Bonus to Shareholders A/c			1,00,000
	[Being capitalisation of reserves for issue of bonus shares]			
	Bonus to Shareholders A/c	Dr.	1,00,000	
	To Equity Share Capital A/c			1,00,000
	[Being issue of 1,00,000 fully paid shares as bonus shares]			

Balance Sheet as on 31st March, 2014

Liabilities	₹	₹	Assets	₹	₹
Share Capital		--------?	**Fixed Assets**		2,10,000
Authorised:			(Sundry)		
Issue, Subscribed and Paid up:			**Investments**		Nil
3,00,000 Equity Shares of ₹ 1 each (Out of the above, 1,00,000 shares are allotted as Bonus Shares)		3,00,000	**Current Assets** Cash and Bank (see note)		2,39,000
Reserves and Surplus:			**Loans and Advances**		Nil
General Reserve: b/d	80,000		**Misc. Expenditure (not w/o)**		Nil
Add: Tfd. from Debenture Redemption Reserve Fund	50,000				
	1,30,000				
Less: Utilised for issue of Bonus Shares	1,00,000	30,000			
Secured Loan		Nil			
Unsecured Loans		Nil			
Current Liabilities and Provisions:					
A. Current Liabilities		1,19,000			
B. Provisions		Nil			
		4,49,000			**4,49,000**

Notes:

1. Cash Balance:

Cash and Bank b/d	2,40,000
Add: Sale of Investments	50,000
	2,90,000

Less: Debentures redeemed	51,000
	2,39,000

2. Premium on redemption of debentures:

Opening balance b/d	1,000
Less: Adjusted during year	1,000
	Nil

Illustration 8 (Sinking Fund Insurance Policy): ABC Ltd. issued 9% debentures of ₹ 2,00,000 on 1st January, 2012 redeemable at par. The company decided to take a 5 years Sinking Fund Insurance Policy for providing for redemption. The annual premium payable of 1st January every year is ₹ 37,000. The value of the policy increases every year by 4%. Prepare the Sinking Fund A/c and Sinking Fund Insurance Policy A/c for 5 years. **(T.Y.B.Com., M.U.)**

Solution:

Dr. Sinking Fund Account Cr.

Date	Particulars	₹	Date	Particulars	₹
2012			2012		
Dec. 31	To Balance c/d	38,480	Dec. 31	By P & L Appropriation A/c	37,000
				By SF Ins. Policy A/c (see note)	1,480
		38,480			**38,480**
2013			2013		
Dec. 31	To Balance c/d	78,499	Jan. 1	By Balance b/d	38,480
			Dec. 31	By P & L Appropriation A/c	37,000
				By SF Ins. Policy A/c	3,019
		78,499			**78,499**
2014			2014		
Dec. 31	To Balance c/d	1,20,119	Jan. 1	By Balance b/d	78,499
			Dec. 31	By P & L Appropriation A/c	37,000
				By SF Ins. Policy A/c	4,620
		1,20,119			**1,20,119**
2015			2015		
Dec. 31	To Balance c/d	1,63,404	Jan. 1	By Balance b/d	1,20,119
			Dec. 31	By P & L Appropriation A/c	37,000
				By SF Ins. Policy A/c	6,285
		1,63,404			**1,63,404**
2016			2016		
Dec. 31	To General Reserve	2,08,420	Jan. 1	By Balance b/d	1,63,404
			Dec. 31	By P & L Appropriation A/c	37,000
				By SF Insurance Policy A/c	8,016
		2,08,420			**2,08,420**

Dr. Sinking Fund Insurance Policy Account Cr.

Date	Particulars	₹	Date	Particulars	₹
2012			2012		
Jan. 1	To Bank A/c	37,000	Dec. 31	By Balance c/d	38,480
Dec. 31	To Sinking Fund A/c (4% × 37,000)	1,480			
		38,480			**38,480**

2013			2013		
Jan.1	To Balance b/d	38,480			
Dec.31	To Bank A/c	37,000	Dec. 31	By Balance c/d	78,499
	To Sinking Fund A/c (4% × 75,480)	3,019			
		78,499			**78,499**
2014			2014		
Jan. 1	To Balance b/d	78,499	Dec. 31	By Balance c/d	1,20,119
Dec. 31	To Bank A/c	37,000		(policy matured)	1,63,404
	To Sinking Fund A/c (4% × 1,15,499)	4,620			
		1,20,119			**1,20,119**
2015			2015		
Jan. 1	To Balance b/d	1,20,119	Dec. 31	By Bank A/c	1,63,404
Dec. 31	To Bank A/c	37,000			
	To Sinking Fund A/c (4% × 1,57,119)	6,285			
		1,63,404			**1,63,404**
2016			2016		
Jan. 1	To Balance b/d	1,63,404	Dec. 31	By Bank A/c (policy matured)	2,08,420
Dec. 31	To Bank A/c	37,000			
	To Sinking Fund A/c (4% × 200, 404)	8,016			
		2,08,420			**2,08,420**

Note: The policy is taken out on 1st January, 2012. The increase in first year (4% × 37,000 = 1,480) is credited to the Sinking Fund A/c on 31.12.12. Similarly, the 4% increase in 1991 is of ₹ 75,480 (38,480 + 37,000); in 1992 is on ₹ 1,15,499 (73,499 + 37,000); in 1993 on ₹ 1,57,119 (1,20,119 + 37,000) and in 1994 on ₹ 2,00,404 (1,63,404 + 37,000).

Illustration 9 (Conversion): On 10th January, 2010, X Ltd. issued 10,000 6% Debentures of ₹ 100 each redeemable at par after 15 years. The term of issue, however, provided that the debentures could be redeemed by giving 6 months notice at any time after 5 years at a premium of 4% either by payment in cash or by allotment of Preference Shares and/or other debentures according to the option of the debentureholders.

On 10th April, 2014, the company informed the debenture holders to redeem the debentures on 1st October, 2014 either by payment in cash or by allotment of 8% Preference Shares of ₹ 100 each at ₹130 per share or 7% 2nd debenture of ₹ 100 each at ₹ 96 per debentures.

Holders of 4,000 debentures accepted the offer of the Preference Shares, holders of 4,800 debentures accepted the offer of 7% 2nd debentures and the rest demanded cash.

Give journal entries recording the above redemption. **(CA Modified)**

Solution: **Journal of X Ltd.**

Date	Particulars		Debit ₹	Credit ₹
1	6% Debentures A/c	Dr.	10,00,000	
	Premium on Redemption of Debentures A/c	Dr.	40,000	
	To Debenture Holders A/c			10,40,000
	[Being amount payable on redemption of 10,000 debentures at premium of 4%)			

2	Debenture Holders A/c Dr.	4,16,000	
	To 8% Preference Share Capital A/c		3,20,000
	To Share Premium A/c		96,000
	[Being preference shares of ₹ 100 each at a premium of ₹ 30 each allotted to 4,000 debenture Holders]		
3	Debenture Holders A/c Dr.	4,99,200	
	Discount on Issue of Debentures A/c Dr.	20,800	
	To 7% Debentures of ₹ 100		5,20,000
	[Being 7% debentures of ₹ 100 each at a discount of 4% allotted to 4,800 debenture Holders]		
4	Debenture Holders A/c Dr.	1,24,800	
	To Bank A/c		1,24,800
	[Being amount paid to 1,200 debenture Holders on redemption]		
5	Share Premium A/c Dr.	60,800	
	To Premium on Redemption of Debentures A/c		40,000
	To Discount of Issue of Debentures A/c		20,800
	[Being premium on redemption of debentures and discount on issue of debentures written off]		
6	Profit and Loss (Appropriation) A/c Dr.	1,20,000	
	To General Reserve A/c		1,20,000
	[Being transfer of an amount equal to face value of debentures redeemed in cash]		

Notes:

1.	Conversion into Preference Shares:	₹
	Total Amount Due: Holders of 4,000 debentures × ₹ 104	4,16,000
	Preference Share Capital: 4,16,000 × 100/130	3,20,000
	Premium on issue of Preference Shares: Balance	96,000
2.	Conversion into New Debentures:	₹
	Total Amount Due: Holders of 4,800 Debentures × ₹ 104	4,99,200
	New Debentures: 4,99,200 × 100/96	5,20,000
	Discount on Issue of New Debentures: Balance	20,800
3.	Cash Paid: Holders of 1,200 Debentures × ₹ 104	1,24,800

Illustration 10: Hindustan Manufacturing Limited gave notice of its intention to redeem its 6% Debentures, amounting to ₹ 4,00,000 of ₹ 100 each at ₹ 102 and offered the debentureholders the following three options, to apply the redemption money to subscribe for:

(a) 5% cumulative preference shares of ₹ 20 each at ₹ 22.50 per share

(b) 6% debentures at ₹ 96 and

(c) to have their holdings redeemed for cash.

Debenture Holders for ₹ 1,71,000 accepted the proposal (a)

Debenture Holders for ₹ 1,44,000 accepted the proposal (b)

Remaining debenture Holders accepted the proposal (c)

Pass the necessary journal entries to record the above transactions in the books of the company.

(T.Y.B.Com., Modified, M.U., April 96)

Solution: **Journal of Hindustan MFG. Co. Ltd.**

Date	Particulars		Debit (₹)	Credit (₹)
1	6% Debentures A/c	Dr.	4,00,000	
	Premium on Redemption of Debentures A/c	Dr.	8,000	
	To Debenture Holders A/c			4,08,000
	[Being amount payable on redemption of debentures at premium of 2%]			
2	Debenture Holders A/c	Dr.	1,74,420	
	To 5% Cumulative Preference Share Capital A/c			1,55,040
	To Share Premium A/c			19,380
	[Being 7,752 shares of ₹ 20 issued at premium of ₹ 2.50 against redemption of debentures worth ₹ 1,71,000]			
3	Debenture Holders A/c	Dr.	1,46,880	
	Discount on Issue of 6% Debentures A/c	Dr.	6,120	
	To 6% Debentures (New) A/c			1,53,000
	[Being new debentures of ₹ 100 issued @ ₹ 96 each against redemption of debentures worth ₹ 1,44,000)			
4	Debenture Holders A/c	Dr.	86,700	
	To Bank A/c			86,700
	[Being amount paid on redemption of part debentures in cash]			
5	Profit and Loss Appropriation A/c	Dr.	85,000	
	To General Reserve A/c			85,000
	[Being transfer of amount equal to face value of debentures redeemed in cash]			

Notes:

1. Options for Redemption: **₹**

(a) Preference Shares of ₹ 20 @ ₹ 22.50:

Face value of Debentures redeemed against Preference Shares	1,71,000
Add: 2% Premium	3,420
Total Amount Due	**1,74,420**
No. of Preference Shares Issued (1,47,420/22.50) = 7,752	1,55,040
Face value of Preference Shares (7,752 × ₹ 20)	19,380
Premium on issue of Preference Shares (7,752 × ₹ 2.50)	**1,74,420**

(b) 6% Debentures of ₹ 100 @ ₹ 96:

Face value of Debentures redeemed against New Debentures	1,44,000
Add: 2% Premium	2,880
Total Amount Due	**1,46,880**
No. of Debentures Issued (1,46,880/96) = 1,530	1,53,000
Face value of Debentures (1,530 × 100)	6,120
Less: Discount on Issue of Debentures (1,530 × ₹ 4)	**1,46,880**

(c) Cash:

Face value of Debentures redeemed against Cash (balance) (4,00,000 – 1,71,000 – 1,44,000)	85,000
Add: 2% Premium	1,700
Total Amount Due and Paid in Cash	**86,700**

2. Entry (5) is passed to transfer the amount equal to face value of debentures redemption in cash to general reserves assuming redemption out of profits; if redemption is assumed to be out of capital, it will not be passed.

Illustration 11: Beeta Limited had issued 5,000 12% Debentures of ₹ 100/- each redeemable on 31st December, 1995 at a premium of 5%. The company offered three options to Debentureholders as follows: (i) 14% Preference Shares of ₹ 10 at ₹ 12; (ii) 15% Debentures of ₹ 1,500 debentures; (iii) Redemption in cash.

The option were accepted as under: (i) option by holders of 1,500 debentures; (ii) option by holders of 1,500 debentures; (iii) option by holders of 2,000 debentures. The redemption was carried out by the company. Show journal entries. **(T.Y.B.Com./BAF, Modified, M.U., Oct. 2006)**

Solution: Journal of Beeta Ltd.

1995 Dec. 31	Particulars		Debit (₹)	Credit (₹)
1	12% Debentures A/c	Dr.	5,00,000	
	Premium on Redemption of Debentures A/c	Dr.	25,000	
	To Debentureholders A/c			5,25,000
	[Being amount payable on redemption of 5,000 debentures at premium of 5%]			
2	Debenture Holders A/c	Dr.	1,57,500	
	To 14% Preference Share Capital A/c			1,31,250
	To Share Premium A/c			26,250
	[Being shares issued at premium against redemption of 1,500 debentures]			
3	Debenture Holders A/c	Dr.	1,57,500	
	To 15% Debentures A/c			1,57,500
	[Being new debentures issued against redemption of existing 1,500 debentures]			
4	Debentures A/c	Dr.	2,10,000	
	To Bank A/c			2,10,000
	[Being amount paid on redemption of 2,000 debentures in cash]			
5	Share Premium A/c	Dr.	25,000	
	To Premium on Redemption of Debentures			25,000
	[Being premium on redemption of debentures adjusted]			

Notes:

1. Options for Redemption: ₹

(a) Preference Shares of ₹ 10 @ ₹ 12:

Face value of Debentures redeemed against Preference Shares (1,500 × 100)	1,50,000
Add: 5% Premium	7,500
Total Amount Due	**1,57,500**
No. of Preference Shares Issued (1,57,500/12) = 13,125	
Face value of Preference Shares (13,125 × ₹ 10)	1,31,250
Premium on issue of Preference Shares (13,125 × ₹ 2)	26,250
	1,57,500

(b) 15% Debentures of ₹ 100 at par:

Face value of Debentures redeemed against New Debentures (1,500 × 100)	1,50,000
Add: 5% Premium	7,500
Total Amount Due	**1,57,500**
No. of Debentures Issued (1,57,500/100) = 1,575	
Face value of Debentures 1,575 × 100	**1,57,500**

(c) Cash:

Face value of Debentures redeemed against Cash (balance) (5,00,00 – 1,50,000 × 1,50,000)	2,00,000
Add: 5% Premium	10,000
Total Amount Due and Paid in Cash	**2,10,000**

Illustration 12: M/s Solvent Ltd. intends to redeem its Secured Debts on 1st April, 2014 when its financial position indicated:

Particulars	₹ in lakhs		
SOURCES			
I. Own Fund:			
1. Equity Share Capital	7.00		
2. Preference Share Capital	1.00	8.00	
3. Reserves and Surplus:			
Sinking Fund	3.85		
Profit and Loss Account	0.90	4.75	12.75
II. Owed Fund:			
1. 10% Debentures Stock Redeemable @ Premium of 10% (Secured against Fixed Assets)		4.00	
2. Public Deposits		0.25	4.25
Total Fund			**17.00**
APPLICATIONS			
I. Fixed Assets:			10.00
II. Sinking Fund Investments:			
₹ 80,000, 5% Infrastructure Bonds		0.76	
₹ 90,000, 6% National Defence Bonds		1.00	
₹ 70,000, 7½% State Finance Corporation Bonds		0.70	
₹ 1,90,000, 7% IDBI Securities		1.85	4.31
Working Capital			2.69
Total Assets			**17.00**

The Debenture Holders were given option to get:

1. Cash on Redemption OR
2. Equity Shares of ₹ 10/- each @ premium of ₹ 5/- per share OR
3. 15% Debentures of ₹ 100/- each @ premium of ₹ 10 per debenture.

Accordingly:

(a) 50% Debenture Holders opted for 1st option.
(b) 30% Debenture Holders opted for 2nd option.
(c) 20% Debenture Holders opted for 3rd option.
(d) All investments were sold @ 15% below cost.

Pass necessary journal entries and prepare revised Balance Sheet after redemption.

(T.Y.B.Com., Modified, M.U.)

Solution: Journal of Solvent Limited

No.	Particulars		Debit (₹)	Credit (₹)
1	10% Debentures Stock A/c	Dr.	4,00,000	
	Premium on Redemption of Debentures A/c	Dr.	40,000	
	To Debenture Holders A/c			4,40,000
	[Being amount due on redemption]			

2	Cash/Bank A/c	Dr.	3,66,350	
	Sinking Fund A/c (loss)	Dr.	64,650	
	To Sinking Fund Investments A/c			4,31,000
	[Being amount received on sale of sinking fund investments]			
3	Debenture Holders A/c	Dr.	2,20,000	
	To Cash/Bank A/c			2,20,000
	[Being amount paid on redemption to 50% of debenture Holders]			
4	Debenture Holders A/c	Dr.	1,32,000	
	To Equity Share Capital A/c			88,000
	To Share Premium A/c			44,000
	[Being shares issued at premium against redemption to 30% of debentureholders]			
5	Debenture Holders A/c	Dr	88,000	
	To 15% Debentures A/c			80,000
	To Debenture Premium A/c			8,000
	[Being debentures issued at premium against redemption to 20% of debentureholders]			
6	Sinking Fund A/c	Dr.	3,20,350	
	To Profit and Loss A/c			3,20,350
	[Being transfer on redemption of debentures: 3,85,000 – 64,650]			
7	Share Premium A/c	Dr	40,000	
	To Premium on Redemption of Debentures A/c			40,000
	[Being premium on redemption of debentures adjusted]			

Balance Sheet as on 1st April, 2014

Particulars	₹	₹	₹
SOURCE OF FUNDS			
I. Own Fund:			
1. Share Capital:			
Authorised:		?	
Issued, Subscribed and Paid up:			
(i) Preference Shares		1,00,000	
(ii) 78,800 Equity Shares of ₹ 10 each		7,88,000	8,88,000
2. Reserves and Surplus:			
(i) Sinking Fund: b/d	3,85,000		
Less: Loss on SF Investment	64,650		
	3,20,350		
Less: Tfd. To P & L A/c	3,20,350	Nil	
(ii) Share Premium A/c: b/d	Nil		
Add: Fresh issue	44,000		
Less: Premium on redemption of debentures written off	40,000	4,000	
(iii) Profit and Loss A/c: b/d	90,000		
Add: Tdf. from Sinking Fund	3,20,350	4,10,350	
(iv) Debentures Premium (during the year)		8,000	4,22,350
			14,15,350

II. Owned Funds			
(1) 15% Debentures		80,000	
(2) Public Deposits		25,000	1,05,000
APPLICATION OF FUNDS			
I. Fixed Assets			10,00,000
II. Working Capital (see note)			4,15,350
			14,15,350

Notes:

1. Working Capital:	**₹**	**₹**
Balance b/d		2,69,000
Add: Cash/Bank A/c balance:		
Cash received on sale of investments	3,66,350	
Less: Cash paid to Debentureholders	2,20,000	1,46,350
Balance		**4,15,350**

2. It is assumed that the Sinking Fund is for redemption of debentures

Illustration 13: Bharat Ltd. issued 50,000 15% debentures of ₹ 1,000 each at ₹ 952 per debenture. The debentures are redeemable in five annual instalments of ₹ 200 each. It is decided to writ off discount in proportion to the amount of debenture finance usage over the various years.

You are asked to:

(i) Prepare statement for write off of discount over the five year period.

(ii) Pass appropriate journal entries in year 1 and year 2.

(iii) Show the disclosure in final accounts of year 1 and year 2.

(T.Y.BAF/B.Com., Modified, M.U., Apr. 98/2008)

Solution: **Journal of Bharat Limited**

No.	Particulars		Debit (₹)	Credit (₹)
Year 1				
1	Bank A/c	Dr.	4,76,00,000	
	Discount on Issue of Debentures A/c	Dr.	24,00,000	
	To 15% Debentures A/c			5,00,00,000
	[Being 50,000 debentures of ₹ 1,000 each issued @ ₹ 952 each vide Board resolution dt....]			
2	Debenture Interest A/c	Dr.	75,00,000	
	To Bank A/c			75,00,000
	[Being Interest @ 15% p.a. on debentures of ₹ 5,00,00,000]			
3	Profit and Loss A/c	Dr.	83,00,000	
	To Debenture Interest A/c			75,00,000
	To Discount on Interest of Debenture A/c			8,00,000
	[Being above expenses transferred]			
4	15% Debentures A/c	Dr.	1,00,00,000	
	To Bank A/c			1,00,00,000
	[Being 1st instalment of ₹ 200 each on 50,000 debentures repaid]			
Year 2				
5	Debenture Interest A/c	Dr.	60,00,000	
	To Bank A/c			60,00,000
	[Being interest @ 15% p.a. on debentures of ₹ 4,00,00,000]			

6	Profit and Loss A/c	Dr.	66,40,000	
	To Debenture Interest A/c			60,00,000
	To Discount on Issue of Debenture A/c			6,40,000
	[Being above expenses transferred]			
7	15% Debentures A/c	Dr.	1,00,00,000	
	To Bank A/c			1,00,00,000
	[Being 2nd instalment of ₹ 200 each on 50,000 debentures repaid]			

Profit and Loss Account for the Year Ended (Extracts)

	Year 2	Year 1
Expenses	60,00,000	75,00,000
Debenture Interest	6,40,000	8,00,000

Balance Sheet as on ... [Extracts]

Particulars	Year 2	Year 1
SOURCES OF FUNDS		
Owed Funds		
Secured Loans:		
50,000 15% Debentures of ₹ 600 each (previous year ₹ 800 each); repayable in yearly instalments of ₹ 200 per debentures	3,00,00,000	4,00,00,000
APPLICATION OF FUNDS		
Misc. Expenditure (to the extent not adjusted)		
Discount on Issue of Debentures	9,60,000	16,00,000

Note:

Statement Showing Discount Write-off

Year	Proportion	Discount W/O
1	24,00,000 × 5/15	8,00,000
2	24,00,000 × 4/15	6,40,000
3	24,00,000 × 3/15	4,80,000
4	24,00,000 × 2/15	3,20,000
5	24,00,000 × 1/15	1,60,000
		24,00,000

Illustration 14 (Redemption by Conversion): Hindustan Ltd. had issued 5,000 – 12% debentures of ₹ 100 each redeemable on 31st December, 2007 at par.

The company offered three options to the debentureholders as under:

(i) 14% preference shares of ₹ 10 each at ₹ 12

(ii) 15% debentures of ₹ 100 each at par

(iii) Redemption in cash

The options were accepted as under:

Option 1 by holders of 1,500 debentures

Option 2 by holders of 1,500 debentures

Option 3 by holders of 2,000 debentures

The redemption was carried out by the company.

Pass Journal Entries in the books of Hindustan Ltd. without narration.

(T.Y.BAF, Modified, M.U. March 2008)

Solution: **Hindustan Ltd. Journal**

No.	Particulars		Debit (₹)	Credit (₹)
1	12% Debentures A/c	Dr.	5,00,000	
	To 12% Debenture Holders A/c (5,000 × 100)			5,00,000
2	12% Debenture Holders A/c	Dr.	1,50,000	
	To 14% Preference Share Capital (12,500 × 10)			1,25,000
	To Securities Premium A/c			25,000
3	12% Debenture Holders A/c	Dr.	1,50,000	
	To 15% Debentures A/c (1,500 × 100)			1,50,000
4	12% Debenture Holders A/c	Dr.	2,00,000	
	To Bank A/c (2,000 × 100)			

Working Note:

1. Number of Preference Shares Issued = $\frac{1,50,000}{12} = 12,500$
2. Redemption in cash is assumed to be out of capital.

Illustration 15 (Sinking Fund Method): A company issued 10,000 – 8% debentures of ₹ 100 each at par on 1st January, 2012; redeemable on 31st December, 2015 at par. The company decided to invest money outside business to provide funds for redemption. The outside investments were made @ 5% p.a. on the last day of each year.

On 31st December, 2015, the company sold all investments for ₹ 7,25,000 and redeemed the 8% debentures. The sinking fund value of ₹ 1 @ 5% interest for 4 years is 0.23012.

Prepare for all the four years:

1. 8% Debentures Account
2. Sinking Fund Account
3. Sinking Fund Investment Account. **(T.Y.BAF, Modified, M.U., 2006)**

Note: Calculations to be rounded off to the nearest rupee.

Solution:

1.

Dr. **8% Debentures A/c** **Cr.**

Date	Particulars	₹	Date	Particulars	₹
2012			2012		
Dec. 31	To Balance c/d	10,00,000	Jan. 1	By Cash/Bank A/c	10,00,000
		10,00,000			**10,00,000**
2013			2013		
Dec. 31	To Balance c/d	10,00,000	Jan. 1	By Balance b/d	10,00,000
		10,00,000			**10,00,000**
2014			2014		
Dec. 31	To Balance c/d	10,00,000	Jan. 1	By Balance b/d	10,00,000
		10,00,000			**10,00,000**
2015			2015		
Dec. 31	To Bank A/c	10,00,000	Dec. 31	By Balance b/d	10,00,000
		10,00,000			**10,00,000**

2.

Dr. Sinking Fund A/c Cr.

Date	Particulars	₹	Date	Particulars	₹
2012			2012		
Dec. 31	To Balance c/d	2,30,120	Jan. 1	By Profit and Loss Appr. A/c	2,30,120
		2,30,120			**2,30,120**
2013			2013		
Dec. 31	To Balance c/d	4,71,746	Jan. 1	By Balance b/d	2,30,120
			Dec. 31	By Profit and Loss Appr. A/c	2,30,120
			Dec. 31	By Bank A/c (interest)	11,506
		4,71,746			**4,71,746**
2014			2014		
Dec. 31	To Balance c/d	7,25,453	Jan. 1	By Balance b/d	4,71,746
			Dec. 31	By Profit and Loss Appr. A/c	2,30,120
			Dec. 31	By Bank A/c (Interest)	23,587
		7,25,453			**7,25,453**
2015			2015		
Dec. 31	To Sinking Fund Investment A/c	453	Jan. 1	By Balance b/d	7,25,453
Dec. 31	To General Reserve A/c	9,91,393	Dec. 31	By Profit and Loss Appr. A/c	2,30,120
			Dec. 31	By Bank A/c (interest)	36,273
		9,91,846			**9,91,486**

3.

Dr. Sinking Fund Investment A/c Cr.

Date	Particulars	₹	Date	Particulars	₹
2012			2012		
Dec. 31	To Bank A/c	2,30,120	Dec. 31	By Bank c/d	2,30,120
		2,30,120			**2,30,120**
2013			2013		
Jan. 1	To Balance b/d	2,30,120	Dec. 31	By Balance c/d	4,71,746
Dec. 31	To Bank A/c	2,41,626			–
		4,71,746			**4,71,746**
2014			2014		
Jan. 1	To Balance c/d	4,71,746	Dec. 31	By Balance c/d	7,25,453
Dec. 31	To Bank A/c	2,53,707			–
		7,25,453			**7,25,453**
2015			2015		
Jan. 1	To Balance b/d	7,25,453	Dec. 31	By Bank A/c	7,25,000
		–	Dec. 31	By Sinking Fund A/c(loss)	453
		7,25,453			**7,25,453**

Interest

$$12\% \text{ of } ₹\ 1,50,000 \text{ for 2 months} = \frac{18,000}{12} \times 2 = 3,000$$

Illustration 16 (Sinking Fund Method): The following balances appeared in books of Sidney Potier Ltd. as on 31st March, 2014:

10% First Mortgage Debentures: ₹ 5,00,000.

Income received on Sinking Fund Investment: ₹ 50,000

Discount on Issue of Debentures: ₹ 25,000

Sinking Fund Account: ₹ 4,00,000

Sinking Fund Investment:

₹ 90,000 15% Government of Maharashtra Loans: ₹ 85,000.

₹ 1,00,000 14% Konkan Railway Bonds: ₹ 90,000

₹ 80,000 12% Krushna Valley Loan: ₹ 75,000

₹ 1,30,000 10% Central Government Securities: ₹ 1,50,000

On the same day, the investments were sold as follows:

15% Government of Maharashtra Loans @ ₹ 90

14% Konkan Railway Bonds at par

12% Krushna Valley Loan @ ₹ 90

10% Central Government Securities @ ₹ 120

On 1st April, 2014, debentures of ₹ 4,00,000 were redeemed at a premium of 5%. On the same day, Maharashtra Road Development Corporation Bonds of ₹ 1,00,000 were purchased at 10% premium annual contribution for sinking fund was ₹ 90,000. Ignore interest.

You are required to prepare:

1. Debentures Account.
2. Sinking Fund Account.
3. Sinking Fund Investment Account.
4. General Reserve Account. **(T.Y.BAF Modified, M.U.)**

Solution: **In the Books of Sidney Potier Ltd.**

Dr. **10% Debentures A/c** **Cr.**

Date	Particulars	₹	Date	Particulars	₹
2014			2014		
April	To Debentures A/c	4,00,000	April 1	By Balance b/d	5,00,000
2015					
Mar. 31	To Balance c/d	1,00,000			
		5,00,000			**5,00,000**

Dr. **Sinking Fund A/c** **Cr.**

Date	Particulars	₹	Date	Particulars	₹
2014			2014		
April 1	To Debenture Holders A/c	20,000	April 1	By Balance b/d	4,00,000
April 1	To General Reserve A/c	4,00,000	April 1	By Bank A/c	50,000
				By Sinking Fund Investment	9,000
2015					
Mar. 31	To Balance c/d	1,29,000	Mar. 31	By Profit and Loss A/c	90,000
		5,49,000			**5,49,000**

Dr. Sinking Fund Investment A/c Cr.

Date	Particulars	₹	Date	Particulars	₹
2014			2014		
April 1	To Balance b/d	4,00,000	April 1	By Bank A/c	4,09,000
April 1	To Sinking Fund A/c	9,000	2015		
April 1	To Bank A/c	1,10,000	Mar. 31	By Balance c/d	1,10,000
		5,19,000			**5,19,000**

Dr. Debentureholders A/c Cr.

Date	Particulars	₹	Date	Particulars	₹
2014			2014		
April 1	To Bank A/c	4,20,000	April 1	By Debentures A/c	4,00,000
			April 1	By Sinking Fund A/c	20,000
		4,20,000			**4,20,000**

Dr. General Reserve A/c Cr.

Date	Particular	₹	Date	Particulars	₹
2015			2014		
Mar. 31	To Bank A/c	4,00,000	April 1	By Sinking Fund A/c	4,00,000
		4,00,000			**4,00,000**

Illustration 17 (Redemption by Conversion): A company gave notice of its intention to redeem its outstanding ₹ 50,000 10% Debentures of 100 each at a premium of 5% and offered the holders the following options:

1. To accept 12% Cumulative Preference Shares of ₹ 20 each at ₹ 25 per share.
2. To accept 10% Debentures stock at 96%
3. To have their holding redeemed for cash accordingly.
   (i) ₹ 25,000 debenture Holders accepted the Proposal 1
   (ii) ₹ 20,000 debenture Holders accepted the Proposal 2
   (iii) Remaining debenture Holders accepted the Proposal 3.

Pass the Journal Entries in the books of the company to record only the above transactions.

(T.Y.B.Com., Modified, M.U., April 2002)

Solution:

Option 1:

Journal of Company

Date	Particulars		Debit (₹)	Credit (₹)
1	10% Debentures A/c	Dr.	25,00,000	
	Premium on Redemption of Debentures A/c	Dr.	1,25,000	
	To Debenture Holders A/c			26,25,000
	[Being the amount transferred to Debenture Holders A/c]			
2	Debenture Holders A/c	Dr.	26,25,000	
	To 12% Cumulative Preference Shares A/c (1,05,000 × 20)			21,00,000
	To Securities Premium A/c (1,05,000 × 5)			5,25,000
	[Being preference shares allotted to debenture Holders on redemption of debentures]			

Option 2:

Journal of Company

Date	Particulars		Debit (₹)	Credit (₹)
1	10% Debentures A/c	Dr.	20,00,000	
	Premium on Redemption of Debentures A/c	Dr.	1,00,000	
	To Debenture Holders A/c			21,00,000
	[Being the amount transferred to Debenture Holders A/c]			
2	Debenture Holders A/c (21.875 × 96)	Dr.	21,00,000	
	Discount on Issue of Debentures A/c (21,875 × 4)		87,500	
	To 10% Debentures A/c			21,87,500
	[Being 21,875 debentures issued to Debenture Holders at a discount of ₹ 4 for redemption]			

Option 3:

Journal of Company

Date	Particulars		Debit (₹)	Credit (₹)
1	10% Debentures A/c	Dr.	5,00,000	
	Premium on Redemption of Debentures A/c	Dr.	25,000	
	To Debenture Holders A/c			5,25,000
	[Being the amount transferred to Debenture Holders A/c]			
2	Debenture Holders A/c	Dr.	5,25,000	
	To Cash/Bank A/c			5,25,000
	[Being the debenture Holders paid off]			

Illustration 18 (Sinking Fund Method): Indosys Ltd. issued on 1st April, 2011; 4,000, 14% redeemable debentures of ₹ 100 each at par redeemable at a premium of 10% after 4 years. The company decided to set up a sinking fund for the redemption of the debentures setting aside necessary amount every year and investing it in investments carrying 12% interest per annum. The sinking fund factor for 4 years @ 12% was ₹ 0.20964. On 31st March, 2015, the sinking fund investments were sold for ₹ 3,15,000,

You are required to show the ledger accounts in the books of Indosys Ltd. to carry out the redemption of debentures. **(T.Y.BAF. Modified, M.U., October 2011)**

Solution: **Ledger of Indosys Ltd.**

Dr. **Sinking Fund A/c** **Cr.**

Date	Particulars	₹	Date	Particulars	₹
Y1-2011-12			Y1-2011-12		
Mar. 31	To Balance c/d	92,242	Mar. 31	By Profit and Loss Appr. A/c	92,242
		92,242			**92,242**
Y2-2012-13			Y2-2012-13		
Mar. 31	To Balance c/d	1,95,553	Apr. 1	By Balance b/d	92,242
			Mar. 31	By Profit and Loss Appr. A/c	92,242
				By Bank (interest)	11,069
		1,95,553			**1,95,553**
Y3-2013-14			Y3-2013-14		
Mar. 31	To Balance c/d	3,11,261	Apr. 1	By Balance b/d	1,95,553
			Mar. 31	By Profit and Loss Appr. A/c	92,242
			Mar. 31	By Bank (interest)	23,466
		3,11,261			**3,11,261**

Y4-2014-15			Y4-2014-15		
Mar. 31	To General Reserve A/c	4,44,593	Apr. 1	By Balance b/d	3,11,261
			Mar. 31	By Profit and Loss Appr. A/c	92,242
			Mar. 31	By Bank (interest)	37,351
			Mar. 31	By Sinking Fund Investment A/c	3,739
		4,44,593			**4,44,593**

Dr. Sinking Fund Investments A/c Cr.

Date	Particulars	₹	Date	Particulars	₹
Y1-2011-12			Y1-2011-12		
Mar. 31	To Bank A/c	92,242	Mar. 31	By Balance c/d	92,242
		92,242			**92,242**
Y2-2012-13			Y2-2012-13		
April 1	To Balance b/d	92,242	Mar. 31	By Balance c/d	1,95,553
Mar. 31	To Bank A/c	1,03,311			
		1,95,553			**1,95,553**
Y3-2013-14			Y3-2013-14		
April 1	To Balance b/d	1,95,553	Mar. 31	By Balance c/d	3,11,261
Mar. 31	To Bank A/c	1,15,708			
		3,11,261			**3,11,261**
Y4-2014-15			Y4-2014-15		
April 1	To Balance b/d	3,11,261	Mar. 31	By Bank A/c	3,15,000
Mar. 31	To Sinking Fund A/c (profit)	3,739			
		3,15,000			**3,15,000**

Dr. Interest on Debentures A/c Cr.

Date	Particulars	₹	Date	Particulars	₹
Y1-2011-12			Y1-2011-12		
Mar. 31	To Bank A/c	56,000	Mar. 31	By Profit and Loss A/c	56,000
		56,000			**56,000**
Y2-2012-13			Y2-2012-13		
Mar. 31	To Bank A/c	56,000	Mar. 31	By Profit and Loss A/c	56,000
		56,000			**56,000**
Y3-2013-14			Y3-2013-14		
Mar. 31	To Bank A/c	56,000	Mar. 31	By Profit and Loss A/c	56,000
		56,000			**56,000**
Y4-2014-15			Y4-2014-15		
Mar. 31	To Bank A/c	56,000	Mar. 31	By Profit and Loss A/c	56,000
		56,000			**56,000**

Dr. Loss on Issue of Debentures A/c Cr.

Date	Particulars	₹	Date	Particulars	₹
Y1-2011-12			Y1-2011-12		
Apr. 1	To Premium on Redemption of Debentures A/c	40,000	Mar. 31	By Profit and Loss A/c	10,000
			Mar. 31	By Balance c/d	30,000
		40,000			**40,000**

Y2-2012-13			Y2-2012-13		
Apr. 1	To Balance b/d	30,000	Mar. 31	By Profit and Loss A/c	10,000
		–	Mar. 31	By Balance c/d	20,000
		30,000			**30,000**
Y3-2013-14			Y3-2013-14		
Apr. 1	To Balance b/d	20,000	Mar. 31	By Profit and Loss A/c	10,000
		–	Mar. 31	By Balance c/d	10,000
		20,000			**20,000**
Y4-2014-15			Y4-2014-15		
Apr. 1	To Balance b/d	10,000	Mar. 31	By Profit and Loss A/c	10,000
		10,000			**10,000**

Working Note:

1. Annual appropriation set aside:

Sinking Fund Factor for 4 years @ 12%	0.20964
Redeemable Debentures	₹ 4,00,000
Add: Premium @ 10%	₹ 40,000
Amount to be paid after 4 years	₹ 4,40,000
∴ 0.20964 × 4,40,000	92,241,60
∴ Annual Appropriation	92,242

2. Interest on debenture is payable once in a year, i.e., at the end of the accounting year.
3. Loss on issue of debentures is equally written off to Profit and Loss A/c in 4 years.

GLOSSARY

- **Redemption:** Repayment of debentures.
- **Debenture Redemption Reserve:** It is the amount kept aside out of profit for redemption of debentures.
- **Sinking Fund:** It is a special fund established out of profit for the purpose of redemption of debentures.
- **Annual Set Aside:** It is a certain amount transferred every year out of. profit to sinking fund.
- **Sinking Fund Investments:** It is the investment of accumulated sinking fund in outside securities.
- **Premium on Redemption of Debentures:** It is the extra amount payable to the debentureholders at the time of redemption. It is a liability of the company.
- **Own Debentures:** These are the company's own debentures which may be purchased for investment and cancellation or immediate cancellation.

EXERCISES

Objective Type Questions

(A) Fill in the Blank:

1. Interest on Sinking Fund Investment is credited to _____ Account.
2. Sinking Fund Account always shows _____ balance.
3. Sinking Fund Investment Account always shows _____ balance.
4. Profit on cancellation of own debentures is _____ profit.

5. If debentures are to be redeemed at a premium, such premium must be provided as a liability at the time of _____ (issue/redemption).
6. Redemption of debentures out of capital may happen if the debentures are for a period of _____ (less than/more than/equal to) 18 months.
7. A company which issues debentures must create a _____ (Debenture Redemption Reserve/Debenture Redemption Sinking Fund), for redemption of such debentures, out of its profits, every year, until such debenture are redeemed.
8. A company _____ (can/cannot) purchase its own debenture.
9. Interest on Debenture Redemption Sinking Fund Investments is transferred to _____ (Debenture Redemption Sinking Fund Investments/Profit and Loss Account).
10. Debenture Redemption Reserve is _____ (to/not to) be created if debentures are redeemed through conversion.
11. Debenture Redemption Reserve is _____ (to/not to) be created in respect of the non-convertible portion of the convertible debentures.
12. After cancellation of own debentures, the debentures _____ (can/cannot) be reissued.
13. Profit on cancellation of own debentures is transferred to _____ (Capital Reserve/Capital Redemption Reserve).
14. Loss on cancellation of own debentures is transferred to _____ (Goodwill Profit and Loss Account).
15. Profit on cancellation of own debentures held as sinking fund investments is transferred to _____ (Sinking Fund Account/Capital Reserve).
16. Interest on Sinking Fund Investment is credited to _____ A/c (Profit and Loss, Sinking Fund).
17. If the own debentures purchased in the open market are not cancelled, these will appear on the _____ side of the balance sheet (assets, liabilities).
18. Sinking Fund A/c shall always show a _____ balance (debit, credit).
19. Sinking Fund Investment A/c shall always show a _____ balance (debit, credit).
20. Profit on the cancellation of own debentures is _____ profit (revenue, capital).

[**Ans.:** 1. Sinking Fund, 2. Credit, 3. Debit, 4. Capital, 5. Issue, 6. less than, 7. Debenture Redemption Reserve, 8. Can, 9. Debenture Redemption Sinking Fund Investments, 10. to, 11. to, 12. cannot, 13. Capital Reserve, 14. Profit and Loss Account, 15. Capital Reserve, 16. Sinking Fund, 17. assets, 18. credit, 19. debit, 20. capital]

(B) State Whether the Following Statements are True or False:

1. A company cannot purchase its own debenture.
2. Interest on Debenture Redemption Sinking Fund Investments is transferred to Profit and Loss Account.
3. After debentures are redeemed, balance of Debenture Redemption Reserve is transferred to Capital Reserve.
4. Whenever debentures are redeemed out of profits, an equivalent amount will be transferred to Debenture Redemption Reserve.
5. Debenture Redemption Reserve is to be created even if debentures are redeemed through conversion.

6. The balance of Debenture Sinking Fund Investment A/c is transferred to Debenture Sinking Fund A/c.
7. The balance of Debenture Sinking Fund A/c is transferred to Debenture Sinking Fund Investment A/c.
8. A debenture Holder is an owner of the company.
9. A debenture Holder can get his money back only on the liquidation of the company.
10. A debenture issued at a discount can be redeemed at a premium.
11. A debenture Holder receives interest only in the event of profits.
12. Debentures can be redeemed by payment in lumpsum at the end of a specified period.
13. Debentures cannot be redeemed during the lifetime of the company.
14. Debentures can be redeemed by payments in annual instalments.
15. Debentures can be purchased in the open market for cancellation.
16. When all the debentures are redeemed, balance in the Debenture Redemption Fund Account is transferred to General Reserve.
17. The nominal and book values of Debenture Redemption Fund Investments Account are respectively ₹ 50,000 and ₹ 48,000. The company sold investments of the nominal value of ₹ 30,000 at a price which was just sufficient to redeem debentures of ₹ 30,000 at 10% premium. The profit on sale of investments is ₹ 3,000.

[**Ans.:** **True:** 5, 6, 7, 10, 12, 14, 15, 16, 19
False: 1, 2, 3, 4, 8, 9, 11, 13, 17, 18, 20, 21
17. **False;** ₹ 4,200
18. **False;** the company purchases from the market and keeps them as investments.
20. **False;** to Debenture Redemption Reserve.
21. **False;** to Debenture redemption fund account.]

(C) Multiple Choice Questions:

1. Debentures can be redeemed _____.
   (a) only out of the proceeds of the fresh issue of debentures
   (b) only out of divisible profits
   (c) only out of capital
   (d) out of capital or profits
2. When debentures are redeemed out of profits, an amount equal to the nominal value of debentures redeemed should be transferred to _____.
   (a) Capital Reserve Account (b) Capital Redemption Reserve Account
   (c) General Reserve Account (d) Profit and Loss Account
3. When debentures are redeemed out of profits, the amount be transferred to General Reserve should be equal to _____.
   (a) Premium payable on redemption
   (b) Amount payable on redemption
   (c) The nominal value of debentures redeemed
   (d) None of the above
4. Which of the following statements is wrong in respect of Debenture Redemption Reserve (DRR)?

(a) A company which issues debentures for a term 18 months, or more must create a DRR
(b) The amount shall be transferred out of profits to DRR in the year of redemption
(c) The transfer to DRR is to be made every year
(d) Transfer to DRR must be made in respect of non-convertible portion of convertible debentures

5. In case of Cumulative Sinking Fund, the following statement is true.
   (a) Interest received on Sinking Fund Investments is credited to Profit and Loss Account
   (b) Interest received on Sinking Fund Investments is added back to the sinking fund and reinvested
   (c) Sinking fund Investments are made in cumulative preference shares
   (d) None of the above
6. In case of cumulative sinking fund for redemption of debentures, interest received _____.
   (a) is credited to Profit and Loss A/c (b) is credited to Sinking Fund Investment A/c
   (c) is credited to Sinking Fund A/c (d) is credited to Interest A/c
7. Loss on sale of Non-cumulative Sinking Fund Investments _____.
   (a) is debited to Profit and Loss A/c (b) is debited to Sinking Fund Investment A/c
   (c) is debited to Sinking Fund A/c (d) is credited to Sinking Fund A/c
8. Balance of Sinking Fund, after redemption of debentures _____.
   (a) is transferred to Profit and Loss A/c
   (b) is transferred to Debenture Redemption Reserve
   (c) is transferred to Capital Redemption Reserve
   (d) is transferred to General Reserve
9. Balance of Sinking Fund for redemption of debentures is _____.
   (a) Shown under 'Long-term Borrowings' in balance sheet
   (b) Shown under 'Investments' in balance sheet
   (c) Shown under 'Reserves and Surplus' in balance sheet
   (d) Shown under 'Current Liabilities' in balance sheet
10. Annual Instalments in Sinking Fund for Redemption of Debentures is equal to _____.
    (a) Face Value of Debentures × Factor in S.F. Table
    (b) Amount of Redemption × Factor in S.F. Table × Period of Debentures
    (c) Amount of Redemption × Factor in S.F. Table
    (d) Amount of Redemption ÷ Factor in S.F. Table
11. Debentures of ₹ 100 issued at a discount of 5% _____.
    (a) cannot be converted into shares of ₹ 100, ₹ 95 paid up
    (b) can be converted into shares of ₹ 100, ₹ 95 paid up
    (c) must be converted into shares having face value and paid-up value of ₹ 95 only
    (d) can be converted into shares having face value of ₹ 95 and paid-up value of ₹ 100
12. If debentures are redeemed by conversion into equity shares, then the amount transferred to General Reserve is _____.
    (a) nil
    (b) equal to the face value of debentures redeemed
    (c) equal to the face value of the equity shares issued

(d) equal to difference between the face value of the debentures redeemed and the equity shares issued

13. Interest received on Debenture Redemption Fund Investment will be _____.
    (a) Credited to Profit and Loss A/c
    (b) Credited to Debenture Redemption Fund A/c
    (c) Credited to Profit and Loss Appropriation A/c
    (d) None of the above
14. The balance of Debenture Sinking Fund is transferred to _____.
    (a) Profit and Loss Account
    (b) Debenture Redemption Fund Investment Account
    (c) General Reserve Account
    (d) Capital Reserve Account
15. Loss of sale of Sinking Fund Investment will be debited to _____.
    (a) Profit and Loss Account (b) Sinking Fund Account
    (c) Sinking Fund Investment Account (d) General Reserve Account
16. A company issuing debentures is required to create Debenture Redemption Reserve if the maturity period is more than _____.
    (a) 12 months (b) 18 months
    (c) 24 months (d) none of the above
17. A company may redeem debentures out of capital if the maturity period is less than _____.
    (a) 12 months (b) 18 months
    (c) 24 months (d) none of the above
18. Which of the following statements is true?
    (a) A debenture Holder is an owner of the company
    (b) A debenture Holder can gets his money back only on the liquidation of the company
    (c) A debenture issued at a discount can be redeemed at a premium
    (d) A debenture Holder receives interest only in the event of profits
19. When interest on own debentures becomes due, it will be credited to _____.
    (a) Profit and Loss Account (b) Own Debenture Account
    (c) Debenture Interest Account (d) Interest on Own Debenture Account
20. Which of the following statements is false?
    (a) Debentures can be redeemed by payment in lumpsum at the end of a specified period.
    (b) Debentures cannot be redeemed during the lifetime of the company.
    (c) Debentures can be redeemed by payments in annual instalments.
    (d) Debentures can be purchased in the open market for cancellation.
21. The periodical interest received from investments against Debenture Redemption Fund is credited to _____.
    (a) Interest Income Account (b) Debenture Holders Account
    (c) Debentures Account (d) Debenture Redemption Fund Account
22. When debentures become due for redemption, the entry is _____.
    (a) debit Debentures A/c; credit Bank A/c
    (b) debit Debenture Holders A/c; credit Bank A/c

(c) debit Debentures A/c; credit Debenture Holders A/c
(d) none of the above

23. Till debentures are redeemed, loss on issue of debentures is _____.
(a) shown on the liability side of balance sheet
(b) credited to P & L A/c
(c) Shown on the asset side of balance sheet
(d) none of the above

24. The premium payable on the redemption of debentures is _____.
(a) Written off from the accumulated profit (b) Written off from the capital profit
(c) Not be written off at all (d) None of the above

25. According to SEBI guidelines, the company is required to create a debentures redemption reserve equivalent to _____.
(a) 50% of the issue size (b) 15% of the issue size
(c) 100% of the issue size (d) none of the above

26. For the redemption of debentures, sinking fund is created out of _____.
(a) Capital reserve (b) Share capital
(c) Secured loans (d) Current year profits

27. When interest on own debentures becomes due, it will be credited to _____.
(a) Own Debentures A/c (b) Interest on Own Debentures A/c
(c) Profit and Loss Appropriation A/c (d) None of the above

28. A Ltd. purchased its own 10% debentures from the open market and later on cancelled them. The gain on redemption of its own debentures by cancellation is to be credited to _____.
(a) Capital Reserve (b) Profit and Loss Appropriation A/c
(c) Capital Redemption Reserve (d) None of the above

29. The profit or loss on cancellation of own debentures is calculated at the time of _____.
(a) Issue of own debentures (b) Cancellation of own debentures
(c) Purchase of own debentures (d) None of above

30. Till the date of redemption of debentures, 'Premium on Redemption of Debentures' appears on the _____.
(a) Asset side of balance sheet (b) Credit side of Profit and Loss account
(c) Liabilities side of balance sheet (d) None of the above

31. Following balances are given in trial balance:
Debenture redemption fund 50,000
Debenture redemption fund investments 50,000
Interest on debenture redemption fund investment 3,000
Increase in debenture redemption fund by 10,000
Debenture Redemption Fund in Balance Sheet will be _____.
(a) ₹ 60,000 (b) ₹ 63,000
(c) ₹ 50,000 (d) ₹ 65,000

32-34. On March 31, 2005, the balance of 12% Debentures of ₹ 100 each of C Ltd. Was ₹ 5,00,000. The company reserves the right to redeem the debentures in any year by purchase in the open market. Interest on debentures is payable on September 30 and March 31, every year.

On July 1, 2005, the company purchased 1,000 of its 12% Debentures as investment at ₹ 99 cum-interest. On August 01, 2005, it purchased another 1,000 of its debentures at ₹ 98 ex-interest. The company cancelled 2,000 own debentures on September 01, 2005.

32. Amount debited to Own Debentures Account at the time of purchase on 01-07-2005 = ?
(a) ₹ 1,00,000 (b) ₹ 99,000
(c) ₹ 98,000 (d) ₹ 96,000

33. Amount debited to Own Debentures Account at the time of purchase on 01-08-2005 = ?
(a) ₹ 1,00,000 (b) ₹ 99,000
(c) ₹ 98,000 (d) ₹ 97,000

34. The profit/loss on cancellation of own debentures is _____.
(a) ₹ 1,000 (Loss) (b) ₹ 6,000 (Profit)
(c) ₹ 3,000 (Profit) (d) ₹ 2,000 (Loss)

[**Ans.:** 1. (d), 2. (c), 3. (c), 4. (b), 5. (b), 6. (c), 7. (a), 8. (d), 9. (c), 10. (c), 11. (b), 12. (a), 13. (b), 14. (c), 15. (b), 16. (b), 17. (b), 18. (c), 19. (d), 20. (b), 21. (d), 22. (c), 23. (c), 24. (a), 25. (a), 26. (d), 27. (b), 28. (a), 29. (b), 30. (c), 31. (b), 32. (d), 33. (c), 34. (b)]

(D) Match the Columns:

(I)

	Column A		**Column B**
1.	Debenture Redemption Reserve Account	(a)	Shown under 'Reserves and Surplus' in Balance Sheet
2.	Balance of Debenture Redemption Reserve Account after redemption	(b)	Transfer to Capital Redemption Reserve
3.	Interest received on Non-cumulative Sinking Fund Investments	(c)	S.117C of the Companies Act
4.	Interest received on Cumulative Sinking Fund Investments	(d)	Shown under 'Investments' in Balance Sheet
5.	Loss on sale of Cumulative Sinking Fund Investments	(e)	Credited to Profit and Loss Account
6.	Balance of Sinking Fund for redemption of debentures	(f)	Sec. 81 of the Companies Act
		(g)	Debited to Sinking Fund Account
		(h)	Credited to Sinking Fund Account
		(i)	Credited to General Reserve

[**Ans.:** 1. (c), 2. (e), 3. (i), 4. (h), 5. (g), 6. (a)]

(II)

	Group A		**Group B**
1.	Annual Instalment in Sinking Fund for Redemption of Debentures	(a)	Capital Reserve Account
2.	Profit on Cancellation of Debenture is transferred to	(b)	Cum-interest price
3.	Loss on Cancellation of Debentures is transferred to	(c)	The amount credited to own Debenture A/c is equal to price received Less Interest accrued till date of sale

4. Price paid by company for purchase of own debentures excluding the accrued interest	(d) The amount credited to Own Debentures A/c is equal to Price received
5. Price paid by company for purchase of own debentures including the accrued interest	(e) Amount of Redemption × Factor in S.F. Table
6. If a company resells its debentures in open market at ex-interest price	(f) Profit and Loss Account
7. If a company resells its debentures in open market at cum-interest price	(g) Amount of Redemption/Factor in S.F. Table
	(h) is ignored
	(i) ex-interest price

[**Ans.:** 1. (e), 2. (a), 3. (f), 4. (i), 5. (b), 6. (d), 7. (c)]

Short Problem

1. On 31-1-2005, Janta Ltd. converted its ₹ 88,00,000, 6% debentures into equity shares of ₹ 20 each at a premium of ₹ 2 per share.

Pass necessary journal entries in the books of the company for redemption of debentures.

[Hint: No. of Equity Shares $= \frac{\textbf{Debentures Redemption Value}}{\textbf{Share Issued Value}} = \frac{\textbf{88,00,000}}{\textbf{20 + 2}} = \textbf{4,00,000 Shares}$**]**

2. On 1-2-2005, Janta Ltd. converted 9,000, 8% debentures of ₹ 100 each into 8% preference shares of ₹ 100 each issued at a discount of 10%.

Pass necessary journal entries for redemption of debentures.

[Ans.: Preference Shares issued = 10,000]

3. Pass necessary journal entries in the books of the company in the following cases for redemption of 6,000, 12% Debentures of ₹ 10 each issued at par:

(a) Debentures redeemed at par by conversion into 10% preference shares of ₹ 50 each.

(b) Debentures redeemed at a premium of 20% by conversion into equity shares issued at par.

(c) Debentures redeemed at a premium of 20% by conversion into equity shares issued at a premium of 20%

4. Y Ltd. redeemed ₹ 50,00,000, 8% debentures at a premium of 10% out of profits on 31-3-2006. Pass necessary journal entries for the redemption of debentures.

5. Z Ltd. issued ₹ 20,00,000, 8% debentures on 1-4-2001 at a premium of 5%. On 31-3-2006, out of these ₹ 2,00,000, 8% debentures were redeemed by converting them into equity shares of ₹ 100 each issued at par and ₹ 5,00,000, 8% debentures were converted into 10% preference shares of ₹ 100 each issued at a premium of 25%.

Pass necessary journal entries in the books of Z Ltd. for the redemption of debentures.

6. On 1st August, 2006, K.M. Ltd. buys 10,000, 9% debentures of ₹ 100 at ₹ 95 each cum-interest, the dates of interest being March 31 and September 30. Record necessary journal entries when debentures are purchased for cancellation. Show your working also.

[Hint: (i) Settled purchase price = 10,000 × $\frac{\textbf{95}}{\textbf{100}}$ **= 9,500**

(ii) Interest on debenture = $10,000 \times \frac{9}{100} \times \frac{6}{12} = 450$

(iii) Profit on Redemption = $10,000 \times \frac{5}{100} = 500 + 450 = 950$]

7. White Ltd. issued 8,00,000, 8% debentures of ₹ 100 each redeemable at a premium of 10%. According to the terms of redemption, the company redeemed 25% of the above debentures by converting them into shares of ₹ 50 each issued at a premium of 60%. Pass journal entries regarding issue and redemption of debentures.

[Hint: No. of shares to be issued = $\frac{₹\ 2,20,00,000}{₹\ 80} = 2,75,500$ shares]

8. Ekta Ltd. issued 60,000, 9% debentures of ₹ 100 each redeemable at a premium of 10% after three years. Pass the necessary journal entries for the issue of 9% debentures.

9. Thandak Refrigerators Ltd. has an outstanding balance of 5,000, 6% debentures of ₹ 100 each redeemable at a premium of 10%. According to the terms of redemption, the company redeemed 10% of these debentures by converting them into 8% preference shares of ₹ 100 each issued at a premium of 10%. Calculate the number of shares to be issued on conversion and record journal entries for the redemption in the books of the company.

[Hint: No. of shares = $\frac{55,000}{110} = 500$ shares]

Practical Problems

1. R Ltd. has issued ₹ 12,00,000 8% Debentures at a discount of 6% payable over a period of 10 years by Annual Drawings of ₹ 1,20,000 without creating Debenture Redemption Reserve. Write up the Cash Book, Debentures Account and Discount on Debenture Accounts for the first three years.

2. On 1.4.2013, Reliance Ltd. issued 2,000 Debentures of ₹ 100 each at a discount of 5%. These debentures were repayable at par on 31.3.2014 and a Sinking Fund was to be created out of profits by setting aside an equal amount of ₹ 15,900 on 1st March every year to be invested in 5% securities.

You are requested to show the Sinking Fund Account and the Investment Account in the books for five years. **(CA Modified)**

3. P Ltd. issued ₹ 2,00,000 in 5% Debentures of ₹ 100 each at par, repayable at the end of 5 years at a premium of 6%. A Sinking Fund at 4% compound interest is created for the redemption of debentures.

Draw up the Debenture Redemption Fund Account for the 5 years.

(₹ 1 p.a. at 4% compound interest amounts to ₹ 5.4163 in 5 years) **(CMA Modified)**

4. Power Flow Ltd. company issued 4% Debentures of the face value of ₹ 1,00,000 at a discount of 5%.

A Sinking Fund was created for repayment of the debentures and at the end of ten years ₹ 1,00,000 had been invested.

The sale proceeds of the investment realised ₹ 1,00,500 and the debentures were repaid.

Show the entries and the necessary ledger accounts. **(T.Y.B.Com., Modified, P.U.)**

5. On January 1, 2012, Alpha Ltd. gave notice of its intention to redeem its ₹ 10,00,000 8% Debentures on 31, March, 2012 at 105% and offered the debentureholders the following options:

(a) To apply the redemption money in subscribing:
  (i) 11% Cumulative preference shares of ₹ 100 each at 110 (opted by the holders of ₹ 1,10,000 debentures) or
  (ii) 9% Debentures at 95% (opted by the holders of ₹ 7,12,500 debentures)

(b) To get their holding redeemed for cash if neither of the options under (a) was accepted.

Show as on 31st March, 1993, the Journal entries to record the redemption and allotments involved in the above transactions. Also show the Debenture Redemption account.

6. M/s Dimple Ltd. has ₹ 60,000 7% Debentures showing balance on 1st January, 2012. The Debenture Redemption Fund Account shows the balance of ₹ 50,000 represented by investments in 3% Government Securities worth ₹ 59,000/-. The company appropriates every year ₹ 8,230/- to Sinking Fund Account.

The Directors of Dimple Ltd. decided to redeem the debentures on 31st December, 2013 by selling out investments at 83%. The balance at Bank amounted to ₹ 12,500/-.

You are required to show necessary ledger accounts in the books of Dimple Ltd. for the year 2013. **(T.Y.BAF Modified, M.U.)**

7. The summarised Balance Sheet of Jayadev Ltd. on March 31, 2014 was as follows:

Liabilities	₹	Assets	₹
Share Capital:		Fixed Assets at Cost less Depreciation	5,12,000
6% Redeemable preference shares of ₹ 10 each	2,00,000	Goodwill	1,00,000
Equity Shares of ₹ 10 each	4,00,000	Stock	3,50,000
6% Debentures	3,00,000	Sundry Debtors	3,15,000
Profit and Loss A/c	2,50,000	Discount on Debentures	15,000
Current Liabilities:			
Bank Loan	50,000		
Creditors	92 000		
	12,92,000		**12,92,000**

Wanting to redeem the preference shares and the debentures, the company offered to the redeemable preference shareholders and the debenture Holders the option to convert their holdings into equity shares which are to be treated as worth ₹ 12.50. The half of the preference shareholders and one-third of the debenture Holders agreed to do this. The company issued 30,000 equity shares at ₹ 12.50 to the public for cash and with the fund available paid off the bank loan and redeemed the remaining redeemable preference shares and debentures.

Journalise the transactions and show how the balance sheet will appear after the transactions have been completed. **(CA/CMA Modified)**

[Ans.: Balance Sheet Total ₹ 13,17,000]

8. Hitech Refineries Ltd. issued 9% Debentures of ₹ 1.00,00,000 on 1st January, 2008. These debentures were to be redeemed on 31st December, 2014. For this purpose, a sinking fund was established. The investments were expected to earn @ 6% per annum. Sinking fund table shows that ₹ 0.119135 invested annually @ 6%, gives an amount of ₹ 1 in seven years. Give journal entries assuming investments realised ₹ 73.33,400 on 31st December, 2014.

(Round off your calculations to the nearest rupee) **(T.Y.B.Com., Modified, M.U.)**

9. Inder Leasing Ltd. issued (10,000, 9% Debentures of ₹ 100 each redeemable after 3 years at par.

The company took an endowment insurance policy of ₹ 60,00,000/-. The annual premium is ₹ 16,60,000/-. The company received ₹ 60,00,000/- at the end of the third year on maturity of policy. The debentures were redeemed. Give journal entries and show the necessary ledger accounts for three years.

10. On 1st January, 2012, M/s Trishna Metals Corporation issued 20,000, 15% debenture of ₹ 100/- each at par redeemable also at par. The company desired to provide a fund for redemption of debentures on 31st December, 2014. The directors took an insurance policy to provide the necessary cash, the annual premium being ₹ 5,29,195/-. The company estimated the return of 12% p.a. compound interest.

(While calculating, fraction of rupee is to be ignored).

Give necessary journal entries and show the ledger accounts. **(T.Y.BAF Modified, M.U.)**

11. On 1st January, 2011, X Limited issued 10,000 fifteen years debentures of ₹ 100 each bearing interest at 10% p.a. One of the conditions of issue was that the company could redeem the debentures by giving six month's notice at any time after 5 years, at a premium of 4%, either by payment in cash or by allotment of preference shares and/or other debentures at the option of the debenture Holders.

On 1st April, 2006, the company gave notice to the debenture Holders of its intention to redeem the debentures on 1st October, 2006 either by payment in cash or by allotment of 11% preference shares of ₹ 100 each at ₹ 130 per share or 11% Second Debentures of ₹ 100 at ₹ 96 per debenture.

Holders of 4,000 debentures accepted the offer of the preference shares, holders of 4,800 debentures accepted the offer of the 11% second debentures and the rest demanded cash on 1st October, 2006.

Given the journal entries to give effect to the above as of 1st October, 2006. Suggest how debentures can be dealt in the accounts. **(T.Y.B.Com./BAF Modified, M.U.)**

[Ans.: Redemption of debentures in cash ₹ 1,24.800]

12. The summarised Balance Balance Sheet of Vasudha Ltd. as on 30th September, 2012 was:

Particulars	₹	Assets	₹
Share Capital:		Fixed Assets	15,00,000
Issued and fully paid 5,000 equity shares of ₹ 100 each fully paid	5,00,000	Investments:	
6% Redeemable preference shares of ₹ 100 each (less calls-in-arrears on 200 shares)	4,95,000	(Own Debenture of Nominal value of ₹ 1,00,000)	95,000
Reserves and Surplus:		Other Securities	1,00,000
Share Premium	1,00,000		
Capital Reserve	1,00,000	Current Assets:	
General Reserve	2,00,000	Stock	2,00,000
Profit and Loss Account	3,00,000	Debtors	1,00,000
10% Debentures	2,00,000	Cash at Bank	6,00,000
Creditors	7 00 000		
	25,95,000		**25,95,000**

On 30th September, 2014, the following were due for redemption:

(i) 5,000 6% Redeemable Preference Shares at a premium of ₹ 25 per share.

(ii) 2,000 10% Redeemable Debentures at a premium of 10%.

The Redemption was made on that date or subsequently thus:

(a) For the half year ending 30th September, 1998, the debenture interest and Preference dividend were paid out of the profits of the company

(b) On an offer made to the 10% Debenture Holders, the outsiders agreed to take new 12% Debentures at par in exchange of old debentures; the company also decided to assume the new debentures.

(c) A fresh issue of 1,000 equity shares of ₹ 100 each were made at a premium of ₹ 50 per share and subscribed in full. All moneys due were received forthwith.

(d) Redemption of all preference shares were made on 10th October, 2012.

You are required to show all journal entries for the above transactions and to give the company's opening Balance Sheet after giving effect to them. **(T.Y.B.Com./BAF, Modified, M.U.)**

[Ans.: Balance Sheet ₹ 21,20,150]

13. The following three alternatives have been given to redeem 5,000 8% Debentures of ₹ 100 each at 5% premium.

(a) Payment in cash.

(b) 10% Redeemable Preference Share to be issued at ₹ 120 (face value ₹ 100)

(c) 9% New Debenture of ₹ 100 each at ₹ 90.

Holders of 2,000 Debentures accepted Preference shares; 1,800 holders accepted 9% new Debentures and the remaining holders demanded cash.

Pass entries for the redemption of debentures. **(T.Y.B.Com., Modified, M.U.)**

[Ans.: Holders of 2,000 Debentures will get 1,750 Preference Shares at ₹ 120; Holders of 1,800 Debentures will get 2,100 New Debentures at ₹ 90 and the holders of remaining 1,200 Debentures will get ₹ 1,26,000 in cash]

14. On June 30, 2014, the following balances stood in the books of S Ltd.:

	₹
10% Debentures	3,00,000
Debenture redemption reserve fund	2,80,000
Bank balance	45,000

The above fund was invested in the following securities:

₹ 1,00,000 6% Gujarat Govt. Loan

₹ 1,80,000 5% Central Govt. Loan.

To redeem the debentures on June 30, 2014, the above investments were sold on the same day as under:

6% Gujarat Govt. Loan at par

5% Central Govt. Loan at ₹ 95.

The debentures were paid immediately after the selling of the securities.

Give Journal entries to record the above transactions. **(T.Y.B.Com., Modified, M.U.)**

[Ans.: Finally, the balance of Debenture Redemption Fund ₹ 2,71,000 transferred to General Reserve Account]

15. On 30th June, 2014, the following balance stood in the books of Samor & Co. Ltd.:

	₹
13% First mortgage debentures	4,50,000
Debenture redemption reserve fund	4,79,430

The above fund was invested in the following securities:

₹ 2,70,000 7½% Govt. Loan (2002)	₹ 2,72,835
₹ 2,13,750 8% Narmada Bonds (2004-2009)	₹ 2,06,595

To redeem the debentures on June 30, 2014, the above investments were sold on the same day as under:

7½% Govt. Loan, 1994 at par

8% Narmada Bonds (2004-2009) at ₹ 96

Draw up the necessary accounts **(T.Y.BAF, Modified, M.U.)**

[Ans.: Finally, the balance of Debenture Redemption Fund ₹ 4,75,200 transferred to General Reserve Account]

16. The following were the balance in the books of S Limited as on 31st December, 2014:

		₹
12% Mortgage Debentures		5,00,000
Debenture Redemption Fund		5,50,000
Debenture Redemption Fund Investments:		
(i) 6% Gujarat Govt. Loan (Purchased at par)	3,00,000	
(ii) 5% National Defence Bonds (Face value ₹ 2,00,000)	1,90,000	4,90,000

On 31st March, 2015, 6% Gujarat Govt. Loan was sold at ₹ 105 and 5% National Defence Bonds at ₹ 98. On the same date, debentures were redeemed at ₹ 106 together with accrued interest, The interest on debentures had been paid up to 31st December, 1989.

Pass Journal entries in the books of S Limited. **(CA Modified)**

[Ans.: Debenture Redemption Fund Account closed by transferring ₹ 5,56,000 to General Reserve]

17. On 30th September, 2014, the following balances stood in the books of P Limited:

	₹
5% First Mortgage Debentures	2,00,000
Debenture Redemption Reserve Fund	2,13,080

The above fund was invested in the following securities and shares:

	₹
₹ 70,000 3½% Government Loan, 2009	71,260
₹ 80,000 3% Government Loan 2009-10	64,068
₹ 22,000 3% Conversion Loan	16,042
600 Second Preference Shares of ₹ 100 each fully paid of Tata Iron & Steel Co. Ltd.	61,716

The above investments were sold net on the same day as under:

3½% Governments loan, 2009 at par

Government Loan 2009-10 at ₹ 91

3% Conversion Loan at ₹ 75

Second Preference Shares of Tata Iron & Steel Co. Ltd. at ₹ 109.

On 1st October, 2014, the company redeemed the debentures at a premium of 5%.

Draw up the necessary accounts (other than cash), bring down their balances, if any after recording the above transactions and state how they will be disclosed in the Balance Sheet of the company as at 31st December, 2014. **(CMA Modified)**

[Ans.: Transfer balance of Debenture Redemption Fund ₹ 2,14,700 to General Reserve and show it in Balance Sheet under the heading "Reserves and Surplus"]

18. A company issued debentures of ₹ 1,00,000 on 1st January, 2014 repayable at par at the end of 5 years. It was resolved to establish a sinking fund for the purpose and invested in tax-free securities.

Show the ledger accounts for five years, assuming that the interest received on the investments representing the sinking fund was at the rate of 5% on the cost, and that the interest was received yearly and immediately invested. Finally all the investments were sold at a loss of ₹ 500 to repay the debentures.

The sinking fund table shows that ₹ 0.180975 invested at the end of each year at 5% compound interest will produce ₹ 1 at the end of 5 years. **(CS Modified)**

[Ans.: Transfer ₹ 18,098 annually from Profit and Loss Appropriation Account to Debenture Redemption Fund Account]

19. (i) "ABC" Limited issued 5,000 Debentures of ₹ 200 each on 1-1-2014 at 10% discount and 5% premium payable at the time of redemption. Interest to Debentures is payable half-yearly at 12%. Debentures are of 10 years.

The company decided to transfer ₹ 1,00,000 to Debenture Redemption Fund Account and to invest the same in 8% Government Securities ever year.

Journalise all the transactions regarding debentures in the books of the company for the first year only.

(ii) Balances (1-1-2015):

	₹
Debentures	4,00,000
Debenture Redemption Fund	3,00,000
12% D.R.F. Investments	3,00,000

The company transfers ₹ 1,00,000 to Debenture Redemption Fund A/c every year. On 31-12-2015, the company sold out investments in ₹ 2,75,000 and redeemed the debentures.

Give Journal entries for redeeming debentures. Prepare Debenture Redemption Fund Account and Debenture Redemption Fund Investment Account. **(T.Y.BAF, Modified)**

[Ans.: (1) ₹ 1,00,000 debited to Discount on Debentures A/c; ₹ 50,000 debited to Loss on Issue of Debentures A/c; Interest on Debentures ₹ 60,000 Paid on 30th June and 31st December]

20. Z Ltd. issued 4,000, 15% Debentures of ₹ 100 each on 1-1-2003 at a discount of 10% redeemable at a premium of 10% out of profits by creating Debenture Redemption Reserve in four

equal annual drawings. Journalise all the transactions for 2003. The company closes its book on 31st December every year. The interest on debentures is payable on half-yearly basis the dates being 30th June and 31st December. Ignore tax.

[Ans.: Loss on issue w/o in 4 : 3 : 2 : 1]

21. (Red. @ Prem.; JV + Ledger A/c for 4 yrs; Inv. sold at profit): On 1st January, 1999, A Ltd. issues 2,000 14% Debentures of ₹ 100 each repayable at the end of four years at a premium of 5%. It has been decided to institute a Sinking Fund for the purpose, the investments being expected to realise 4% net. Sinking Fund tables show that ₹ 0.235490 amount to one at 4% in four years. Investments were made in multiples of hundred only.

On 31st December, 2003, the balance at the bank was ₹ 59,000 and the investments realised ₹ 1,56,800. The debentures were paid off. Give journal entries and show ledger account (except the debenture interest).

[Ans.: Amount of Annual Appropriation ₹ 49,452.90, Profit on sale of investments ₹ 1,900]

22. (Red. @ Par; Ledger A/c for 6 yrs; Inv. sold at par/profit/loss): B. Co. issues 7% Debentures of ₹ 1,35,000 on 1-1-98 with a condition that they should be redeemed by setting aside at the end of every year 30,000 out of profits, investing the amount in 10% Govt. Securities. The interest received at the end of the year should be invested in the same securities.

Securities were sold off on 30-6-2004 for ₹ 1,40,000 and the debentures were paid off.

Show the Debentures Redemption Fund Account and the Debentures Redemption Fund Investments A/c.

[Ans.: Profit on sale of D.R.F. Investments ₹ 770; At the end, the balance of Debenture Redemption Fund Account of ₹ 1,40,000 will be transferred to General Reserve]

23. (Red. @ Par; Ledger A/c for 5 yrs; Inv. sold at loss): A company issued debentures of ₹ 1,00,000 on 1st January, 1999 repayable at par at the end of 5 years. It was resolved to establish a sinking fund for the purpose and invested in tax-free securities.

Show the ledger accounts for five years, assuming that the interest received on the investments representing the sinking fund was at the rate of 5% on the cost, and that the interest was received yearly and immediately invested. Finally, all the investments were sold at a loss of ₹ 300 to repay the debentures.

The sinking fund table shows that ₹ 0.180975 invested at the end of each year at 5% compound interest will produce ₹ 1 at the end of 5 years. Investments were made at the nearest multiple ₹ 100.

[Ans.: Transfer ₹ 18,098 annually from Profit and Loss Appropriation Account to Debenture Redemption Fund Account]

24. (Red. @ Par; Ledger A/c for last yr; Inv. sold at loss): M/s Dimple Ltd. has ₹ 60,000 15% Debentures showing balance on 1st January, 2003. The Debenture Redemption Fund Account shows the balance of ₹ 50,000 represented by Investments in 10% Government Securities worth ₹ 59,000. The company appropriates every year ₹ 8,230 to Sinking Fund Account.

The Directors of Dimple Ltd. decided to redeem the debentures on 31st December, 2003 by selling out investments at 83%. The balance at bank after receiving interest amounted to ₹ 15,640.

You are required to show necessary ledger accounts in the books of Dimple Ltd. for the year 2003.

25. (Red. @ Prem; Ledger A/c for last yr; Inv. sold at par/profit/loss): The following balances appeared in books of Sidney Potier Ltd. as on 31-3-2004:

	₹
10% First Mortgage Debentures	5,00,000
Income Received on Sinking Fund Investments	50,000
Discount on Issue of Debentures	25,000
Sinking Fund Account	4,00,000
Sinking Fund Investments:	
(a) ₹ 90,000 15% Government of Maharashtra Loans	85,000
(b) ₹ 1,00,000 14% Konkan Railway Bonds	90,000
(c) ₹ 80,000 12% Krushna Vally Loan	75,000
(d) ₹ 1,30,000 10% Central Government Securities	1,50,00

On the same day, the investments were sold as follows:

(a) 15% Government of Maharashtra Loans @ ₹ 90

(b) 14% Kokan Railway Bonds at par

(c) 12% Krushna Vally Loan @ ₹ 90

(d) 10% Central Government Securities @ ₹ 120

On 1st April, 2004, Debentures of ₹ 4,00,000 were redeemed at a premium of 5%. On the same day, Maharashtra Road Development Corporation Bonds of ₹ 1,00,000 were purchased at 10% premium. Annual contribution for Sinking Fund was ₹ 90,000. Ignore interest:

You are required to prepare: (1) Debentures A/c, (2) Sinking Fund A/c, (3) Sinking Fund Investment A/c and (4) General Reserve A/c. **(Mumbai, Oct. 2002, Adapted)**

[Ans.: Profit on sale of investment - ₹ 9,000]

26. (Red. @ Prem; Ledger A/c for last yr; Inv. sold at par/profits/loss): On 30th June, 2003, the following balances stood in the books of P Limited:

	₹
8% First Mortgage Debentures	2,00,000
Debenture Redemption Reserve Fund	2,13,080

The above fund was invested in the following securities and shares :

	₹
₹ 70,000 6% Government Loan 2005	71,260
₹ 80,000 5% Government Loan 2007	64,068
₹ 16,000 7% Conversion Loan	16,042
₹ 60,000 8% Government of India Loan	61,710

The above investments were sold net on the same days as under: 6% Government Loan at par; 5% Government Loan at ₹ 91.7% Conversion Loan at ₹ 103 and 8% Government Loan at ₹ 109.

On 1st July, 2003, the company redeemed the debentures at premium of 5%.

Draw up the necessary accounts (other than cash), bring down their balances, if any after recording the above transactions and state how they will be disclosed in the Balance Sheet of the company as at 31st December, 2003.

[Ans.: Profit on investment sold – ₹ 11,600]

27. (Red. @ Prem; JV for fast yr; Inv. sold at par; Bonus): The summarised Balance Sheet of Successful Ltd. on 31st December, 2012 was:

Liabilities	₹	Assets	₹
Share Capital:		Fixed Assets	2,10,000
Ordinary Shares of ₹ 1 each fully paid	2,00,000	Debenture Redemption Reserve Fund Investments	50,000
General Reserve	80,000	Current Assets Including balance at Bank	2,40,000
Debenture Redemption Reserve Fund	50,000		
Premium on Redemption of Debentures A/c	1,000		
5% Debentures	50,000		
Current Liabilities	1,19,000		
	5,00,000		**5,00,000**

The directors decided to:

(a) Repay the debentures including premium of 2%.

(b) Make a bonus issue to the ordinary shareholders of one share for every two shares held in order to capitalise part of the undistributed profits. The appropriate resolutions were passed, the above transactions were duly completed. Debenture Redemption Reserve Fund Investments were sold for ₹ 50,000.

You are required to show:

(a) The appropriate journal entries to record the transactions in the books of the company and

(b) The Balance Sheet as it would appear after the completion of the transactions.

[Ans.: Transferred to General Reserve from Debenture Redemption Reserve ₹ 50,000; Bonus issue ₹ 1,00,000; B/S Total - ₹ 4,49,000]

28. (EQ @ Discount): C Ltd. redeemed 19,200 14% Debentures of ₹ 100 each which were issued at par, at 110% by converting them into equity shares of ₹ 10 each issued at a discount of 4%. Journalise.

[Ans.: Premium on redemption ₹ 1,92,000; Discount on issue of shares ₹ 88,000; No. of shares issued 2,20,000]

29. (EQ @ Par/Cash/PS @ Prem./Deb. @ Dis.): On 10th January, 1998, X Ltd. issued 10,000 6% Debentures of ₹ 100 each redeemable at par after 15 years. The terms of issue, however, provided that the debentures could be redeemable by giving 6 month's notice at any time after 5 years at a premium of 4% either by payment in cash or by allotment of Preference Shares and/or other debentures according to the option of the debentureholders.

On 10th April, 2003, the company informed the debentureholders to redeem the debentures on 1st October, 2003 either by payment in cash or by allotments of 8% Preference Shares of ₹ 100 each at ₹ 130 per share or 7% 2nd debentures of ₹ 100 each at ₹ 96 per debenture.

Holders of 4,000 debentures accepted the offer of the Preference Shares, holders of 4,800 debentures accepted the offer of 7% 2nd debentures and the rest demanded cash.

Give Journal entries recording the above redemption.

[Ans.: Conversion into Preference 4,000 Debentures × ₹ 104; Cash 1,200 × 104; Converted in new debentures 4,800 × 104]

30. (Red. @ Prem./Cash/PS @ Prem./Deb. @ Dis.): On January 1, 2004, Alpha Ltd. gave notice of its intention to redeem its ₹ 4,00,000 8% Debentures on 31st March, 2004 at 102% and offered the debenture holders, the following options:

(a) To apply the redemption money in subscribing:
  (i) 11% Cumulative Preference Shares of ₹ 20 each at 22.50 (opted by the holders of ₹ 1,71,000 debentures) or
  (ii) 9% Debentures at 95% (opted by the holders of ₹ 1,44,000 debentures)

(b) To get their holding redeemed for cash if neither of the options under (a) was accepted.

Show as on 31st March, 2004, the Journal entries to record the redemption and allotments involved in the above transactions. Also show the Debenture Redemption account.

31. (Red. @ Prem./Cash/PS @ Prem./Deb. @ Dis.): The following three alternatives have been given to redeem 5,000 8% Debentures of ₹ 100 each at 5% premium.

1. Payment in cash.
2. 10% Redeemable Preference Shares to be issued at ₹ 120 (face value ₹ 100).
3. 9% New Debenture of ₹ 100 each at ₹ 90.

Holders of 2,000 Debentures accepted Preference shares; 1,800 holders accepted 9% new Debentures and the remaining holders demanded cash.

Pass entries for the redemption of debentures.

[Ans.: Holders of 2,000 Debentures will get 1,750 Preference Shares at ₹ 120; Holder of 1,800 Debentures will get 2,100 New Debentures at ₹ 90 and the holders of remaining 1,200 Debentures will get ₹ 1,26,000 in cash]

32. (PS @ Prem.; Deb @ Par; Red. in Cash): Enkay Ltd.'s Summary Balance Sheet on 31st March, 2012 reads as under:

Liabilities		₹	Assets	₹
Share Capital (₹ 100 each)			Fixed Assets	8,00,000
Equity	5,00,000		Investments	1,00,000
Less: Calls-in-arrears	10,000	4,90,000	Stock	80,000
10% Preference	3,00,000		Debtors	4,00,000
Less: Calls-in-arrears	10,0000	2,90,000	Bank	2,00,000
Security (Share) Premium		50,000		
Capital Reserve		1,00,000		
General Reserve		2,00,000		
12% Debentures		3,00,000		
Creditors		1,50,000		
		15,80,000		**15,80,000**

On the same date, Preference Shares are redeemable at premium of 10% and Debentures are repayable at par.

The calls-in-arrears on both classes of shares are @ ₹ 40 per share.

To enable redemption, company took the following measures:

1. The reminders for calls were sent to all shareholders. The shareholders holding 100 Equity Shares and 150 Preference Shares paid the amount.
2. The remaining Preference Shares were forfeited and cancelled.
3. The remaining Equity Shares were forfeited and reissued later on receipt of ₹ 60 per share.

4. Investments were sold for ₹ 1,20,000.
5. 1,000 Equity Shares were issued for cash consideration at 20% Premium. The issue was fully subscribed and paid for.
6. A special discount @ 5% was offered to customers for immediate payments. 50% of customers in value accepted the offer.
7. Bank Overdraft was arranged for balance of funds required.

You are required to show Journal Entries and Revised Balance Sheet in compliance with Companies Act. **(Oct. 95, Adapted)**

[Ans.: Capital Reserve ₹ 9,000; CRR ₹ 1,90,000; B/S Total ₹ 11,10,000]

33. (PS @ Prem.; Deb. @ Prem.; Red. in Cash): Resale Ltd., a retail trading company, decided that the value of its freehold properties could be used to provide additional working capital.

The summarised Balance Sheet of the company as on 31st March, 2012 showed the following:

Liabilities	₹	Assets		₹
5,000 6% Preference Shares of ₹ 10 each	50,000	Freehold Properties at cost	2,00,000	
10,000 Equity Shares of ₹ 10 each	1,00,000	*Less:* Prov. for Depreciation	40,000	1,60,000
Security Premium Account	5,000	Furniture and Equipment, at cost	90,000	
Profit and Loss Account	1,30,000	*Less:* Proc. for Depreciation	30,000	60,000
8% Debentures (secured on freehold properties)	70,000	Stock		58,000
Creditors	40,000	Debtors		52,000
		Bank		65,000
	3,95,000			**3,95,000**

Note: Depreciation on the freehold properties has been provided at 2% p.a. on cost.

The following action was taken:

1. The freehold properties were sold for ₹ 2,20,000 to an insurance company.
2. The 8% Debentures were discharged at premium of 10%.
3. The 5,000 6% Preference Shares were redeemed at premium of 10%.

You are required to show the Journal entires necessary to record the above transactions (including cash) in the company's books.

[Ans.: CRR ₹ 50,000]

34. (PS @ Par; Deb. @ Prem.; Red. in Cash; Bonus): The summarised Balance Sheet of Reflex Ltd. on December 31, 2012 was:

Liabilities	₹	Assets	₹
Share Capital:		Freehold Property	2,80,000
6% Preference Shares of ₹ 1 each	1,00,000	Other Fixed Assets	2,05,000
Equity Shares of ₹ 1 each	2,00,000	Current Assets	2,90,000
General Reserve	1,00,000		
Profit and Loss Account	2,05,000		
5% Debenture	50,000		
Current Liabilities	1,20,000		
	5,00,000		**5,00,000**

The Directors decide to:

1. Redeem the Preference Shares at par;
2. Redeem the Debenture at a premium of 2%.
3. Make a bonus issue to the Equity Shareholders of one ₹ 1 share for every two ₹ 1 shares held in order to capitalise part of the undistributed profits.

The appropriate resolutions having been passed, the above transactions were completed.

You are required to show:

(a) The appropriate Journal entries to record the transactions in the books of the company; and

(b) The Balance Sheet as it would appear after the completion of transactions.

[Ans.: CRR ₹ 1,00,000; Bonus ₹ 1,00,000; B/S Total ₹ 6,24,000]

35. (PS @ Prem; Deb. @ Prem; Conversion in EQ @ Prem.): The summarised Balance Sheet of Didnot Ltd. as at 31st March, 2012 was as follows:

Liabilities	₹	Assets	₹
6% Redeemable preference shares of ₹ 10 each	2,00,000	Fixed Assets at cost less depreciation	4,12,000
Equity Shares of ₹ 10 each	4,00,000	Goodwill	2,00,000
Profit and Loss Account	2,50,000	Stock	4,50,000
6% Debentures	3,00,000	Sundry Debtors	2,15,000
Bank	50,000	Discount on Debentures	12,000
Creditors	89,000		
	12,89,000		**12,89,000**

For redemption of Preference shares and Debentures, the company offered to the Redeemable Preference shareholders and the Debenture Holders the options to convert their holdings into equity share, which are to be treated as worth ₹ 12.50 each.

Half the Preference shareholders and 1/3rd of the Debenture Holders agreed to do this. The company issued 30,000, Equity shares at ₹ 12.50 to the public for cash and with the funds available paid off the Bank Loan and redeemed the remaining redeemable Preference shares and Debentures. Journalise the above transactions and recast the Balance sheet. **(Mumbai, Oct. 2000, Adapted)**

[Ans.: Debenture Holders Cash 2,00,000; Equity 80,000 + Premium 20,000; Preference Holder Cash 1,00,000;Equity 80,000 + Premium 20,000; B/S Total ₹ 13,02,000]