

PAPER – 5: ADVANCED ACCOUNTING

PART – I: ANNOUNCEMENTS STATING APPLICABILITY & NON-APPLICABILITY FOR MAY, 2015 EXAMINATION

A. Applicable for May, 15 Examination

(i) **Revision in the Criteria for classifying Level II Non-Corporate Entities**

Due to recent changes in the enhancement of tax audit limit, the Council of the ICAI has recently decided to change the 1st criteria of Level II Non-Corporate Entities i.e. determination of SME on turnover basis from ₹ 40 lakhs to ₹ 1 Crore vide announcement “Revision in the Criteria for classifying Level II Non-Corporate Entities” issued by ICAI on 7th March, 2013. This revision is applicable with effect from the accounting year commencing on or after April 1, 2012.

(ii) **Paragraphs 46 for entities other than Companies**

In line with para 46 inserted by the MCA for corporate entities, the Council of the ICAI has also inserted Paragraph 46 in AS 11 for entities other than Companies in the month of February, 2014:

46(1) In respect of accounting periods commencing on or after 7th December, 2006 (such option to be irrevocable and to be applied to all such foreign currency monetary items), the exchange differences arising on reporting of long-term foreign currency monetary items at rates different from those at which they were initially recorded during the period, or reported in previous financial statements, in so far as they relate to the acquisition of a depreciable capital asset, can be added to or deducted from the cost of the asset and should be depreciated over the balance life of the asset, and in other cases, can be accumulated in a “Foreign Currency Monetary Item Translation Difference Account” in the enterprise’s financial statements and amortized over the balance period of such long-term asset or liability, by recognition as income or expense in each of such periods, with the exception of exchange differences dealt with in accordance with the provisions of paragraph 15.

(2) To exercise the option referred to in sub-paragraph (1), an asset or liability shall be designated as a long-term foreign currency monetary item, if the asset or liability is expressed in a foreign currency and has a term of twelve months or more at the date of origination of the asset or the liability:

Provided that the option exercised by the enterprise should disclose the fact of such option and of the amount remaining to be amortized in the financial statements of the period in which such option is exercised and in every subsequent period so long as any exchange difference remains unamortized.”

(iii) Companies Act, 2013

The relevant Sections of the Companies Act, 2013 notified up to 30th September 2014 will be applicable for May, 2015 Examination.

(iv) Maintenance of Statutory Liquidity Ratio (SLR)

In exercise of the powers conferred by sub-section (2A) of Section 24 of Banking Regulation Act, 1949 (10 of 1949) as amended from time to time, RBI vide notification DBOD.No.Ret.BC.48 /12.02.001/2014-15 dated August 5, 2014 has decided that Statutory Liquidity Ratio for every Scheduled Commercial Bank and Local Area Banks be reduced to **22 per cent of their Net Demand and Time Liabilities (NDTL)** with effect from the fortnight beginning August 9, 2014.

RBI vide notification No. RBI/2014-15/166RPCD.RCB.BC.No.22/07.51.020/2014-15, dated August 06, 2014, has decided to reduce the Statutory Liquidity Ratio (SLR) of State/Central Cooperative Banks from 22.5 percent of their **Net Demand and Time Liabilities (NDTL) to 22.0 per cent** with effect from the fortnight beginning August 9, 2014.

(v) Maintenance of Cash Reserve Ratio (CRR)

Reserve Bank of India has decided to reduce the Cash Reserve Ratio (CRR) of Scheduled Commercial Banks by 25 basis points from 4.25 per cent to **4.00 per cent of their Net Demand and Time Liabilities (NDTL)** with effect from the fortnight beginning February 09, 2013 vide circular DBOD.No.Ret.BC.76/12.01.001/2012-13 dated January 29, 2013. The Local Area Banks shall also maintain CRR at 3.00 per cent of its net demand and time liabilities up to February 08, 2013 and 4.00 per cent of its net demand and time liabilities from the fortnight beginning from February 09, 2013.

(vi) SLR Holdings under Held to Maturity Category

In terms of para 1.2 of the circular RPCD.CO.RRB.BC.No. 74/03.05.33/2013-14 dated January 07, 2014 on 'Guidelines for Classification, Valuation and Provisioning', RRBs were permitted to exceed the limit of 25.00 percent of total investments under the HTM category provided the excess comprised only SLR securities and the total SLR securities held in the HTM category was not more than 24.50 per cent of their NDTL as on last Friday of the second preceding fortnight. In consonance with the calibrated reduction in the SLR and in order to enable RRBs greater participation in financial markets, the RBI vide Notification No. RBI/2014-15/168 RPCD.CO.RRB. BC.No.25/03.05.33/2014-15, dated August 7, 2014 has permitted RRBs to exceed the limit of 25 per cent of total investments under HTM category provided the excess comprises only SLR securities, and the total SLR securities held in the HTM category is not more than 24.00 per cent of their NDTL as on the last Friday of the second preceding fortnight with effect from August 9, 2014.

(Source: rbi.org.in)

(vii) Buy Back of Securities (Amendment) Regulations, 2013

In exercise of the powers conferred under section 30 of the Securities and Exchange Board of India Act, 1992, SEBI made Securities and Exchange Board of India (Buy-back of Securities) (Amendment) Regulations, 2013 to amend the Securities and Exchange Board of India (Buy back of Securities) Regulations, 1998. The important provisions of the new regulations are:

- (i) No offer of buy-back for fifteen per cent or more of the paid up capital and free reserves of the company shall be made from the open market.
- (ii) A company shall not make any offer of buy-back within a period of one year reckoned from the date of closure of the preceding offer of buy-back, if any.
- (iii) The company shall ensure that at least fifty per cent of the amount earmarked for buy-back is utilized for buying-back shares or other specified securities.

(viii) Securities and Exchange Board of India (Share Based Employee Benefits) Regulations, 2014

SEBI vide *Circular No. LAD-NRO/GN/2014-15/16/1729 dated 28th October, 2014* has formulated the SEBI (Share Based Employee Benefits) Regulations, 2014 which replaces the SEBI (Employees Stock Option Plan) Guidelines, 1999. The said Regulations deal with various provisions relating to employee stock option schemes, employee stock purchase schemes, stock appreciation rights schemes, general employee benefits schemes and retirement benefit schemes formulated by listed companies. The regulations deal with definition of eligible employees, formation of compensation committee, shareholders approvals variation of terms of issue, listing, compliances etc. For the complete text of this notification please refer to the link: http://www.sebi.gov.in/cms/sebi_data/attachdocs/1414568485252.pdf

[Source: www.sebi.gov.in]

B. Not applicable for May, 15 examination**Ind ASs issued by the Ministry of Corporate Affairs**

The MCA has hosted on its website 35 converged Indian Accounting Standards (Ind AS) without announcing the applicability date. These are the standards which are being converged by eliminating the differences of the Indian Accounting Standards vis-à-vis IFRS. **These Ind ASs are not applicable for the students appearing in May, 15 Examination.**

PART – II : QUESTIONS AND ANSWERS

QUESTIONS

Sale of Partnership firm to a Company

1. 'X' and 'Y' carrying on business in partnership sharing Profit and Losses equally, wished to dissolve the firm and sell the business to 'X' Limited Company on 31-3-2015, when the firm's position was as follows:

<i>Liabilities</i>	₹	<i>Assets</i>	₹
X's Capital	1,50,000	Land and Building	1,00,000
Y's Capital	1,00,000	Furniture	40,000
Creditors	60,000	Stock	1,00,000
		Debtors	66,000
		Cash	<u>4,000</u>
	<u>3,10,000</u>		<u>3,10,000</u>

The arrangement with X Limited Company was as follows:

- (i) Land and Building was purchased at 20% more than the book value.
- (ii) Furniture and stock were purchased at book values less 15%.
- (iii) The goodwill of the firm was valued at ₹ 40,000.
- (iv) The firm's debtors, cash and creditors were not to be taken over, but the company agreed to collect the book debts of the firm and discharge the creditors of the firm as an agent, for which services, the company was to be paid 5% on all collections from the firm's debtors and 3% on cash paid to firm's creditors.
- (v) The purchase price was to be discharged by the company in fully paid equity shares of ₹ 10 each at a premium of ₹ 2 per share. The shares received from the company were distributed between the partners in the ratio of their final claims.

The company collected all the amounts from debtors. The creditors were paid off less by ₹ 1,000 allowed by them as discount. The company paid the balance due to the vendors in cash.

Prepare the Realisation account, the Capital accounts of the partners and the Cash account in the books of partnership firm.

Dissolution of partnership firm

2. (a) The partners P, Q & R have called you to assist them in winding up the affairs of their partnership on 31.12.2014. Their balance sheet as on that date is given below:

<i>Liabilities</i>	<i>Amount ₹</i>	<i>Assets</i>	<i>Amount ₹</i>
Capital Accounts:		Land & Building	50,000
P	65,000	Plant & Machinery	46,000
Q	50,500	Furniture & Fixture	10,000
R	32,000	Stock	14,500
Creditors	16,000	Debtors	14,000
		Cash at Bank	9,000
		Loan P	13,000
		Loan Q	<u>7,000</u>
Total	<u>1,63,500</u>	Total	<u>1,63,500</u>

- (a) The partners share profit and losses in the ratio of 4:3:2.
 (b) Cash is distributed to the partners at the end of each month.
 (c) A summary of liquidation transactions are as follows:

January 2015

- ₹ 9,000 - collected from debtors; balance is uncollectable.
- ₹ 8,000 - received from the sale of entire furniture
- ₹ 1,000 - Liquidation expenses paid.
- ₹ 6,000 - Cash retained in the business at the end of month

February 2015

- ₹ 1,000 - Liquidation expenses paid.
- As part payment of his capital, R accepted a machinery for ₹ 9,000 (book value ₹ 3,500)
- ₹ 2,000 - Cash retained in the business at the end of month

March 2015

- ₹ 38,000 - received on the sale of remaining plant and machinery.
- ₹ 10,000 - received from the sale of entire stock.
- ₹ 1,700 - Liquidation expenses paid.
- ₹ 41,000 - Received on sale of land & building.
- No Cash is retained in the business.

You are required to prepare a schedule of cash payments amongst the partners by "Higher Relative Capital Method".

Issues related to Accounting in LLPs

(b) What are the liabilities of designated partners in a LLP. Explain in brief.

Employees Stock Option Plan

3. The following particulars in respect of stock options granted by a company are available:

Grant date	April 1, 2011
Number of employees covered	50
Number options granted per employee	1,000
Fair value of option per share on grant date (₹)	9

The options will vest to employees serving continuously for 3 years from vesting date, provided the share price is ₹ 70 or above at the end of 2013-14.

The estimates of number of employees satisfying the condition of continuous employment were 48 on 31/03/12, 47 on 31/03/13. The number of employees actually satisfying the condition of continuous employment was 45.

The share price at the end of 2013-14 was ₹ 68.

Compute expenses to recognise in each year and show important accounts in books of the company.

Redemption of Debentures

4. Malik Ltd. have authorized capital of 8,00,000 equity shares of ₹ 10 each. But out of these 2,40,000 shares have been issued as fully paid.

The company has an outstanding 14% Debentures loan of ₹ 24,00,000 redeemable at 102 per cent and interest has been paid up to date on December 31, 2012. On that date, the balance of the Debenture Redemption Reserve Account is ₹ 20,00,000 and corresponding Investment Account ₹ 20,00,000 (at cost) of which the market value is ₹ 18,00,000.

The directors resolved to redeem the Debentures on January 1, 2013 and the holders are given an option to receive payment either wholly in cash or wholly in fully paid equity shares @ 8 shares for every ₹ 100 of debentures.

75% of the holders decided to exercise the option for taking shares in repayment and cash for the rest is procured by realizing an adequate amount of investment at the prevailing market value.

Draw up journal entries (including Cash Book Entries) to give effect to the above transactions.

Buy Back of Securities

5. The following was the summarized balance sheet of Gamma (an unlisted company) Ltd. as on 31st March, 2014:

<i>Equity & liabilities</i>	<i>(₹ in lakhs)</i>	<i>Assets</i>	<i>(₹ in lakhs)</i>
Authorised capital:		Fixed assets	56,000
Equity shares of ₹ 10 each	<u>40,000</u>	Investments	12,000
Issued capital:		Cash at Bank	6,600
Equity Shares of ₹ 10 each Fully Paid Up	32,000	Trade receivables	33,000
10% Redeemable Preference Shares of 10 each, Fully Paid Up	10,000		
Reserves & Surplus:			
Capital Redemption Reserve	4,000		
Securities Premium	3,200		
General Reserve	24,000		
Profit & Loss Account	1,200		
9% Debentures	20,000		
Trade payables	<u>13,200</u>		
	<u>1,07,600</u>		<u>1,07,600</u>

On 1st April, 2014, the Company redeemed all its Preference Shares at a Premium of 10% and bought back 25% of its Equity Shares at ₹ 20 per Share. In order to make Cash available, the Company sold all the Investments for ₹ 12,600 Lakhs and raised a Bank Loan amounting to ₹ 8,000 lakh on the security of the Company's Plant.

Give the necessary Journal Entries considering that the buy back is authorised by the articles of company and necessary resolution is passed by the company for this. The amount of Securities premium will be utilized to the maximum extent as allowed by the law.

Underwriting of Securities

6. A company made a public issue of 2,00,000 equity shares of ₹ 10 each at a premium of ₹ 2 per share. The entire issue was underwritten by the underwriters L, M, N and O in the ratio of 4:3:2:1 respectively with the provision of firm underwriting of 5,000, 4,000, 2,000 and 2,000 shares respectively.

The company received application for 1,50,000 shares (excluding firm underwriting) from public, out of which applications for 55,000, 40,000, 42,000 and 8,000 shares were marked in favour of L, M, N and O respectively.

Calculate the liability of each underwriter as regards the number of shares to be taken up assuming that the benefit of underwriting is not given to the individual underwriter.

Internal Reconstruction of a Company

7. The summarized Balance Sheet of Vaibhav Ltd. as on 31st March 2014 is as follows:

<i>Liabilities</i>	₹	<i>Assets</i>	₹
Equity Shares of ₹ 100 each	2,00,00,000	Fixed Assets	2,50,00,000
6%, Cumulative Preference Shares of ₹ 100 each	1,00,00,000	Investments (Market Value ₹ 19,00,000)	20,00,000
5% Debentures of ₹ 100 each	80,00,000	Current Assets	2,00,00,000
Trade Payables	1,00,00,000	P & L A/c	12,00,000
Provision for taxation	2,00,000		
TOTAL	4,82,00,000	TOTAL	4,82,00,000

The following scheme of Internal Reconstruction is sanctioned:

- (i) All the existing equity shares are reduced to ₹ 40 each.
- (ii) All preference shares are reduced to ₹ 60 each.
- (iii) The rate of Interest on Debentures increased to 6%. The Debenture holders surrender their existing debentures of ₹ 100 each and exchange the same for fresh debentures of ₹ 70 each for every debenture held by them.
- (iv) Fixed assets are to be written down by 20%.
- (v) Current assets are to be revalued at ₹ 90,00,000.
- (vi) Investments are to be brought to their market value.
- (vii) One of the creditors of the company (included under trade payables in the above balance sheet) to whom the company owes ₹ 40,00,000 decides to forgo 40% of his claim. The creditor is allotted with 60000 equity shares of ₹ 40 each in full and final settlement of his claim.
- (viii) The taxation liability is to be settled at ₹ 3,00,000.
- (ix) It is decided to write off the debit balance of Profit & Loss A/c.

Pass necessary journal entries and show the Balance Sheet of the company after giving effect to the above.

Amalgamation of Companies

8. The following are the summarized Balance Sheets of P Ltd. and Q Ltd. as on 31st March, 2014:

<i>Liabilities</i>	<i>P Ltd.</i>	<i>Q Ltd.</i>	<i>Assets</i>	<i>P Ltd.</i>	<i>Q Ltd.</i>
	₹	₹		₹	₹
Share Capital			Fixed Assets	7,00,000	2,50,000

Equity Shares of ₹ 10 each	6,00,000	3,00,000	Investment	80,000	80,000
10% Pref. Shares of ₹ 100 each	2,00,000	1,00,000	Current Assets:		
Reserves and Surplus	3,00,000	2,00,000	Inventory	2,40,000	3,20,000
Secured Loans:			Trade receivables	4,20,000	2,10,000
12% Debentures	2,00,000	1,50,000	Cash at Bank	1,10,000	40,000
Current Liabilities:					
Trade payables	<u>2,50,000</u>	<u>1,50,000</u>			
	<u>15,50,000</u>	<u>9,00,000</u>		<u>15,50,000</u>	<u>9,00,000</u>

Details of Trade receivables and trade payables are as under:

	<i>P Ltd. (₹)</i>	<i>Q Ltd. (₹)</i>
Trade receivables		
Debtors	3,60,000	1,90,000
Bills Receivable	<u>60,000</u>	<u>20,000</u>
	<u>4,20,000</u>	<u>2,10,000</u>
Trade payables		
Sundry Creditors	2,20,000	1,25,000
Bills Payable	<u>30,000</u>	<u>25,000</u>
	<u>2,50,000</u>	<u>1,50,000</u>

Fixed Assets of both the companies are to be revalued at 15% above book value. Inventory in Trade and Debtors are taken over at 5% lesser than their book value. Both the companies are to pay 10% Equity dividend, Preference dividend having been already paid.

After the above transactions are given effect to, P Ltd. will absorb Q Ltd. on the following terms:

- (i) 8 Equity Shares of ₹ 10 each will be issued by P Ltd. at par against 6 shares of Q Ltd.
- (ii) 10% Preference Shareholders of Q Ltd. will be paid at 10% discount by issue of 10% Preference Shares of ₹ 100 each at par in P Ltd.
- (iii) 12% Debentureholders of Q Ltd. are to be paid at 8% premium by 12% Debentures in P Ltd. issued at a discount of 10%.
- (iv) ₹ 30,000 is to be paid by P Ltd. to Q Ltd. for Liquidation expenses. Sundry Creditors of Q Ltd. include ₹ 10,000 due to P Ltd.

Prepare:

- (a) Journal entries in the books of P Ltd.
- (b) Statement of consideration payable by P Ltd.

Liquidation of Company

9. The following is the summarized Balance Sheet of Shah Ltd. Co. which is in the hands of the liquidator:

Balance Sheet as at 31.3.2015

<i>Liabilities</i>	₹	<i>Assets</i>	₹
Share Capital:		Fixed assets	2,00,000
1,000, 6% Preference Shares of ₹ 100 each, fully paid	1,00,000	Inventory	1,20,000
2,000 Equity shares of ₹ 100 each, fully paid	2,00,000	Book debts	2,40,000
2,000 Equity shares of ₹ 100 each ₹ 75 paid up	1,50,000	Cash in hand	40,000
Loan from bank (on security of stock)	1,00,000	Profit and loss A/c	3,00,000
Trade Payables	<u>3,50,000</u>		
	<u>9,00,000</u>		<u>9,00,000</u>

The assets realized the following amounts (after all costs of realization and liquidator's commission amounting to ₹ 5,000 paid out of cash in hand).

	₹
Fixed assets	1,68,000
Inventory	1,10,000
Trade Receivables	2,30,000

Calls on partly paid shares were made but the amounts due on 200 shares were found to be irrecoverable.

You are required to prepare Liquidator's Final Statement of Receipts and Payments.

Financial Statements of a Banking Company

10. A commercial bank has the allowing capital funds and assets. Segregate the capital funds into Tier I and Tier II capitals. Find out the risk adjusted asset and risk weighted asset ratio.

<i>Particulars</i>	<i>Amount (₹ in crores)</i>
Equity Share Capital	400.000
Statutory Reserve	250.000
Capital Reserve (of which Statutory Reserve ₹ 18 crores were due to revaluation of assets and the balance due to sale of capital assets)	86.000
<u>Assets</u>	
Cash Balance with RBI	12.00
Balance with other Banks	20.00
Other Investments	40.00
<u>Loans & Advances</u>	
(i) Guaranteed by Government	14.50
(ii) Others	5,465.00
Premises Furniture & Fixtures	74.00
<u>Off Balance Sheet Items</u>	
(i) Guarantees and other obligations	700
(ii) Acceptances, endorsements and letter of credit	4,900.00

11. The following facts have been taken out from the records of City Bank Ltd. as on 31st March, 2015:

	₹	₹
Rebate on bill discounted (not due on March 31 st , 2014)		91,600
Discount received		4,05,000
Bill discounted	24,50,000	

An analysis of the bills discounted is as follows:

	<i>Amount</i>	<i>Due date</i>	<i>Rate of discount</i>
	₹	2015	
(i)	7,50,000	April 8	12%
(ii)	3,00,000	May 5	14%
(iii)	4,40,000	June 12	14%
(iv)	9,60,000	July 15	15%

You are required to:-

- (i) Calculate Rebate on Bill Discounted as on 31st March, 2015.
- (ii) The amount of discount to be credited to the profit and loss account.

Financial Statements of Insurance Companies

12. From the following information of XYZ Marine Insurance Ltd. for the year ending 31st March, 2014, find out the

- (i) Net Premium earned
- (ii) Net Claims Incurred

Particulars	Direct Business (₹)	Re-insurance (₹)
Premium Received	92,00,000	7,86,000
Premium Receivable as on 01.04.2013	4,59,000	37,000
Premium Receivable as on 31.03.2014	3,94,000	33,000
Premium Paid		6,36,000
Premium Payable as on 01.04.2013		28,000
Premium payable as on 31.03.2014		20,000
Claims Paid	73,00,000	5,80,000
Claims payable as on 01.04.2013	94,000	16,000
Claims payable as on 31.03.2014	1,01,000	12,000
Claims received		2,10,000
Claims receivable as on 01.04.2013		42,000
Claims receivable as on 31.03.2014		39,000

Financial Statements of Electricity Companies

13. Following information has been provided in respect of Watson Power Generation Project:

1. Date of commercial operation/work completed date : 1st April, 1995
2. Capital Cost at the beginning of the year 2010-11 : ₹ 135.39 Crore
3. Useful Life : 35 years
4. Details of allowed capital expenditure, details of actual repayment of loan and weighted average rate of interest on loan is as follows:

	2010-11	2011-12	2012-13
	(₹ in Crore)	(₹ in Crore)	(₹ in Crore)
Additional Capital Expenditure (allowed above)	1.63	0.98	0.52

Repayment of Loan during the year (net)	0.96	0.87	0.68
Weighted Average Rate of Interest on Loan	7.35%	7.48%	7.50%
Value of Land	0.00	0.00	0.00

5. Depreciation recovered upto 2008-09 = ₹ 49.05 Crore
 6. Depreciation recovered in 2009-10 = ₹ 3.26 Crore
 7. Cumulative Repayment of Loan upto 2009-10 = ₹ 14,00 Crore

From the above information, calculate (a) Interest on Loans considering loan amount as 70% of total capital cost; (b) Depreciation as per the Central Electricity Commission (Terms and Conditions of Tariff) Regulations, 2009:

Departmental Accounts

14. The following balances were extracted from the books of M/s Division. You are required to prepare Departmental Trading Account and Profit and Loss account for the year ended 31st December, 2014 after adjusting the unrealized department profits if any.

	Deptt. A ₹	Deptt. B ₹
Opening Stock	50,000	40,000
Purchases	6,50,000	9,10,000
Sales	10,00,000	15,00,000

General expenses incurred for both the departments were ₹ 1,25,000 and you are also supplied with the following information: (a) Closing stock of Department A ₹ 1,00,000 including goods from Department B for ₹ 20,000 at cost of Department A. (b) Closing stock of Department B ₹ 2,00,000 including goods from Department A for ₹ 30,000 at cost to Department B. (c) Opening stock of Department A and Department B include goods of the value of ₹ 10,000 and ₹ 15,000 taken from Department B and Department A respectively at cost to transferee departments. (d) The rate of gross profit is uniform from year to year.

Branch Accounting

15. (a) Pass necessary Journal entries in the books of an independent Branch of a Company, wherever required, to rectify or adjust the following:
- Expenses of ₹ 2,800 allocated to the Branch by Head Office but not recorded in the Branch books.
 - Provision for doubtful debts, whose accounts are kept by the Head Office, not provided earlier for ₹ 1,000.

- (iii) Branch paid ₹ 3,000 as salary to a Head Office Manager, but the amount paid has been debited by the Branch to Salaries Account.
- (iv) Branch incurred travelling expenses of ₹ 5,000 on behalf of other Branches, but not recorded in the books of Branch.
- (v) A remittance of ₹ 1,50,000 sent by the Branch has not received by Head Office on the date of reconciliation of Accounts.
- (vi) Head Office allocates ₹ 75,000 to the Branch as Head Office expenses, which has not yet been recorded by the Branch.
- (vii) Head Office collected ₹ 30,000 directly from a Branch Customer. The intimation of the fact has been received by the Branch only now.
- (viii) Goods dispatched by the Head office amounting to ₹ 10,000, but not received by the Branch till date of reconciliation. The Goods have been received subsequently.

Foreign Branch

- (b) ABC Ltd. has head office at Delhi (India) and branch at New York (U.S.A). New York branch is an integral foreign operation of ABC Ltd. New York branch furnishes you with its trial balance as on 31st March, 2015 and the additional information given thereafter:

	<i>Dr. (\$)</i>	<i>Cr. (\$)</i>
Stock on 1st April, 2014	150	–
Purchases and sales	400	750
Sundry Debtors and creditors	200	150
Bills of exchange	60	120
Sundry expenses	540	–
Bank balance	210	–
Delhi head office A/c	–	540
	1,560	1,560

The rates of exchange may be taken as follows:

- on 1.4.2014 @ ₹ 40 per US \$
- on 31.3.2015 @ ₹ 42 per US \$
- average exchange rate for the year @ ₹ 41 per US \$.

New York branch account showed a debit balance of ₹ 22,190 on 31.3.2015 in Delhi books and there were no items pending reconciliation.

You are asked to prepare trial balance of New York branch in ₹ in the books of ABC Ltd.

Framework for Preparation and Presentation of Financial Statements

16. Mohan started a business on 1st April 2014 with ₹ 12,00,000 represented by 60,000 units of ₹ 20 each. During the financial year ending on 31st March, 2015, he sold the entire stock for ₹ 30 each. In order to maintain the capital intact, calculate the maximum amount, which can be withdrawn by Mohan in the year 2014-15 if Financial Capital is maintained at historical cost.

Problems based on Accounting Standards**AS 20**

17. (a) The following information is available for AB Ltd. for the accounting year 2012-13 and 2013-14:

Net profit for		₹
Year	2012-13	22,00,000
Year	2013-14	30,00,000

No of shares outstanding prior to right issue 10,00,000 shares.

Right issue: One new share for each five shares outstanding i.e. 2,00,000 shares.

: Right Issue price ₹ 25

: Last date to exercise right 31st July, 2013

Fair value of one equity share immediately prior to exercise of rights on 31.07.2013 is ₹ 32.

You are required to compute:

- Basic earnings per share for the year 2012-13.
- Restated basic earnings per share for the year 2012-13 for right issue.
- Basic earnings per share for the year 2013-14.

AS 19

- (b) X Ltd. has leased equipment over its useful life that costs ₹ 7,46,55,100 for a three year lease period. After the lease term the asset would revert to the Lessor. You are informed that:

- The estimated unguaranteed residual value would be ₹ 1 lakh only.
- The annual lease payments have been structured in such a way that the sum of their present values together with that of the residual value of the asset will equal the cost thereof.

(iii) Implicit interest rate is 10%.

You are required to ascertain the annual lease payment and the unearned finance income. Annual lease payments are made at the end of each accounting year. P.V. factor @ 10% for years 1 to 3 are 0.909, 0.826 and 0.751 respectively.

AS 16

18. (a) Suhana Ltd. issued 12% secured debentures of ₹ 100 Lakhs on 01.05.2013, to be utilized as under:

Particulars	Amount (₹ in lakhs)
Construction of factory building	40
Purchase of Machinery	35
Working Capital	25

In March 2014, construction of the factory building was completed and machinery was installed and ready for its intended use. Total interest on debentures for the financial year ended 31.03.2014 was ₹ 11,00,000. During the year 2013-14, the company had invested idle fund out of money raised from debentures in banks' fixed deposit and had earned an interest of ₹ 2,00,000.

Show the treatment of interest under Accounting Standard 16 and also explain nature of assets.

AS 5

- (b) Explain whether the following will constitute a change in accounting policy or not as per AS 5.
- Introduction of a formal retirement gratuity scheme by an employer in place of ad hoc ex-gratia payments to employees on retirement.
 - Management decided to pay pension to those employees who have retired after completing 5 years of service in the organization. Such employees will get pension of ₹ 20,000 per month. Earlier there was no such scheme of pension in the organization.

AS 11

19. (a) Explain briefly the accounting treatment needed in the following cases as per AS 11:
- Trade Receivables include amount receivable from Ted of U.S., ₹ 5,00,000 recorded at the prevailing exchange rate on the date of sales, transaction recorded at \$1 = ₹ 38.70.
 - Long term loan taken from a U.S. Company, amounting to ₹ 60,00,000. It was recorded at \$1 = ₹ 35.60, taking exchange rate prevailing at the date of transactions.

Exchange rates at the end of the year were as under:

\$1 Receivable = ₹ 45.80

\$ 1 Payable = ₹ 45.90

AS 12

- (b) On 1.4.2011, ABC Ltd. received Government grant of ₹ 300 lakhs for acquisition of machinery costing ₹ 1,500 lakhs. The grant was credited to the cost of the asset. The life of the machinery is 5 years. The machinery is depreciated at 20% on WDV basis. The Company had to refund the grant in May 2014 due to non-fulfillment of certain conditions.

How you would deal with the refund of grant in the books of ABC Ltd.?

AS 26

20. (a) During 2014-15, an enterprise incurred costs to develop and produce a routine, low risk computer software product, as follows:

	<i>Amount (₹)</i>
Completion of detailed programme and design	25,000
Coding and Testing	20,000
Other coding costs	42,000
Testing costs	12,000
Product masters for training materials	13,000
Packing the product (1,000 units)	11,000

What amount should be capitalized as software costs in the books of the company, on Balance Sheet date?

AS 29

- (b) Shyam Ltd. (a Public Sector Company) provides consultancy and engineering services to its clients. In the year 2014-15, the Government has set up a commission to decide about the pay revision. The pay will be revised with effect from 1-1-2006 based on the recommendations of the commission. The company makes the provision of ₹ 680 lakhs for pay revision in the financial year 2014-2015 on the estimated basis as the report of the commission is yet to come. As per the contracts with the client on cost plus job, the billing is done on the actual payment made to the employees and allocated to jobs based on hours booked by these employees on each job.

The company gives the following disclosures in its notes to accounts:

"Salaries and benefits include the provision of ₹ 680 lakhs in respect of pay revision. The amount chargeable from reimbursable jobs will be billed as per the

contract when the actual payment is made”.

The accountant feels that the company should also recognise the income by ₹ 680 lakhs in Profit and Loss Account as per the terms of the contract. Otherwise, it will be the violation of matching concept and it will lead to understatement of profit.

You are required to comment on the treatment done by the company in line with provisions of Accounting Standards.

SUGGESTED ANSWERS/HINTS

1.

Books of Partnership Firm

Realisation Account

	₹			₹
To Land & Building	1,00,000	By Sundry Creditors		60,000
To Furniture	40,000	By X Ltd. Co. - Purchase consideration – (W.N.1)		2,79,000
To Stock	1,00,000	By X Ltd. Company – Sundry Debtors	66,000	
To Debtors	66,000	Less: Commission 5% on 66,000	<u>3,300</u>	62,700
To X Ltd. Co. - Sundry Creditors	59,000			
To X Ltd. Co. – Commission 3% on 59,000	1,770			
To Profits transferred to X's Capital A/c 17,465				
Y's Capital A/c 17,465				
	<u>34,930</u>			
	<u>4,01,700</u>			<u>4,01,700</u>

Capital Accounts

	X	Y		X	Y
	₹	₹		₹	₹
To Shares in X Ltd. Co.-(W.N.2)	1,63,980	1,15,020	By Balance b/d	1,50,000	1,00,000
To Cash – Final Payment	<u>3,485</u>	<u>2,445</u>	By Realisation a/c - Profit	<u>17,465</u>	<u>17,465</u>
	<u>1,67,465</u>	<u>1,17,465</u>		<u>1,67,465</u>	<u>1,17,465</u>

Cash Account

	₹		₹
To Balance b/d	4,000	By X's Capital A/c- Final payment	3,485
To X Ltd. Co. (Amount realized from Debtors less amount paid to creditors) – (W.N.3)	<u>1,930</u>	By Y's Capital A/c- Final Payment	2,445
	<u>5,930</u>		<u>5,930</u>

Working Notes:**1 Calculation of Purchase consideration**

	₹
Land & Building	1,20,000
Furniture	34,000
Stock	85,000
Goodwill	<u>40,000</u>
	<u>2,79,000</u>

2 Shares received from X Ltd. Co.

The shares received from the company have been distributed between the two partners X & Y in the ratio of their final claims i.e., 1,67,465: 1,17,465.

$$\text{No. of shares received from the company} = \frac{2,79,000}{12} = 23,250$$

$$\text{X gets } \frac{23,250 \times 1,67,465}{2,84,930} = 13,665 \text{ shares valued at } 13,665 \times 12 = ₹ 1,63,980.$$

Y gets the remaining 9,585 shares, valued at ₹ 1,15,020 (9,585 × 12)

3 Calculation of net amount received from X Ltd

	₹
Amount realized from Debtors	66,000
Less: Commission for realization from debtors (5% on 66,000)	<u>3,300</u>
	62,700
Less: Amount paid to creditors	<u>59,000</u>
	3,700
Less: Commission for cash paid to creditors (3% on 59,000)	<u>1,770</u>
Net amount received	<u>1,930</u>

2. (a)

Particulars	Cash	Creditors	Capitals		
	₹	₹	P (₹)	Q (₹)	R (₹)
Balance due after loan		16,000	52,000	43,500	32,000
January					
Balance available	9,000				
Realization less expenses and cash retained	10,000				
Amount available and paid	19,000	(16,000)	-	-	(3,000)
Balance due	-	-	52,000	43,500	29,000
February					
Opening Balance	6,000				
Expenses paid and cash carried forward	<u>3,000</u>				
Available for distribution	3,000				
Cash paid to Q and Machinery given to R			-	3,000	9,000
Balance due	-		52,000	40,500	20,000
March					
Opening Balance	2,000				
Amount realized less expenses	<u>87,300</u>				
Amount paid to partners	89,300		41,689	32,767	14,844
Loss			10,311	7,733	5,156

Working Note:(i) **Highest Relative Capital Basis**

	P (₹)	Q (₹)	R (₹)
Scheme of payment for January 2015			
Balance of Capital Accounts	65,000	50,500	32,000
Less: Loans	(13,000)	(7,000)	-
(A)	52,000	43,500	32,000
Profit Sharing Ratio	4	3	2
Capital / Profit sharing Ratio	13,000	14,500	16,000

Capital in profit sharing ratio, taking P's capital as base (B)	52,000	39,000	26,000
Excess of R's capital and Q's Capital (A – B) (i)		4,500	6,000
Profit Sharing Ratio		3	2
Capital / Profit sharing Ratio		1,500	3,000
Capital in profit sharing ratio, taking Q's capital as base (ii)		4,500	3,000
Excess of R's Capital over Q's capital (i – ii)			3,000

(ii) **Scheme of distribution of available cash for March:**

	P (₹)	Q (₹)	R (₹)
Balance of Capital Accounts at end of February (A)	52,000	40,500	20,000
Profit Sharing Ratio	4	3	2
Capital / Profit sharing Ratio	13,000	13,500	10,000
Capital in profit sharing ratio, taking R's capital as base (B) (i)	40,000	30,000	20,000
Excess of P's Capital and Q's Capital (A – B) (i)	12,000	10,500	
Profit Sharing Ratio	4	3	
Capital / Profit sharing Ratio	3,000	3,500	
Capital in profit sharing ratio taking P's capital as base (ii)	12,000	9,000	
Excess of Q's Capital over P's Capital (i – ii)	-	1,500	
Payment ₹ 1500 (C)		(1,500)	
Balance of Excess Capital (i – C)	12,000	9,000	
Payment ₹ 21000 (D)	(12,000)	(9,000)	
Balance due (A – C – D)	40,000	30,000	20,000
Balance cash Payment (₹ 89,300 – ₹ 22,500) = ₹ 66,800 (E)	(29,689)	(22,267)	(14,844)
Total Payment (₹ 89,000) (C + D + E) (iii)	41,689	32,767	14,844
Loss (A – iii)	10,311	7,733	5,156

(b) **Liabilities of designated partners**

As per Section 8 of LLP Act, unless expressly provided otherwise in this Act, a designated partner shall be-

- (1) responsible for the doing of all acts, matters and things as are required to be done by the limited liability partnership in respect of compliance of the provisions of this Act including filing of any document, return, statement and the like report pursuant to the provisions of this Act and as may be specified in the limited liability partnership agreement; and .
- (2) liable to all penalties imposed on the limited liability partnership for any contravention of those provisions.
3. The vesting of options is subject to satisfaction of two conditions viz. service condition of continuous employment for 3 years and market condition that the share price at the end of 2013-14 is not less than ₹ 70. Since the share price on 31/03/14 was ₹ 68, the actual vesting shall be nil. Despite this, the company should recognise value of option over 3-year vesting period from 2011-12 to 2013-14.

Year 2011-12

Fair value of option per share = ₹ 9

Number of shares expected to vest under the scheme = $48 \times 1,000 = 48,000$

Fair value = $48,000 \times ₹ 9 = ₹ 4,32,000$

Expected vesting period = 3 years

Value of option recognised as expense in 2011-12 = $₹ 4,32,000 / 3 = ₹ 1,44,000$

Year 2012-13

Fair value of option per share = ₹ 9

Number of shares expected to vest under the scheme = $47 \times 1,000 = 47,000$

Fair value = $47,000 \times ₹ 9 = ₹ 4,23,000$

Expected vesting period = 3 years

Cumulative value of option to recognise as expense in 2011-12 and 2012-13

= $(₹ 4,23,000 / 3) \times 2 = ₹ 2,82,000$

Value of option recognised as expense in 2011-12 = ₹ 1,44,000

Value of option recognised as expense in 2012-13

= $₹ 2,82,000 - ₹ 1,44,000 = ₹ 1,38,000$

Year 2013-14

Fair value of option per share = ₹ 9

Number of shares actually vested under the scheme = $45 \times 1,000 = 45,000$

Fair value = $45,000 \times ₹ 9 = ₹ 4,05,000$

Vesting period = 3 years

Cumulative value of option to recognise as expense in 2011-12, 2012-13 and 2013-14 = ₹ 4,05,000

Value of option recognised as expense in 2011-12 and 2012-13 = ₹ 2,82,000

Value of option recognised as expense in 2013-14 = ₹ 4,05,000 – ₹ 2,82,000 = ₹ 1,23,000

Employees' Compensation A/c

Year		₹	Year		₹
2011-12	To ESOP Outstanding A/c	<u>1,44,000</u>	2011-12	By Profit & Loss A/c	<u>1,44,000</u>
		1,44,000			1,44,000
2012-13	To ESOP Outstanding A/c	<u>1,38,000</u>	2012-13	By Profit & Loss A/c	<u>1,38,000</u>
		1,38,000			1,38,000
2013-14	To ESOP Outstanding A/c	<u>1,23,000</u>	2013-14	By Profit & Loss A/c	<u>1,23,000</u>
		1,23,000			1,23,000

ESOP Outstanding A/c

Year		₹	Year		₹
2011-12	To Balance c/d	<u>1,44,000</u>	2011-12	By Employees' Compensation A/c	<u>1,44,000</u>
		1,44,000			1,44,000
2012-13	To Balance c/d	2,82,000	2012-13	By Balance b/d	1,44,000
		_____		By Employees' Compensation A/c	<u>1,38,000</u>
		<u>2,82,000</u>			<u>2,82,000</u>
2013-14	To General Reserve	4,05,000	2013-14	By Balance b/d	2,82,000
		_____		By Employees' Compensation A/c	<u>1,23,000</u>
		<u>4,05,000</u>			<u>4,05,000</u>

4.

Journal Entries

2013			₹	₹
Jan. 1	14% Debentures A/c	Dr.	24,00,000	
	Premium on Redemption of Debentures A/c	Dr.	48,000	
	To Debentures holders A/c			24,48,000
	(Being amount payable on redemption of ₹ 24,00,000 debentures at a premium of 2%)			
	Debenture Redemption Reserve A/c	Dr.	48,000	
	To Premium on Redemption of			48,000

Debentures A/c (Being premium on redemption adjusted against Debenture Redemption Reserve A/c)			
Debenture holders A/c $\left(24,48,000 \times \frac{75}{100}\right)$	Dr.	18,36,000	
To Equity Share Capital A/c (1,44,000 × ₹10)			14,40,000
To Securities Premium A/c (1,44,000 × ₹ 2.75)			3,96,000
(Being issue of 1,44,000 shares of ₹ 10 each at a premium of ₹ 2.75 per share to 75% debenture holders who exercised conversion option)			
Bank A/c	Dr.	6,12,000	
Profit & Loss A/c	Dr.	68,000	
To Debenture Redemption Reserve Investment A/c			6,80,000
(Being investment sold & loss transferred to Profit & Loss A/c)			
Debenture holders A/c (24,48,000 × 25%)	Dr.	6,12,000	
To Bank A/c			6,12,000
(Being cash payment to 25% debenture-holders)			
Debenture Redemption Reserve A/c	Dr.	18,84,000	
To General Reserve A/c			18,84,000
(Being balance of Debenture Redemption Reserve A/c transferred on 100% redemption of debentures)			
Investment A/c	Dr.	13,20,000	
To Debenture Redemption Reserve Investment A/c			13,20,000
(Being balance of Debenture Redemption Reserve Investment transferred to Investment (General) A/c)			

Working Notes:

(1)	For every ₹ 100 debenture, amount payable on redemption including premium is Less: Face value of 8 shares of ₹ 10 each to be issued for redemption of each debenture (8 × ₹ 10) Premium on issue of 8 shares Therefore, premium on issue of each share $\left(\frac{₹ 22}{8}\right)$	₹ 102 <u>₹ 80</u> <u>₹ 22</u> ₹2.75
(2)	Shares to be issued for conversion of 75% Debentures into shares @ 8 shares for every ₹ 100 Debenture i.e. $₹24,00,000 \times \frac{75}{100} \times \frac{8}{100} = 1,44,000$ shares	
(3)	Cash payment for remaining 25% debenture holders who exercised the option of cash i.e., $₹24,00,000 \times \frac{25}{100} \times \frac{102}{100} = ₹6,12,000$	
(4)	Face value of investment to be sold to realize ₹ 6,12,000 will be ₹ 6,80,000 $\left(\text{i.e. } ₹ \frac{20,00,000}{18,00,000} \times ₹ 6,12,000\right)$ Loss on sale of investment = 6,80,000 – 6,12,000 = 68,000	
(5)	Debenture Redemption Reserve transferred to General Reserve: 20,00,000 – 48,000 – 68,000 = ₹ 18,84,000	

5.

**Journal Entries
In the books of Gamma Ltd.**

		Dr.	Cr.
		₹ in lakhs	
1	Bank A/c Dr. To Investments A/c To Profit and Loss A/c (Being Investments sold and profit being credited to Profit and Loss Account)	12,600	12,000 600
2	Bank A/c Dr. To Bank Loan A/c (Being Loan taken from Bank to finance Buyback)	8,000	8000

3	10% Redeemable Preference Share Capital A/c	Dr.	10,000	
	Premium payable on Redemption of Preference Shares A/c	Dr.	1,000	
	To Preference Shareholders A/c			11,000
	(Being amount payable on redemption of Preference shares at a Premium of 10%)			
4	Securities Premium A/c	Dr.	1,000	
	To Premium payable on Redemption of Preference Shares A/c			1,000
	(Being Securities Premium utilised to provide Premium on Redemption of Preference Shares)			
5	Equity Share Capital A/c	Dr.	8,000	
	Premium payable on Buyback A/c	Dr.	8,000	
	To Equity Share buy back A/c			16,000
	(Being the amount due on buy-back)			
5	Securities Premium A/c (3,200 – 1,000)	Dr.	2,200	
	General Reserve A/c (balancing figure)	Dr.	5,800	
	To Premium payable on Buyback A/c			8,000
	(Being premium on buyback provided first out of Securities Premium and the balance out of General Reserves)			
6	Bank A/c	Dr.	8,000	
	To Bank Loan A/c			8000
	(Being Loan taken from Bank to finance Buyback)			
7	Preference Shareholders A/c	Dr.	11,000	
	Equity Shares buy back A/c	Dr.	16,000	
	To Bank A/c			27,000
	(Being payment made to Preference Shareholders and Equity Shareholders)			
8	General Reserve Account (10,000 + 8,000)	Dr.	18,000	
	To Capital Redemption Reserve Account			18,000
	(Being amount transferred to Capital Redemption Reserve to the extent of face value of preference shares redeemed and equity shares bought back)			

6. Calculation of liability of each underwriter assuming that the benefit of firm underwriting is not given to individual underwriter

Particulars	No. of shares				
	L	M	N	O	Total
Gross liability	80,000	60,000	40,000	20,000	2,00,000
Less: Marked Applications (excluding firm underwriting)	(55,000)	(40,000)	(42,000)	(8,000)	(1,45,000)
Balance	25,000	20,000	(2,000)	12,000	55,000
Less: Surplus of N allotted to L, M & O in the ratio of 4:3:1	(1,000)	(750)	2,000	(250)	-
Balance	24,000	19,250	-	11,750	55,000
Less: Unmarked application including firm underwriting (WN)	(7,200)	(5,400)	(3,600)	(1,800)	(18,000)
Net Liability	16,800	13,850	(3,600)	9,950	37,000
Less: Surplus of N allotted to L, M & O in the ratio of 4:3:1	(1,800)	(1,350)	3,600	(450)	-
Balance	15,000	12,500	-	9,500	37,000
Add: Firm Underwriting	5,000	4,000	2,000	2,000	13,000
Total Liability	20,000	16,500	2,000	11,500	50,000

Working Note:

Particulars	No. of shares
Applications received from public	1,50,000
Add: Firm underwriting	<u>13,000</u>
Total Applications	1,63,000
Less: Marked application	<u>(1,45,000)</u>
Unmarked application including firm underwriting	18,000

7. **Journal Entries in the books of Vaibhav Ltd.**

		₹	₹
(i)	Equity share capital (₹ 100) A/c Dr.	2,00,00,000	
	To Equity Share Capital (₹ 40) A/c		80,00,000
	To Capital Reduction A/c		1,20,00,000
	(Being conversion of equity share capital of ₹ 100 each into ₹40 each as per reconstruction scheme)		

(ii)	6% Cumulative Preference Share capital (₹ 100) A/c Dr.	1,00,00,000	
	To 6% Cumulative Preference Share Capital (₹ 60) A/c		60,00,000
	To Capital Reduction A/c		40,00,000
(Being conversion of 6% cumulative preference shares capital of ₹ 100 each into ₹ 60 each as per reconstruction scheme)			
(iii)	5% Debentures (₹ 100)A/c Dr.	80,00,000	
	To 6% Debentures (₹ 70) A/c		56,00,000
	To Capital Reduction A/c		24,00,000
(Being 6% debentures of ₹ 70 each issued to existing 5% debenture-holders. The balance transferred to capital reduction account as per reconstruction scheme)			
(iv)	Trade Payable A/c Dr.	40,00,000	
	To Equity Share Capital (₹ 40) A/c		24,00,000
	To Capital Reduction A/c		16,00,000
(Being a creditor of ₹ 40,00,000 agreed to surrender his claim by 40% and was allotted 60,000 equity shares of ₹ 40 each in full settlement of his dues as per reconstruction scheme)			
(v)	Provision for Taxation A/c Dr.	2,00,000	
	Capital Reduction A/c Dr.	1,00,000	
	To Liability for Taxation A/c		3,00,000
(Being conversion of the provision for taxation into liability for taxation for settlement of the amount due)			
(vi)	Capital Reduction A/c Dr.	199,00,000	
	To P & L A/c		12,00,000
	To Fixed Assets A/c		50,00,000
	To Current Assets A/c		110,00,000
	To Investments A/c		1,00,000
	To Capital Reserve A/c (Bal. fig.)		26,00,000
(Being amount of Capital Reduction utilized in writing off P & L A/c (Dr.) Balance, Fixed Assets, Current Assets, Investments and the Balance transferred to Capital Reserve)			

(vii)	Liability for Taxation A/c	Dr.	3,00,000	
	To Current Assets (Bank A/c)			3,00,000
	(Being the payment of tax liability)			

Balance Sheet of Vaibhav Ltd. (After Reconstruction) as on 31.3.2014

Particulars	Notes	₹
Equity and Liabilities		
1 Shareholders' funds		
a Share capital	1	164,00,000
b Reserves and Surplus	2	26,00,000
2 Non-current liabilities		
Long-term borrowings	3	56,00,000
3 Current liabilities		
Trade Payables(1,00,00,000 less 40,00,000)		60,00,000
Total		3,06,00,000
Assets		
1 Non-current assets		
a Fixed assets		
Tangible assets	4	200,00,000
b Investments	5	19,00,000
2 Current assets	6	87,00,000
Total		3,06,00,000

Notes to accounts

	₹
1. Share Capital	
Equity share capital	
Issued, subscribed and paid up	
2,60,000 equity shares of ₹ 40 each (60,000 shares have been issued for consideration other than cash)	1,04,00,000
Preference share capital	
Issued, subscribed and paid up	
1,00,000 6% Cumulative Preference shares of ₹ 60 each	60,00,000
Total	1,64,00,000

2. Reserves and Surplus		
Capital Reserve		<u>26,00,000</u>
3. Long-term borrowings		
Secured		
6% Debentures		<u>56,00,000</u>
4. Tangible assets		
Fixed Assets	2,50,00,000	
Adjustment under scheme of reconstruction	(50,00,000)	<u>2,00,00,000</u>
5. Investments	20,00,000	
Adjustment under scheme of reconstruction	(1,00,000)	<u>19,00,000</u>
6. Current assets		
Adjustment under scheme of reconstruction	2,00,00,000	
	<u>110,00,000</u>	
	90,00,000	
Taxation liability paid	(3,00,000)	<u>87,00,000</u>

Working Note:**Capital Reduction Account**

To Liability for taxation A/c	1,00,000	By Equity share capital	1,20,00,000
To P & L A/c	12,00,000	By 6% Cumulative preferences Share capital	40,00,000
To Fixed Assets	50,00,000	By 5% Debentures	24,00,000
To Current assets	110,00,000	By Sundry creditors	16,00,000
To Investment	1,00,000		
To Capital Reserve (Bal. fig.)	<u>26,00,000</u>		
	<u>2,00,00,000</u>		<u>2,00,00,000</u>

8. (a) Journal Entries in the Books of P Ltd.

	Dr.	Cr.
	₹	₹
Fixed Assets	Dr. 1,05,000	
To Revaluation Reserve		1,05,000
(Revaluation of fixed assets at 15% above book value)		
Reserve and Surplus	Dr. 60,000	

To Equity Dividend (Declaration of equity dividend @ 10%)		60,000
Equity Dividend	Dr. 60,000	
To Bank Account (Payment of equity dividend)		60,000
Business Purchase Account	Dr. 4,90,000	
To Liquidator of Q Ltd. (Consideration payable for the business taken over from Q Ltd.)		4,90,000
Fixed Assets (115% of ₹ 2,50,000)	Dr. 2,87,500	
Inventory (95% of ₹ 3,20,000)	Dr. 3,04,000	
Debtors	Dr. 1,90,000	
Bills Receivable	Dr. 20,000	
Investment	Dr. 80,000	
Cash at Bank (₹ 40,000 – ₹ 30,000 dividend paid)	Dr. 10,000	
To Provision for Bad Debts (5% of ₹ 1,90,000)		9,500
To Sundry Creditors		1,25,000
To 12% Debentures in Q Ltd.		1,62,000
To Bills Payable		25,000
To Business Purchase Account		4,90,000
To Capital Reserve (Balancing figure)		80,000
(Incorporation of various assets and liabilities taken over from Q Ltd. at agreed values and difference of net assets and purchase consideration being credited to capital reserve)		
Liquidator of Q Ltd.	Dr. 4,90,000	
To Equity Share Capital		4,00,000
To 10% Preference Share Capital (Discharge of consideration for Q Ltd.'s business)		90,000
12% Debentures in Q Ltd. (₹ 1,50,000 × 108%)	Dr. 1,62,000	
Discount on Issue of Debentures	Dr. 18,000	
To 12% Debentures (Allotment of 12% Debentures to debenture holders of Q Ltd. at a discount of 10%)		1,80,000
Sundry Creditors	Dr. 10,000	

To Sundry Debtors (Cancellation of mutual owing)			10,000
Goodwill	Dr.	30,000	
To Bank (Being liquidation expenses reimbursed to Q Ltd.)			30,000
Capital Reserve	Dr.	30,000	
To Goodwill (Being goodwill set off)			30,000

(b) Statement of Consideration payable by P Ltd. for 30,000 shares (payment method)

Shares to be allotted $\frac{30,000}{6} \times 8 = 40,000$ shares of P Ltd.

Issued 40,000 shares of ₹ 10 each i.e. ₹ 4,00,000 (i)

For 10% preference shares, to be paid at 10% discount

₹ $\frac{1,00,000 \times 90}{100}$ ₹ 90,000 (ii)

Consideration amount [(i) + (ii)] ₹ 4,90,000

9. Liquidator's Final Statement of Receipts and Payments A/c

	₹	₹		₹
To Cash in hand		40,000	By Liquidator's remuneration and expenses	5,000
To Assets realised:			By Trade Payables	3,50,000
Fixed assets	1,68,000		By Preference shareholders	1,00,000
Inventory			By Equity shareholders @ ₹ 10 on 2,000 shares	20,000
(1,10,000 – 1,00,000)	10,000			
Book debts	<u>2,30,000</u>	4,08,000		
To Cash - proceeds of call on 1,800 equity shares @ ₹ 15		<u>27,000</u>		
		<u>4,75,000</u>		<u>4,75,000</u>

Working Note:

Return per equity share

	₹
Cash available before paying preference shareholders (₹ 4,48,000 – ₹ 3,55,000)	93,000

Add: Notional calls 1,800 shares (2,000-200) × ₹ 25	<u>45,000</u>
	1,38,000
Less: Preference share capital	<u>(1,00,000)</u>
Available for equity shareholders	<u>38,000</u>
Return per share = $\frac{₹ 38,000}{3,800 (4,000 - 200)} = ₹ 10$	
and Loss per Equity Share ₹ (100-10) = ₹ 90	

Calls to be made @ ₹ 15 per share (₹ 90-75) on 1,800 shares.

10. (a) **Computation of Tier I and Tier II Capital Fund**

Particulars	Amount (₹ in crores)
(i) Capital Funds – Tier I	
Equity Share Capital	400.00
Statutory Reserve	250.00
Capital Reserve (arising out of sale of assets i.e. ₹ 86 cr – ₹18 cr)	<u>68.00</u>
	718.00
(ii) Capital Fund – Tier-II	
Capital Reserve (arising out of revaluation of assets) 18.00	18.00
Less: Discount to the extent of 55%	<u>(9.90)</u>
	<u>8.10</u>
	<u>726.10</u>

Risk Adjusted Assets

Particulars	Amount (₹ in crores)	% of weight	Amount (₹ in crores)
Funded Risk Assets			
Cash Balance with RBI	12.00	0	0.00
Balance with other Banks	20.00	20	4.00
Other Investments	40.00	100	40.00
Loans & Advances :			
(i) Guranteed by Government	14.50	0	0.00
(ii) Others	5,465.00	100	5,465.00
Premises Furniture & Fixture	74.00	100	<u>74.00</u>
Total (i)			<u>5583.00</u>

Off Balance Sheet Items			
Guarantees and other obligations	700.00	100	700.00
Acceptances, endorsements and letter of credit	4,900.00	100	<u>4,900.00</u>
Total (ii)			<u>5,600.00</u>
Total [(i) + (ii)]			11183.00

Risk Weighted Assets Ratio:

$$\frac{\text{Capital Fund} \times 100}{\text{Risk Adjusted Assets}}$$

$$= (726.10 / 11183) \times 100$$

$$= 6.49\%$$

11. (i) Calculation of Rebate on bills discounted

S.No.	Amount (₹)	Due date 2015	Unexpired portion	Rate of discount	Rebate on bill discounted ₹
(i)	7,50,000	April 8	8 days	12%	1,972
(ii)	3,00,000	May 5	35 days	14%	4,028
(iii)	4,40,000	June 12	73 days	14%	12,320
(iv)	9,60,000	July 15	106 days	15%	<u>41,820</u>
					<u>60,140</u>

(ii) Amount of discount to be credited to the Profit and Loss Account

	₹
Transfer from Rebate on bills discount as on 31 st March, 2014	91,600
Add: Discount received during the year ended 31 st March, 2015	<u>4,05,000</u>
	4,96,600
Less: Rebate on bills discounted as on 31 st March, 2015	<u>60,140</u>
Discount credited to the Profit and Loss Account	<u>4,36,460</u>

12.**In the books of XYZ Marine Insurance Ltd.**

	Amount (₹)
(i) Net Premium earned	
Premium from Direct Business received	92,00,000
Add: Receivable as on 31.03.2014	3,94,000

Less: Receivable as on 01.04.2013	<u>(4,59,000)</u>
Sub Total (A)	<u>91,35,000</u>
Premium on reinsurance accepted	7,86,000
Add: Receivable as on 31.03.2014	33,000
Less: Receivable as on 01.04.2013	<u>(37,000)</u>
Sub Total (B)	<u>7,82,000</u>
Premium on reinsurance Ceded	6,36,000
Add: Payable as on 31.03.2014	20,000
Less: Payable as on 01.04.2013	<u>(28,000)</u>
Sub Total (C)	<u>6,28,000</u>
Premium Earned (A+B-C)	92,89,000
(ii) Net Claims Incurred	
Claims paid on direct business	73,00,000
Add: Outstanding as on 31.03.2014	1,01,000
Less: Outstanding as on 01.04.2013	<u>(94,000)</u>
Sub Total (A)	<u>73,07,000</u>
Reinsurance claims	5,80,000
Add: Outstanding as on 31.03.2014	12,000
Less: Outstanding as on 01.04.2013	<u>(16,000)</u>
Sub Total (B)	<u>5,76,000</u>
Claims received from reinsurance	2,10,000
Add: Outstanding as on 31.03.2014	39,000
Less: Outstanding as on 01.04.2013	<u>(42,000)</u>
Sub Total (C)	<u>2,07,000</u>
Net Claim Incurred (A+B-C)	76,76,000

13. (a) Interest on loan

	2010-11 ₹	2011-12 ₹	2012-13 ₹
Opening Capital cost (A)	135.39	137.02	138
Gross Opening loan - considered at 70% of (A)=(B)	94.773	95.914	96.6
Cumulative Repayment of Loan upto previous year (C)	14	14.96	15.83

Net Loan Opening (B)-(C)=(D)	80.773	80.954	80.77
Additional capital expenditure (allowed above) (E)	1.63	0.98	0.52
Addition of loan due to approved additional capital expenditure - considered at 70% of (E)=(F)	1.141	0.686	0.364
Repayment of loan during the year (net)(G)	0.96	0.87	0.68
Net Loan Closing [(D)+(F)-(G)=(H)]	80.954	80.77	80.454
Average Loan[(D)+(H)/2]=I	80.864	80.862	80.612
Weighted Average Rate of Interest on Loan (J)	7.35%	7.48%	7.50%
Interest on Loan(I) x (J)	5.944	6.048	6.046

(b) Depreciation

Name of the Power Station : Wastan Power Generation Project

Date of commercial operation /Work Completed Date 1/4/95

Beginning of Current year 1/4/10

Useful life 35 Years

Remaining Useful Life 20 Years

(Figures in ₹ crores)

S.N.		2010-11	2011-12	2012-13
	Capital cost at beginning of the year	135.39	137.02	138
	Additional capitalisation during the year	1.63	0.98	0.52
	Closing capital cost	137.02	138	138.52
1	Average capital cost	136.205	137.51	138.26
2	Less: Value of Land	0.000	0.000	0.000
3	Capital cost for depreciation (1-2)	136.205	137.51	138.26
4	Depreciable value (90% of 3)	122.585	123.759	124.434
5	Depreciation recovered up to 2008-09	49.05		
6	Depreciation recovered in 2009-10	3.26		
7	Depreciation recovered upto previous year	52.31	55.824	59.400
8	Balance depreciation to be recovered (4-7)	70.27	67.936	65.035
9	Balance useful life of 35 years	20	19	18
10	Yearly depreciation from 2010-11 (8/9)	3.514	3.576	3.613
11	Depreciation recovered upto the year (7+10)	55.824	59.400	63.013

14. **Departmental Trading and Loss Account of M/s Division**
For the year ended 31st December, 2014

	Deptt. A	Deptt. B		Deptt. A	Deptt. B
	₹	₹		₹	₹
To Opening stock	50,000	40,000	By Sales	10,00,000	15,00,000
To Purchases	6,50,000	9,10,000	By Closing stock	1,00,000	2,00,000
To Gross profit	<u>4,00,000</u>	<u>7,50,000</u>		<u>11,00,000</u>	<u>17,00,000</u>
	<u>11,00,000</u>	<u>17,00,000</u>	By Gross profit	4,00,000	7,50,000
To General Expenses (in ratio of sales)	50,000	75,000			
To Profit ts/f to general profit and loss account	3,50,000	6,75,000			
	4,00,000	7,50,000		4,00,000	7,50,000

General Profit and Loss Account

	₹		₹
To Stock reserve required (additional: Stock in Deptt. A 50% of (₹ 20,000 - ₹ 10,000) (W.N.1)	5,000	By Profit from: Deptt. A	3,50,000
Stock in Deptt. B 40% of (₹ 30,000 - ₹ 15,000) (W.N.2)	6,000	Deptt. B	6,75,000
To Net Profit	<u>10,14,000</u>		
	<u>10,25,000</u>		<u>10,25,000</u>

Working Notes:

1. Stock of department A will be adjusted according to the rate applicable to department B = $[(7,50,000 \div 15,00,000) \times 100] = 50\%$
2. Stock of department B will be adjusted according to the rate applicable to department A = $[(4,00,000 \div 10,00,000) \times 100] = 40\%$

15. (a)

**Books of Branch
Journal Entries**

		<i>Amount in ₹</i>	
		<i>Dr.</i>	<i>Cr.</i>
(i)	Expenses Account To Head Office Account A/c (Being the expenses allocated by the Head office not recorded earlier, now recorded)	Dr. 2,800	2,800
(ii)	Provision for Doubtful Debts A/c To Head Office Account (Being the provision for doubtful debts not provided earlier, now provided for)	Dr. 1,000	1,000
(iii)	Head Office Account To Salaries Account (Being rectification of salary paid on behalf of Head Office)	Dr. 3,000	3,000
(iv)	Head Office Account To Cash Account (Being expenditure incurred on account of other branch, now recorded in books)	Dr. 5,000	5,000
(v)	No entry in Branch Books is required.		
(vi)	Expenses Account To Head Office Account (Being allocated expenses of Head Office recorded)	Dr. 75,000	75,000
(vii)	Head Office Account To Debtors Account (Being adjustment entry for collection from Branch Debtors directly by Head Office)	Dr. 30,000	30,000
(viii)	Goods-in- transit Account To Head Office Account (Being goods sent by Head Office still in-transit)	Dr. 10,000	10,000

(b) **In the books of ABC Ltd.
New York Branch Trial Balance in (₹)
as on 31st March, 2015**

	<i>Conversion rate per US \$</i> (₹)	<i>Dr.</i> ₹	<i>Cr.</i> ₹
Stock on 1.4.14	40	6,000	–
Purchases and sales	41	16,400	30,750
Sundry debtors and creditors	42	8,400	6,300
Bills of exchange	42	2,520	5,040
Sundry expenses	41	22,140	–
Bank balance	42	8,820	–
Delhi head office A/c	–	–	22,190
		64,280	64,280

16.

<i>Particulars</i>	<i>Financial Capital Maintenance at Historical Cost</i> (₹)
Closing equity (₹ 30 x 60,000 units)	18,00,000 represented by cash
Opening equity	60,000 units x ₹ 20 = 12,00,000
Permissible drawings to keep Capital intact	6,00,000 (18,00,000 – 12,00,000)

17. (a) **Computation of Basic Earnings per Share**

		<i>Year 2012-13</i> (₹)	<i>Year 2013-14</i> (₹)
(i)	EPS for the year 2012-13 as originally reported = Net profit for the year attributable to equity share holder / weighted average number of equity shares outstanding during the year <u>₹ 22,00,000</u> 10,00,000 shares	2.20	
(ii)	EPS for the year 2012-13 restated for the right issue	2.12	

	$\frac{\text{₹ } 22,00,000}{10,00,000 \text{ shares} \times 1.04}$		
(iii)	EPS for the year 2013-14 (including effect of right issue) $\frac{\text{₹ } 30,00,000}{(10,00,000 \times 1.04 \times 4/12) + (12,00,000 \times 8/12)}$		2.62

Working Notes:**1. Computation of theoretical ex-rights fair value per share =**

$$\frac{\text{Fair value of all outstanding shares immediately prior to exercise of rights} + \text{total amount received from exercise}}{\text{Number of shares outstanding prior to exercise} + \text{number of shares issued in the exercise}}$$

$$\frac{(\text{₹ } 32 \times 10,00,000) + (\text{₹ } 25 \times 2,00,000)}{10,00,000 + 2,00,000} = \text{₹ } 30.83$$

2. Computation of adjustment factor

$$\frac{\text{Fair value per share prior to exercise of rights}}{\text{Theoretical ex-rights value per share}}$$

$$= \frac{\text{₹ } 32}{\text{₹ } 30.83} = 1.04 \text{ (approx.)}$$

(b) (i) Calculation of Annual Lease Payment

	₹
Cost of the equipment	7,46,55,100
Unguaranteed Residual Value	1,00,000
PV of unguaranteed residual value for 3 years @ 10% (₹ 1,00,000 x 0.751)	75,100
Fair value to be recovered from Lease Payment (₹ 7,46,55,100 – ₹ 75,100)	7,45,80,000
PV Factor for 3 years @ 10%	2.486
Annual Lease Payment (₹ 7,45,80,000 / PV Factor for 3 years @ 10% i.e. 2.486)	3,00,00,000

(ii) Unearned Finance Income

Total lease payments [₹ 3,00,00,000 x 3]	9,00,00,000
Add: Residual value	<u>1,00,000</u>

Gross Investments	9,01,00,000
Less: Present value of Investments (₹ 7,45,80,000+ ₹ 75,100)	<u>(7,46,55,100)</u>
Unearned Finance Income	<u>1,54,44,900</u>

18. (a) According to para 6 of AS 16 “Borrowing Costs”, borrowing costs that are directly attributable to the acquisition, construction or production of a qualifying asset should be capitalised as part of the cost of that asset. The amount of borrowing costs eligible for capitalisation should be determined in accordance with this Standard. Other borrowing costs should be recognised as an expense in the period in which they are incurred.

Also para 10 of AS 16 “Borrowing Costs” states that to the extent that funds are borrowed specifically for the purpose of obtaining a qualifying asset, the amount of borrowing costs eligible for capitalisation on that asset should be determined as the actual borrowing costs incurred on that borrowing during the period less any income on the temporary investment of those borrowings.

Thus, eligible borrowing cost

$$= ₹ 11,00,000 - ₹ 2,00,000$$

$$= ₹ 9,00,000$$

Sr. No.	Particulars	Nature of assets	Interest to be Capitalized (₹)	Interest to be charged to Profit & Loss Account (₹)
i	Construction of factory building	Qualifying Asset*	9,00,000x40/100 = ₹ 3,60,000	NIL
ii	Purchase of Machinery	Not a Qualifying Asset	NIL	9,00,000x35/100 = ₹ 3,15,000
iii	Working Capital	Not a Qualifying Asset	NIL	9,00,000x25/100 = ₹ 2,25,000
	Total		<u>₹ 3,60,000</u>	<u>₹ 5,40,000</u>

* A qualifying asset is an asset that necessarily takes a substantial period of time to get ready for its intended use or sale.

- (b) As per para 31 of AS 5 ‘Net Profit or Loss for the Period, Prior Period Items and Changes in Accounting Policies’, the adoption of an accounting policy for events or transactions that differ in substance from previously occurring events or transactions, will not be considered as a change in accounting policy.

(i) Accordingly, introduction of a formal retirement gratuity scheme by an

employer in place of ad hoc ex-gratia payments to employees on retirement is not a change in an accounting policy.

- (ii) The adoption of a new accounting policy for events or transactions which did not occur previously or that were immaterial will not be treated as a change in an accounting policy.

19. (a) AS 11 'The Effects of Changes in Foreign Exchange Rates' provides that exchange differences attributable to monetary items should be taken to Statement of Profit and Loss. In case the option under para 46A is exercised, the exchange differences arising on long-term foreign currency monetary items can be adjusted in the cost of the depreciable capital asset or in other cases transferred in Foreign Currency Monetary Item Translation Difference Account (FCMITD) and amortised.

- (i) Trade Receivables

<i>Particulars</i>	<i>Foreign currency</i>	<i>Rate</i>	<i>Rupees</i>
Initial recognition	US \$ 12,919.90	38.70	5,00,000
Rate on B/S date		45.80	
Exchange Difference	US \$ 12,919.90	7.10	91,731
Gain or loss			Gain
Treatment			Credit to Profit & Loss A/c ₹ 91,731

- (ii) Long Term loan

<i>Particulars</i>	<i>Foreign currency</i>	<i>Rate</i>	<i>Rupees</i>
Initial recognition	US \$ 1,68,539.33	35.60	60,00,000
Rate on B/S date		45.90	
Exchange Difference	US \$ 1,68,539.33	10.30	17,35,955
Gain or loss			Loss
Treatment			Debit to Profit & Loss A/c ₹ 17,35,955 or transfer to FCMITD A/c and amortise.

- (b) According to para 21 of AS 12 on Accounting for Government Grants, the amount refundable in respect of a grant related to a specific fixed asset should be recorded by increasing the book value of the asset or by reducing deferred income balance, as appropriate, by the amount refundable. Where the book value is increased, depreciation on the revised book value should be provided prospectively over the residual useful life of the asset.

		₹ (in lakhs)
1st April, 2011	Acquisition cost of machinery (₹ 1,500 – ₹ 300)	1,200.00
31st March, 2012	Less: Depreciation @ 20%	<u>(240.00)</u>
	Book value	960.00
31st March, 2013	Less: Depreciation @ 20%	<u>(192.00)</u>
	Book value	768.00
31st March, 2014	Less: Depreciation @ 20%	<u>(153.60)</u>
1st April, 2014	Book value	614.40
May, 2014	Add: Refund of grant	<u>300.00</u>
	Revised book value	<u>914.40</u>

Depreciation @ 20% on the revised book value amounting ₹ 914.40 lakhs is to be provided prospectively over the remaining useful life of the asset i.e. years ended 31st March, 2015 and 31st March, 2016.

20. (a) As per para 44 of AS 26, costs incurred in creating a computer software product should be charged to research and development expense when incurred until technological feasibility/asset recognition criteria has been established for the product. Technological feasibility/asset recognition criteria have been established upon completion of detailed programme design or working model. In this case, ₹ 45,000 would be recorded as an expense (₹ 25,000 for completion of detailed program design and ₹ 20,000 for coding and testing to establish technological feasibility/asset recognition criteria). Cost incurred from the point of technological feasibility/asset recognition criteria until the time when products costs are incurred are capitalized as software cost (₹ 42,000 + ₹ 12,000 + ₹ 13,000) ₹ 67,000.
- (b) As per para 46 of AS 29, 'Provisions, Contingent Liabilities and Contingent Assets', when some or all of the expenditure required to settle a provision is expected to be reimbursed by another party, the reimbursement should be recognised when, and only when, it is virtually certain that reimbursement will be received if the enterprise settles the obligation. The reimbursement should be treated as a separate asset. The amount recognised for the reimbursement should not exceed the amount of the provision.

Accordingly, potential loss to an enterprise may be reduced or avoided because a contingent liability is matched by a related counter-claim or claim against a third party. In such cases, the amount of the provision is determined after taking into account the probable recovery under the claim if no significant uncertainty as to its measurability or collectability exists.

PAPER – 6: AUDITING AND ASSURANCE

PART – I: ACADEMIC UPDATE (Legislative Amendments as per the Companies Act, 2013)

Companies (Cost Records and Audit) Rules, 2014: The Central Government has notified the Companies (cost records and audit) Rules, 2014, dated 30th June, 2014, which prescribes the classes of companies required to include cost records in their books of account, applicability of cost audit, maintenance of records etc.

Rule 3 of the Companies (cost records and audit) Rules, 2014 provides the classes of companies required to include cost records in their books of account. These companies include Foreign Companies defined in sub-section (42) of section 2 of the Act. Some of the companies prescribed under the rule are given below:

- (A) Companies engaged in the production of following goods in strategic sectors, such as machinery and mechanical appliances used in defence, space and atomic energy sectors excluding any ancillary item or items; turbo jets and turbo propellers; arms and ammunitions.
- (B) Companies engaged in an industry regulated by a Sectoral Regulator or a Ministry or Department of Central Government, such as aeronautical services of air traffic management, aircraft operations; telecommunication services made available to users by means of any transmission or reception of signs, signals, writing, images and sounds or intelligence of any nature (other than broadcasting services) and regulated by the Telecom Regulatory Authority of India under the Telecom Regulatory Authority of India Act, 1997.
- (C) Companies operating in areas involving public interest, such as mineral products including cement; ores; Construction Industry; companies engaged in health services viz. functioning as or running hospitals, diagnostic centres, clinical centres or test laboratories.
- (D) Companies (including foreign companies other than those having only liaison offices) engaged in the production, import and supply or trading of following medical devices, such as heart valves; orthopaedic implants; pacemaker (temporary and permanent).

As per **Rule 5** of the Companies (cost records and audit) Rules, 2014, every company under these rules including all units and branches thereof, shall, in respect of each of its financial year commencing on or after the 1st day of April, 2014, is required to maintain cost records in **Form CRA-1**. The cost records shall be maintained on regular basis in such manner as to facilitate calculation of per unit cost of production or cost of operations, cost of sales and

margin for each of its products and activities for every financial year on monthly or quarterly or half-yearly or annual basis.

Rule 6 of the Companies (cost records and audit) Rules, 2014 requires the companies prescribed under the said Rules to appoint an Auditor within one hundred and eighty days of the commencement of every financial year. Every referred company shall inform the cost auditor concerned of his or its appointment as such and file a notice of such appointment with the Central Government within a period of thirty days of the Board meeting in which such appointment is made or within a period of one hundred and eighty days of the commencement of the financial year, whichever is earlier, through electronic mode, in **Form CRA-2**, along with the fee as specified in Companies (Registration Offices and Fees) Rules, 2014.

The cost auditor appointed as such shall continue in such capacity till the expiry of one hundred and eighty days from the closure of the financial year or till he submits the cost audit report, for the financial year for which he has been appointed.

The cost auditor shall submit the cost audit report along with his reservations or qualifications or observations or suggestions, if any, in **Form CRA-3**. He shall forward his report to the Board of Directors of the company within a period of one hundred and eighty days from the closure of the financial year to which the report relates and the Board of Directors shall consider and examine such report particularly any reservation or qualification contained therein.

Duty to report on fraud: The provisions of sub-section (12) of section 143 of the Companies Act, 2013 and the relevant rules on duty to report on fraud shall apply mutatis mutandis to a cost auditor during performance of his functions under section 148 of the Act and these rules.

Cost Audit Rules not to apply in certain cases: The requirement for cost audit under these rules shall not be applicable to a company which is covered under Rule 3, and,

- (i) whose revenue from exports, in foreign exchange, exceeds seventy five per cent of its total revenue; or
- (ii) which is operating from a special economic zone.

Submission of Cost Audit Report: A company shall, within thirty days from the date of receipt of a copy of the cost audit report prepared (in pursuance of a direction issued by Central Government), furnish with the Central Government such report along with full information and explanation on every reservation or qualification contained therein, in **Form CRA-4** along with fees specified in the Companies (Registration Offices and Fees) Rules, 2014. If, after considering the cost audit report referred to under this section and the information and explanation furnished by the company as above, the Central Government is of the opinion, that any further information or explanation is necessary, it may call for such further information and explanation and the company shall furnish the same within such time as may be specified by that Government.

PART – II: QUESTIONS AND ANSWERS**QUESTIONS**

1. State with reason (in short) whether the following statements are true or false:
 - (i) In case of failure of the Board to appoint the first auditor, it shall inform the Central Government.
 - (ii) Where a person appointed as an auditor of a company incurs any of the disqualifications after his appointment, he will still continue as an auditor.
 - (iii) An auditor appointed under the Companies Act, 2013 shall provide to the company only such other services as are approved by the company in general meeting.
 - (iv) Every auditor of a company shall have a right of access at all times to the books of account and vouchers of the company kept at the registered office of the company only.
 - (v) Where at any annual general meeting, no auditor is appointed or re-appointed, the existing auditor shall continue to be the auditor of the company.
 - (vi) As defined under Companies Act, 2013, “Book and paper” and “Book or paper” include books of account only.
 - (vii) At every annual general meeting of a company, the Board of directors of the company shall lay before the company the financial statements for the financial year.
 - (viii) “Issued Capital” means such capital as the company issues from time to time for subscription. It is that part of authorised capital which is offered by the company for subscription and includes the shares allotted for consideration other than cash.
 - (ix) Standards on Review Engagements (SREs) - to be applied in the audit of historical financial information.
 - (x) Narrative Record is a series of instructions and/or questions which a member of the auditing staff must follow and/or answer.

Nature of Auditing

2.
 - (a) Discuss the auditor’s responsibilities for detection of frauds and errors with specific reference to Standards on Auditing and Companies Act, 2013.
 - (b) “The process of auditing is such that it suffers from certain limitations which cannot be overcome irrespective of the nature and extent of audit procedures.” Explain.
3.
 - (a) “Audit is not legally obligatory for all types of business organisations or institutions” Discuss.

- (b) “Having accounts audited by independent auditor, among other advantages, acts as a moral check on the employees from committing fraud.” Explain stating the advantages of Independent audit.
- 4. (a) “Auditor is expected to be familiar with the overall economic environment in which his client is operating.” Discuss.
- (b) Discuss the procedure to be followed by the auditor in case he has sufficient reason to believe that an offence involving fraud has been committed against the company by its officers.

Basic Concepts in Auditing

- 5. “Disclosure of significant accounting policies followed is necessary if the view presented is to be properly appreciated.” Discuss.
- 6. (a) “Some accounting estimates involve relatively low estimation uncertainty and may give rise to lower risks of material misstatements whereas for some accounting estimates there may be relatively high estimation uncertainty particularly where they are based on significant assumptions”. Explain by giving examples.
- (b) Explain what do you mean by Analytical procedures. How such procedures are helpful in auditing?
- 7. (a) What do you mean by the term 'Sufficient Appropriate Audit Evidence'? State various factors that help the auditor to ascertain as to what is sufficient appropriate audit evidence.
- (b) The audit working papers constitute the link between the auditor's report and the client's records. Discuss stating clearly the objectives of audit working papers.

Preparation for an Audit

- 8. (a) What is the meaning of Sampling? Also discuss the methods of Sampling. Explain in the light of the SA 530.
- (b) What precautions should be taken by an auditor while applying test check techniques?
- 9. (a) “An auditor who, before the completion of the engagement, is requested to change the engagement to one which provides a lower level of assurance, should consider the appropriateness of doing so.” Discuss.
- (b) For collection and accumulation of audit evidence, certain methods and means are available and these are known as audit techniques. Describe some of the techniques commonly adopted by the auditors.

Internal Control

10. (a) Your firm of Chartered Accountants has been allotted Information Systems Audit of 6 branches of Oriental Bank of Commerce. How would you assess the reliability of internal control system in computerised information system?
- (b) "Internal control can provide only reasonable but not absolute assurance that its objective relating to prevention and detection of errors/frauds, safeguarding of assets etc., are achieved." Explain.
11. (a) GR & Co., a firm of Chartered Accountants has been called upon to audit the accounts of Dee Vee Philips Ltd. The auditors are told that Company is not performing well due to weak accounting and administration system in place. Mr. Preet handling the assignment noticed that there are gaps in internal check system of the company. You are required to explain the special steps involved in framing a system of Internal Check.
- (b) "The purpose of EDP application controls is to establish specific control procedures over the accounting applications to provide reasonable assurance that all transactions are authorised and recorded, and are processed completely, accurately and on a timely basis." Discuss.

Vouching & Verification of Assets and Liabilities

12. (a) Explain clearly the meaning of vouching. Also discuss the points that should be considered while examining a voucher.
- (b) Discuss the important points that you would look into while carrying scrutiny of General Ledger.
13. How will you verify/vouch the following:
- (a) Contingent Liabilities
- (b) Excise Duty
- (c) Recovery of Bad-debts written off
- (d) Endowment Policies.
14. Explain the factors to be considered while "Vouching of travelling expenses".

The Company Audit

15. (a) Discuss the provisions contained in the Companies Act, 2013 regarding appointment of First Auditors in the case of Government Company.
- (b) "Provisions regarding rotation of auditors affect only specific class of companies". Discuss.
16. (a) State the disclosure required to be made in the financial statements if these do not comply with the accounting standards.

- (b) "A portion of Share Premium utilised to declare 40% dividend." Comment.
17. (a) Explain the Director's responsibility statement in brief.
- (b) Briefly discuss the provisions of the Companies Act, 2013 with regard to issue of shares at a discount.
- (c) A vacancy arose in the office of an auditor of XYZ Ltd due to death of the Auditor Mr Z and the Managing Director of the company filled that vacancy. Comment citing the provisions of the Companies Act, 2013.
18. (a) An auditor purchased goods worth ₹ 501,500 on credit from a company being audited by him. The company allowed him one month's credit, which it normally allowed to all known customers. Comment.
- (b) An auditor became aware of a matter regarding a company only after he had issued his audit opinion. Had he become aware of the same prior to his issuing the audit report, he would have issued a different opinion. Comment.

Special Audits

19. (a) What role is played by Comptroller and Auditor General of India in the audit of a Government company?
- (b) "Audit of the accounts of stores and inventories has been developed as a part of expenditure audit with reference to the duties and responsibilities entrusted to C&AG." Discuss.
20. Mention any ten special points to be examined by you in the audit of Income and Expenditure of a Charitable Institution running a hospital.

SUGGESTED ANSWERS / HINTS

1. (i) **Incorrect** : According to section 139(6) of the Companies Act, 2013, in the case of failure of the Board to appoint the auditor, it shall inform the members of the company.
- (ii) **Incorrect**: Where a person appointed as an auditor of a company incurs any of the disqualifications after his appointment, he shall vacate his office as such auditor and such vacation shall be deemed to be a casual vacancy in the office of the auditor.
- (iii) **Incorrect**: According to section 144 of the Companies Act, 2013, an auditor appointed under this Act shall provide to the company only such other services as are approved by the Board of Directors or the audit committee.
- (iv) **Incorrect**: As per Section 143(1) of the Companies Act, 2013, every auditor of a company shall have a right of access at all times to the books of account and vouchers of the company kept not only at the registered office of the company but also at any other place too.

- (v) **Correct:** As per Section 139(10) of the Companies Act, 2013, where at any annual general meeting, no auditor is appointed or re-appointed, the existing auditor shall continue to be the auditor of the company.
 - (vi) **Incorrect:** As per section 2(12) of the Companies Act, 2013, “Book and paper” and “Book or paper” include books of account, deeds, vouchers, writings, documents, minutes and registers maintained on paper or in electronic form.
 - (vii) **Correct:** As per Section 129(2), at every annual general meeting of a company, It shall be the duty of the Board of Directors of the company to lay before the company the financial statements for the financial year.
 - (viii) **Correct:** Section 2(50) of the Companies Act, 2013 defines “issued capital” which means such capital as the company issues from time to time for subscription; It is that part of authorised capital which is offered by the company for subscription and includes the shares allotted for consideration other than cash.
 - (ix) **Incorrect:** Standards on Review Engagements (SREs) - to be applied in the review of historical financial information.
 - (x) **Incorrect:** Narrative Record is a complete and exhaustive description of the system as found in operation by the auditor. On the other hand, a Check List is a series of instructions and/or questions which a member of the auditing staff must follow and/or answer.
2. (a) **Auditor’s Responsibilities for Detection of Fraud and Error:** As per SA 240 “The Auditor’s Responsibilities relating to fraud in an audit of Financial Statements”, an auditor conducting an audit in accordance with SAs is responsible for obtaining reasonable assurance that the financial statements taken as a whole are free from material misstatement, whether caused by fraud or error.

The risk of not detecting a material misstatement resulting from fraud is higher than the risk of not detecting one resulting from error. This is because fraud may involve sophisticated and carefully organized schemes designed to conceal it, such as forgery, deliberate failure to record transactions, or intentional misrepresentations being made to the auditor. Such attempts at concealment may be even more difficult to detect when accompanied by collusion. Collusion may cause the auditor to believe that audit evidence is persuasive when it is, in fact, false.

When obtaining reasonable assurance, the auditor is responsible for maintaining an attitude of professional skepticism throughout the audit, considering the potential for management override of controls and recognizing the fact that audit procedures that are effective for detecting error may not be effective in detecting fraud.

An audit conducted in accordance with the auditing standards generally accepted in India is designed to provide reasonable assurance that the financial statements taken as a whole are free from material misstatement, whether caused by fraud or

error. The fact that an audit is carried out may act as a deterrent, but the auditor is not and cannot be held responsible for the prevention of fraud and error.

The auditor's opinion on the financial statements is based on the concept of obtaining reasonable assurance; hence, in an audit, the auditor does not guarantee that material misstatements, whether from fraud or error, will be detected. Therefore, the subsequent discovery of a material misstatement of the financial statements resulting from fraud or error does not, in and of itself, indicate:

- (i) failure to obtain reasonable assurance,
- (ii) inadequate planning, performance or judgment,
- (iii) absence of professional competence and due care, or,
- (iv) failure to comply with auditing standards generally accepted in India.

In planning and performing his examination the auditor should take into consideration the risk of material misstatement of the financial information caused by fraud or error. He should inquire with the management as to any fraud or significant error, which has occurred in the reporting period, and modify his audit procedures, if necessary. If circumstances indicate the possible existence of fraud and error, the auditor should consider the potential effect of the suspected fraud and error on the financial information. If he is unable to obtain evidence to confirm, he should consider the relevant laws and regulations before expressing his opinion.

The auditor also has the responsibility to communicate the misstatement to the appropriate level of management on a timely basis and consider the need to report to it then changed with governance. He may also obtain legal advice before reporting on the financial information or before withdrawing from the engagement. The auditor should satisfy himself that the effect of fraud is properly reflected in the financial information or the error is corrected in case the modified procedures performed by the auditor confirm the existence of the fraud.

The auditor should also consider the implications of the frauds and errors, and frame his report appropriately. In case of a fraud, the same should be disclosed in the financial statement. If adequate disclosure is not made, there should be a suitable disclosure in his audit report.

Further, as per sub section 12 of section 143 of the Companies Act, 2013, if an auditor of a company, in the course of the performance of his duties as auditor, has reason to believe that an offence involving fraud is being or has been committed against the company by officers or employees of the company, he shall immediately report the matter to the Central Government within 60 days of his knowledge and after following the prescribed procedure.

- (b) **Inherent limitations of Audit:** As per SA 200 “Overall Objectives of the Independent Auditor and the Conduct of an Audit in Accordance with Standards on

Auditing”, the objectives of an audit of financial statements, prepared with in a framework of recognised accounting policies and practices and relevant statutory requirements, if any, is to enable an auditor to express an opinion on such financial statements. In forming his opinion on the financial statements, the auditor follows procedures designed to satisfy him that the financial statements reflect a true and fair view of the financial position and operating results of the enterprise. The process of auditing, however, is such that it suffers from certain limitations, i.e. the limitation which cannot be overcome irrespective of the nature and extent of audit procedures. The limitations of an audit arise from:

- (i) **The Nature of Financial Reporting:** The preparation of financial statements involves judgment by management in applying the requirements of the entity’s applicable financial reporting framework to the facts and circumstances of the entity. In addition, many financial statement items involve subjective decisions or assessments or a degree of uncertainty, and there may be a range of acceptable interpretations or judgments that may be made. Consequently, some financial statement items are subject to an inherent level of variability which cannot be eliminated by the application of additional auditing procedures.
- (ii) **The Nature of Audit Procedures:** There are practical and legal limitations on the auditor’s ability to obtain audit evidence. For example:
 - (1) There is the possibility that management or others may not provide, intentionally or unintentionally, the complete information that is relevant to the preparation and presentation of the financial statements or that has been requested by the auditor.
 - (2) Fraud may involve sophisticated and carefully organised schemes designed to conceal it. The auditor is neither trained as nor expected to be an expert in the authentication of documents.
 - (3) An audit is not an official investigation into alleged wrongdoing. Accordingly, the auditor is not given specific legal powers, such as the power of search, which may be necessary for such an investigation.
- (iii) **Timeliness of Financial Reporting and the Balance between Benefit and Cost:** The relevance of information, and thereby its value, tends to diminish over time, and there is a balance to be struck between the reliability of information and its cost. There is an expectation by users of financial statements that the auditor will form an opinion on the financial statements within a reasonable period of time and at a reasonable cost, recognising that it is impracticable to address all information that may exist or to pursue every matter exhaustively on the assumption that information is in error or fraudulent until proved otherwise.

(iv) Other Matters that Affect the Limitations of an Audit: In the case of certain assertions or subject matters, the potential effects of the limitations on the auditor's ability to detect material misstatements are particularly significant. Such assertions or subject matters include:

- Fraud, particularly fraud involving senior management or collusion.
- The existence and completeness of related party relationships and transactions.
- The occurrence of non-compliance with laws and regulations.
- Future events or conditions that may cause an entity to cease to continue as a going concern.

Because of the limitations of an audit, there is an unavoidable risk that some material misstatements of the financial statements may not be detected, even though the audit is properly planned and performed in accordance with SAs.

3. (a) Audits required under Law: Audit is not legally obligatory for all types of business organisations or institutions. On this basis audits may be of two broad categories i.e., audit required under law and voluntary audits.

The organisations which require audit under law are the following:

- (i) Companies governed by the Companies Act;
- (ii) Banking companies governed by the Banking Regulation Act, 1949;
- (iii) Electricity supply companies governed by the Electricity Supply Act, 1948;
- (iv) Co-operative societies registered under the Co-operative Societies Act, 1912;
- (v) Public and charitable trusts registered under various Religious and Endowment Acts;
- (vi) Corporations set up under an Act of Parliament or State Legislature such as the Life Insurance Corporation of India.
- (vii) Specified entities under various sections of the Income-tax Act, 1961.
- (viii) Audit required under Sales-tax and VAT by various State Government.

(b) Advantages of Independent Audit: Advantages of having the accounts audited by an independent auditor are:-

- (i) It safeguards the financial interest of persons not associated with the management like partners or shareholders.
- (ii) It acts as a moral check on the employees from committing fraud.
- (iii) It is helpful in settling tax liability, negotiations for loans and for determining purchase consideration for sale/merger.

- (iv) It is also helpful in settling trade or labour disputes for higher wages/bonus.
- (v) It helps in detection and minimizing wastages and losses.
- (vi) It ensures maintenance of adequate books and records, statutory register etc.

4. (a) **Auditing and Economics:** As, it is well known, accounting is concerned with the accumulation and presentation of data relating to economic activity. Though the concept of income as put forward by economists is different as compared to the accountants concept of income, still, there are lot of similar grounds on which the accounting has flourished. From the auditing view point, the auditors are more concerned with Micro economics rather than with the Macro economics. The knowledge of Macro economics should include the nature of economic force that affect the firm, relationship of price, productivity and the role of Government and Government regulations. Auditor is expected to be familiar with the overall economic environment in which his client is operating.
- (b) **Procedure to be Followed in case of Fraud:** Rules 13 of the Companies (Audit and Auditors) Rules, 2014, prescribes that in case the auditor has sufficient reason to believe that an offence involving fraud, is being or has been committed against the company by officers or employees of the company, he shall report the matter to the Central Government immediately but not later than sixty days of his knowledge and after following the procedure indicated herein below:
- (i) auditor shall forward his report to the Board or the Audit Committee, as the case may be, immediately after he comes to knowledge of the fraud, seeking their reply or observations within forty-five days;
 - (ii) on receipt of such reply or observations the auditor shall forward his report and the reply or observations of the Board or the Audit Committee alongwith his comments (on such reply or observations of the Board or the Audit Committee) to the Central Government within fifteen days of receipt of such reply or observations;
 - (iii) in case the auditor fails to get any reply or observations from the Board or the Audit Committee within the stipulated period of forty-five days, he shall forward his report to the Central Government alongwith a note containing the details of his report that was earlier forwarded to the Board or the Audit Committee for which he failed to receive any reply or observations within the stipulated time.
5. **Disclosure of Accounting Policies:** The view presented in the financial statements of an enterprise of its state of affairs and of the profit or loss can be significantly affected by the accounting policies followed in the preparation and presentation of the financial statements.

The accounting policies followed vary from enterprise to enterprise. Disclosure of significant accounting policies followed is necessary if the view presented is to be

properly appreciated. The disclosure of some of the accounting policies followed in the preparation and presentation of the financial statements is required by some cases.

The purpose of AS 1 is to promote better understanding of financial statements by establishing through an accounting standard and the disclosure of significant accounting policies and the manner in which such accounting policies are disclosed in the financial statements.

Such disclosure would also facilitate a more meaningful comparison between financial statements of different enterprises.

To ensure proper understanding of financial statements, it is necessary that all significant accounting policies adopted in the preparation and presentation of financial statements should be disclosed. Such disclosure should form part of the financial statements.

It would be helpful to the reader of financial statements if they are all disclosed at one place instead of being scattered over several statements, schedules and notes which form part of financial statements.

Any change in accounting policy, which has a material effect, should be disclosed. The amount by which any item is in the financial statement is affected by such change should also be disclosed to the extent ascertainable. Where such amount is not ascertainable, wholly or in part, the fact should be indicated. If a change is made in the accounting policies, which has not material effect on the financial statements for the current period, which is reasonably expected to have material effect in latter periods, the fact of such change should be appropriately disclosed in the period in which the change is adopted.

6. (a) **Accounting Estimates:** Some accounting estimates involve relatively low estimation uncertainty and may give rise to lower risks of material misstatements, for example:

- Accounting estimates arising in entities that engage in business activities that are not complex.
- Accounting estimates that are frequently made and updated because they relate to routine transactions.

For some accounting estimates, however, there may be relatively high estimation uncertainty, particularly where they are based on significant assumptions, for example:

- Accounting estimates relating to the outcome of litigation.
- Fair value accounting estimates for derivative financial instruments not publicly traded.

Additional examples of accounting estimates are:

- Allowance for doubtful accounts.
- Inventory obsolescence.

- Warranty obligations.
- Depreciation method or asset useful life.
- Provision against the carrying amount of an investment where there is uncertainty regarding its recoverability.
- Outcome of long term contracts.
- Financial Obligations / Costs arising from litigation settlements and judgments.

(b) **SA 520 'Analytical Procedures'**: As per SA 520 the term "analytical procedures" means evaluations of financial information through analysis of plausible relationships among both financial and non-financial data. Analytical procedures also encompass such investigation as is necessary of identified fluctuations or relationships that are inconsistent with other relevant information or that differ from expected values by a significant amount. The auditor's choice of procedures, methods and level of application is a matter of professional judgement.

Analytical procedures include the consideration of comparisons of the entity's financial information with, for example: comparable information for prior periods, anticipated results of the entity, such as budgets or forecasts, or expectations of the auditor, such as an estimation of depreciation and similar industry information, such as a comparison of the entity's ratio of sales to accounts receivable with industry averages or with other entities of comparable size in the same industry.

Analytical procedures also include consideration of relationships, for example: among elements of financial information that would be expected to conform to a predictable pattern based on the entity's experience, such as gross margin percentages and between financial information and relevant non-financial information, such as payroll costs to number of employees.

Various methods may be used to perform analytical procedures. These methods range from performing simple comparisons to performing complex analyses using advanced statistical techniques. Analytical procedures may be applied to consolidated financial statements, components and individual elements of information.

Analytical procedures are used for the following purposes:

- (i) To obtain relevant and reliable audit evidence when using substantive analytical procedures; and
- (ii) To design and perform analytical procedures near the end of the audit that assist the auditor when forming an overall conclusion as to whether the financial statements are consistent with the auditor's understanding of the entity.

7. (a) **Sufficient appropriate audit evidence:** The auditor shall design and perform audit procedures that are appropriate in the circumstances for the purpose of obtaining sufficient appropriate audit evidence.

SA 500 on 'Audit Evidence' further expounds this concept. According to it, the sufficiency and appropriateness of audit evidence are interrelated. Sufficiency is the measure of the quantity of audit evidence. The quantity of audit evidence needed is affected by the auditor's assessment of the risks of misstatement (the higher the assessed risks, the more audit evidence is likely to be required) and also by the quality of such audit evidence (the higher the quality, the less may be required). Obtaining more audit evidence, however, may not compensate for its poor quality.

Appropriateness is the measure of the quality of audit evidence; that is, its relevance and its reliability in providing support for the conclusions on which the auditor's opinion is based. The reliability of evidence is influenced by its source and by its nature, and is dependent on the individual circumstances under which it is obtained.

SA 330 requires the auditor to conclude whether sufficient appropriate audit evidence has been obtained. Whether sufficient appropriate audit evidence has been obtained to reduce audit risk to an acceptably low level, and thereby enable the auditor to draw reasonable conclusions on which to base the auditor's opinion, is a matter of professional judgment. Further, SA 200 contains discussion of such matters as the nature of audit procedures, the timeliness of financial reporting, and the balance between benefit and cost, which are relevant factors when the auditor exercises professional judgment regarding whether sufficient appropriate audit evidence has been obtained.

In general the various factors which may influence the auditor's judgment as to what is sufficient and appropriate audit evidence are as under:

- (i) Degree of risk of misstatements which may be affected by factors such as the nature of items, adequacy of internal control, nature and size of businesses carried out by the entity, situations which may exert an unusual influence on management and the financial position of the entity.
 - (ii) The materiality of the item.
 - (iii) The experience gained during previous audits.
 - (iv) The results of auditing procedures, including fraud and errors which may have been found.
 - (v) The type of information available.
 - (vi) The trend indicated by accounting ratios and analysis.
- (b) **Audit Working Papers:** The audit working papers constitute the link between the auditor's report and the client's records. SA 230 on "Audit Documentation" states

that Audit Working papers are the record of audit procedures performed, relevant audit evidence obtained, and conclusions the auditor reached. The object of Audit working papers is to provide:

- (i) Evidence of the auditor's basis for a conclusion about the achievement of the overall objective of the auditor; and
- (ii) Evidence that the audit was planned and performed in accordance with SAs and applicable legal and regulatory requirements.

Besides above, they serve a number of additional purposes, including the following:

- Assisting the engagement team to plan and perform the audit.
- Assisting members of the engagement team responsible for supervision to direct and supervise the audit work, and to discharge their review responsibilities in accordance with SA 220.
- Enabling the engagement team to be accountable for its work.
- Retaining a record of matters of continuing significance to future audits.
- Enabling the conduct of quality control reviews and inspections in accordance with SQC 1.
- Enabling the conduct of external inspections in accordance with applicable legal, regulatory or other requirements.

Working papers should contain audit plan, the nature, timing and extent of auditing procedures performed, and the conclusions drawn from the evidence obtained. The auditor shall assemble the audit working papers in an audit file and complete the administrative process of assembling the final audit file on a timely basis after the date of the auditor's report. The retention period for audit working papers ordinarily is no shorter than ten years from the date of the auditor's report, or, if later, the date of the group auditor's report. Unless otherwise specified by law or regulation, audit working papers are the property of the auditor. He may at his discretion, make portions of, or extracts from, audit documentation available to clients.

8. (a) **Audit Sampling:** "Audit Sampling" means the application of audit procedures to less than 100% of items within a population of audit relevance such that all sampling units have a chance of selection in order to provide the auditor with a reasonable basis on which to draw conclusions about the entire population.

The objective of the auditor when using audit sampling is to provide a reasonable basis for the auditor to draw conclusions about the population from which the sample is selected.

There are many methods of selecting samples. The principal methods are as follows:

- (i) Random selection (applied through random number generators, for example, random number tables). Stratified Sampling is one of the methods of Random Sampling. This method involves dividing the whole population to be tested in a few groups called strata and taking a sample from each of them. Each stratum is treated as if it were a separate population and if proportionate items are selected from each of the stratum. The groups into which the whole population is divided is determined by the auditor on the basis of his judgement e.g. entire expense vouchers may be divided into:

- (1) Vouchers above ₹ 1,00,000
- (2) Vouchers between ₹ 25,000 and ₹ 1,00,000
- (3) Vouchers below ₹ 25,000

The auditor can then decide to check all vouchers above ₹ 1,00,000, 50% between ₹ 25,000 and ₹ 1,00,000 and 25% of those below ₹ 25,000.

The reasoning behind the stratified sampling is that for a highly diversified population, weights should be allocated to reflect these differences. This is achieved by selecting different proportions from each strata. It can be seen that the stratified sampling is simply an extension of simple random sampling.

- (ii) Systematic selection, in which the number of sampling units in the population is divided by the sample size to give a sampling interval, for example 50, and having determined a starting point within the first 50, each 50th sampling unit thereafter is selected. Although the starting point may be determined haphazardly, the sample is more likely to be truly random if it is determined by use of a computerised random number generator or random number tables. When using systematic selection, the auditor would need to determine that sampling units within the population are not structured in such a way that the sampling interval corresponds with a particular pattern in the population.
- (iii) Monetary Unit Sampling is a type of value-weighted selection in which sample size, selection and evaluation results in a conclusion in monetary amounts.
- (iv) Haphazard selection, in which the auditor selects the sample without following a structured technique. Although no structured technique is used, the auditor would nonetheless avoid any conscious bias or predictability (for example, avoiding difficult to locate items, or always choosing or avoiding the first or last entries on a page) and thus attempt to ensure that all items in the population have a chance of selection. Haphazard selection is not appropriate when using statistical sampling.
- (v) Block selection involves selection of a block(s) of contiguous items from within the population. Block selection cannot ordinarily be used in audit sampling because most populations are structured such that items in a sequence can be expected to have similar characteristics to each other, but different

characteristics from items elsewhere in the population. Although in some circumstances it may be an appropriate audit procedure to examine a block of items, it would rarely be an appropriate sample selection technique when the auditor intends to draw valid inferences about the entire population based on the sample.

(b) Test Check Technique: While adopting test check technique, an auditor should take following precautions:-

- (i) The transactions of the concern should be classified under appropriate heads and may be stratified in case of wide variations between the transactions of the same kind.
- (ii) Authorisations, documentations, recording of the transactions should be studied right from the beginning to end.
- (iii) Evaluating the system of internal control for its efficiency, soundness and capability to produce reliable accounting and financial data.
- (iv) Preparation of test check plan with clear audit objective understood by the audit staff.
- (v) Un-biased selection of the transactions with reference to the random number tables or other statistical methods.
- (vi) Identification of the areas where test check may not be done.
- (vii) Based on degree of reliance and the confidence level required in the audit, the number of transactions to be selected for each test plan should be pre-determined.
- (viii) Setting up criteria to judge what constitute material or immaterial errors. Further investigation of only material errors be carried out and all immaterial errors may be avoided.

9. (a) Acceptance of a Change in Engagement: An auditor who, before the completion of the engagement, is requested to change the engagement to one which provides a lower level of assurance, should consider the appropriateness of doing so.

A request from the client for the auditor to change the engagement may result from a change in circumstances affecting the need for the service, a misunderstanding as to the nature of an audit or related service originally requested or a restriction on the scope of the engagement, whether imposed by management or caused by circumstances. The auditor would consider carefully the reason given for the request, particularly the implications of a restriction on the scope of the engagement, especially any legal or contractual implications.

If the auditor concludes that there is reasonable justification to change the engagement and if the audit work performed complied with the SAs applicable to

the changed engagement, the report issued would be appropriate for the revised terms of engagement. In order to avoid confusion, the report would not include reference to:

- (i) the original engagement; or
- (ii) any procedures that may have been performed in the original engagement, except where the engagement is changed to an engagement to undertake agreed-upon procedures and thus reference to the procedures performed is a normal part of the report.

The auditor should not agree to a change of engagement where there is no reasonable justification for doing so.

If the terms of the audit engagement are changed, the auditor and management shall agree on and record the new terms of the engagement in an engagement letter or other suitable form of written agreement.

If the auditor is unable to agree to a change of the terms of the audit engagement and is not permitted by management to continue the original audit engagement, the auditor shall:

- (i) Withdraw from the audit engagement where possible under applicable law or regulation; and
- (ii) Determine whether there is any obligation, either contractual or otherwise, to report the circumstances to other parties, such as those charged with governance, owners or regulators.

(b) Audit Techniques: For collection and accumulation of audit evidence, certain methods and means are available and these are known as audit techniques. Some of the techniques commonly adopted by the auditors are the following:

- (i) Posting checking
- (ii) Casting checking
- (iii) Physical examination and count
- (iv) Confirmation
- (v) Inquiry
- (vi) Year-end scrutiny
- (vii) Re-computation
- (viii) Tracing in subsequent period
- (ix) Bank Reconciliation

It may be noted that the two terms, procedure and techniques, are often used interchangeably; in fact, however, a distinction does exist. Procedure may comprise a

number of techniques and represents the broad frame of the manner of handling the audit work; techniques stand for the methods employed for carrying out the procedure. For example, procedure requires an examination of the documentary evidence. This job is performed by the procedure known as vouching which would involve techniques of inspection and checking computation of documentary evidence.

10. (a) **Reliability of Internal Control System in CIS:** For evaluating the reliability of internal control system in CIS, the auditor would consider the followings:-
- (i) That authorised, correct and complete data is made available for processing.
 - (ii) That it provides for timely detection and corrections of errors.
 - (iii) That in case of interruption due to mechanical, power or processing failures, the system restarts without distorting the completion of entries and records.
 - (iv) That it ensures the accuracy and completeness of output.
 - (v) That it provides security to application softwares & data files against fraud etc.
 - (vi) That it prevents unauthorised amendments to programs.
- (b) **Limitations of Internal Control system:** Internal control can provide only reasonable but not absolute assurance that its objective relating to prevention and detection of errors/frauds, safeguarding of assets etc., are achieved. This is because it suffers from some inherent limitations, such as:-
- (i) Management's consideration that cost of an internal control does not exceeds the expected benefits.
 - (ii) Most controls do not tend to be directed at unusual transactions.
 - (iii) The potential of human error due to carelessness, misjudgment and misunderstanding of instructions.
 - (iv) The possibility that control may be circumvented through collusion with employees or outsiders.
 - (v) The possibility that a person responsible for exercising control may abuse that authority.
 - (vi) Compliance with procedures may deteriorate because the procedures becoming inadequate due to change in condition.
 - (vii) Manipulation by management with respect to transactions or estimates and judgements required in the preparation of financial statements.
 - (viii) Inherent limitations of Audit.
11. (a) **General Considerations in Framing a System of Internal Check:** The term "internal check" is defined as the "checks on day to day transactions which operate continuously as part of the routine system whereby the work of one person is

proved independently or is complementary to the work of another, the object being the prevention or early detection of errors or fraud". The following aspects should be considered in framing a system of internal check:

- (i) No single person should have an independent control over any important aspect of the business. The work done by one person should automatically be checked by another person in routine course.
 - (ii) The duties/work of members of the staff should be changed from time to time without any previous notice so that the same officer or subordinate does not, without a break, perform the same function for a considerable length of time.
 - (iii) Every member of the staff should be encouraged to go on leave at least once in a year so that frauds successfully concealed by such a person can be detected in his absence.
 - (iv) Persons having physical custody of assets must not be permitted to have access to the books of accounts.
 - (v) There should be an accounting control in respect of each important class of assets, in addition, these should be periodically inspected so as to establish their physical condition.
 - (vi) The system of Budgetary Control should be introduced.
 - (vii) For inventory-taking, at the close of the year, trading activities should, if possible, be suspended. The task of inventory-taking, and evaluation should be done by staff belonging to other than inventory section.
 - (viii) The financial and administrative powers should be sub divided very judiciously and the effect of such division should be reviewed periodically.
 - (ix) Finally, the system must be capable of being expanded or contracted to correspond to the size of the concern.
- (b) **EDP Application Controls:** The purpose of EDP application controls is to establish specific control procedures over the accounting applications to provide reasonable assurance that all transactions are authorised and recorded, and are processed completely, accurately and on a timely basis. These include:
- (1) *Controls over input are designed to provide reasonable assurance that:*
 - (i) Transactions are properly authorised before being processed by the computer.
 - (ii) Transactions are accurately converted into machine readable form and recorded in the computer data files.
 - (iii) Transactions are not lost, added, duplicated or improperly changed.
 - (iv) Incorrect transactions are rejected, corrected and if necessary,

resubmitted on a timely basis.

- (2) *Controls over processing and computer data files are designed to provide reasonable assurance that:*
 - (i) Transactions, including system generated transactions, are properly processed by the computer.
 - (ii) Transactions are not lost, added, duplicated or improperly changed.
 - (iii) Processing errors are identified and corrected on a timely basis.
- (3) *Controls over output are designed to provide reasonable assurance that:*
 - (i) Results of processing are accurate.
 - (ii) Access to output is restricted to authorised personnel.
 - (iii) Output is provided to appropriate authorised personnel on a timely basis.

12. (a) Vouching: The act of examining vouchers is referred to as vouching. It is the practice followed in an audit, with the objective of establishing the authenticity of the transaction recorded in the primary books of account. It essentially consists of verifying a transaction recorded in the books of account with the relevant documentary evidence and the authority on the basis of which the entry has been made; also confirming that the amount mentioned in the voucher has been posted to an appropriate account which would disclose the nature of transaction on its inclusion in the final statements of account. After examination, each voucher is marked in a manner to ensure that it may not be presented again in support of another entry. The following points need careful consideration while examining a voucher:

- (i) that the date of the voucher falls within the accounting period;
- (ii) that the voucher is made out in the client's name;
- (iii) that the voucher is duly authorised;
- (iv) that the voucher comprised all the relevant documents which could be expected to have been received or brought into existence on the transactions having been entered into, i.e., the voucher is complete in all respects; and
- (v) that the account in which the amount of the voucher is adjusted is the one that would clearly disclose the character of the receipts or payments posted thereto on its inclusion in the final accounts.

(b) Scrutiny of General Ledger:

- (i) The General Ledger contains all the balances which are ultimately included in the Profit and Loss Account and the Balance Sheet. Its examination therefore is undertaken last of all.
- (ii) The scrutiny of General Ledger should be carried out with due care in as much

as it is the final review of balances which, on inclusion in Final Accounts, cumulatively reflect the financial position of the concern.

- (iii) Entries in the General Ledger usually are posted in a summary form from the books of original entries such as Cash Book, Journal, Sales Book, Purchase Book and other subsidiary books. Therefore, it should be confirmed that all the postings on various accounts have been verified, totals, etc. checked.
- (iv) It should also be ascertained that balances in all the income and expense accounts have been adjusted: (1) according to standard accounting practices (i.e., all unpaid, prepaid expenses have been adjusted and accrued Income and pre-recorded income is properly adjusted); and (2) on a consideration of the legal provisions which are applicable to the concern.
- (v) The balances in the General Ledger should be traced to the trial balance and from the trial balance to the final accounts.

13. (a) **Contingent liabilities:** Accounting Standard (AS) 29 on 'Provisions, Contingent Liabilities and Contingent Assets', defines 'Contingent Liability' as a possible obligation that arises from past events and the existence of which will be confirmed only by the occurrence or non-occurrence of one or more uncertain future events not wholly within the control of the enterprise; or as a present obligation that arises from past events but is not recognised because it is not probable that an outflow of resources embodying economic benefits will be required to settle the obligation, or a reliable estimate of the amount of the obligation cannot be made.

The auditor may take following steps to vouch or verify the contingent liabilities:

- (i) Inspect the minute books of the company to ascertain all contingent liabilities known to the company.
- (ii) Examine the contracts entered into by the company and the likelihood of contingent liabilities emanating therefrom.
- (iii) Scrutinise the lawyer's bills to track unreported contingent liabilities.
- (iv) Examine bank letters in respect of bills discounted and not matured.
- (v) Examine bank letters to ascertain guarantees on behalf of other companies or individuals.
- (vi) Discuss with various functional officers of the company about the possibility of contingent liability existing in their respective field.
- (vii) Obtain a certificate from the management that all known contingent liabilities have been included in the accounts and they have been properly disclosed.
- (viii) Ensure that proper disclosure has been made as per Schedule III to the Companies Act, 2013 and AS 29, "Provisions, Contingent Liabilities and Contingent Assets".

(b) Excise Duty: Excise duty is levied on manufacture. The liability for duty arises only at the point of time at which manufacturing is complete. The point of time at which duty is collected may be determined by consideration of administrative convenience. Normally excise duty is paid before the issue of excisable goods from the factory. For this, the auditor should take into consideration:

- (i) Ensure that excise duty is paid at the time of issue of excisable goods from the godown at factory of the producer. The duplicate copy of the challan as issued by the bank is forwarded for the purpose of issue of the excisable goods.
- (ii) Verify the amount of duty paid with the corresponding value of the goods issued from the inventory register of the producer by applying test check. In case where the client maintains an advance deposit with Excise Department, the auditor should see that the permits are issued for delivery of the goods against the advance deposit and corresponding adjustment.
- (iii) Ascertain the rates of excise duty and apply it to the total sales and see that the amount actually paid does not exceed the amount thus calculated.
- (iv) Ascertain that in case of dispute about the amount of duty payable, a provisional amount may be paid in lieu of final amount. In such cases, the final amount determined as payable should be verified. If the provisional payment was more than the actual amount, the refund of such excess amount should be vouched.
- (v) The auditor may also physically verify RG 1 with actual and see reconciliation of financial records with sales tax records.

(c) Recovery of Bad Debts written off:

- (i) Check all correspondence and proper authorization of bad debts written off earlier and ensure that the decision of writing off of bad debts was recorded properly.
- (ii) Ascertain total bad debts and see whether all recovery of bad debts is recorded properly in the books of account and deposited into bank.
- (iii) Check all notifications from Court or bankruptcy trustee and all correspondence from trade receivables and collecting agencies.
- (iv) Check Credit Manager's files for amount recovered and confirm acknowledgement receipts issued to trustee/trade receivables.

(d) Endowment Policies:

- (i) Ascertain the specific purpose for which the endowment policy is taken, e.g., Sinking Fund policies for redemption of debentures, redemption of leases or policies taken for other similar purposes, etc.
- (ii) Verify the terms and conditions of policies and ensure that all such conditions

are in force and being followed.

- (iii) Check that premium has been deposited in time and the policy is in force.
- (iv) Examine that proper disclosures have been made in the financial statements in respect of items for which the policy has been taken.

14. Vouching of Travelling Expenses: The following factors are to be considered while “Vouching of Travelling Expenses”:

- (i) Travelling expenses are normally payable to staff according to rules approved by directors or partners. Where no rules exist, the auditor should recommend that these be framed for controlling the expenditure. In the absence of T.A. Rules, the expenditure should be vouched on the basis of actual expenditure incurred. A voucher should be demanded for all items of expenses incurred, except those which are capable of independent verification.
- (ii) As regards travelling expenses claimed by directors the auditor should satisfy himself that these were incurred by them in the interest of the business and that the directors were entitled to receive the amount from the business.
- (iii) The voucher for travelling expenses should normally contain the under mentioned information:
 - (1) Name and designation of the person claiming the amount.
 - (2) Particulars of the journey.
 - (3) Amount of railway or air fare.
 - (4) Amount of boarding or lodging expenses or daily allowance alongwith the dates and times of arrival and departure from each station.
 - (5) Other expenses claimed
- (iv) If the journey was undertaken by air, the counterfoil of the air ticket should be attached to the voucher; this should be inspected. For travel by rail or road, the amount of the fare claimed should be checked from some independent source.
- (v) Particulars of boarding and lodging expenses and in the case of halting allowance the rates thereof should be verified.
- (vi) The evidence in regard to sundry expenses claimed is generally not attached to T.A. bills. So long as the amount appears to be reasonable it is usually not questioned. All vouchers for travelling expenses should be authorised by some responsible official. In the case of foreign travel or any extraordinary travel, the expenses, before being paid, should be sanctioned by the Board.
- (vii) The travelling advance taken, if any, should be settled on receipt of final bills. At the year end, the amount not settled should be shown appropriately in the Balance Sheet.

(viii) Unless the articles specifically provide or their payment has been authorised by a resolution of shareholders, directors are not entitled to charge travelling expenses for attending Board Meetings.

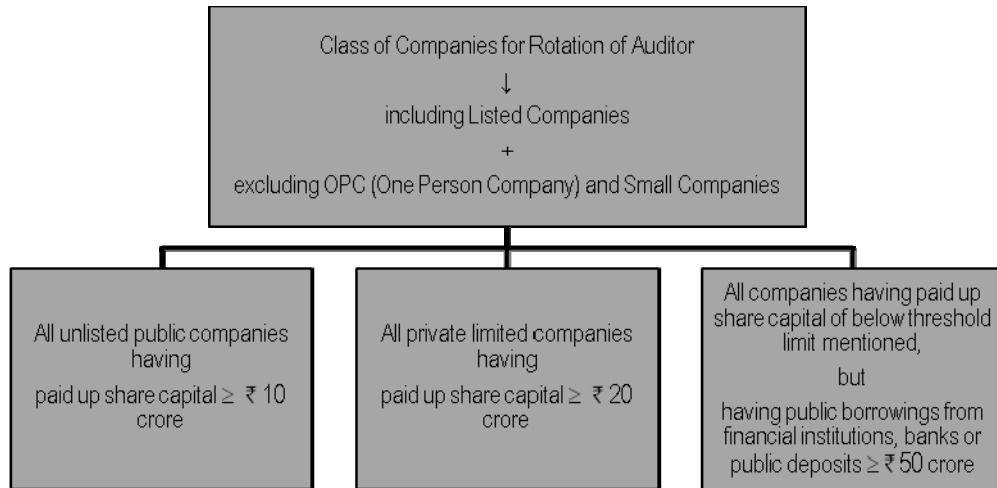
15. (a) **Appointment of First Auditors in the case of Government Company:** Section 139(7) of the Companies Act, 2013 provides that in the case of a Government company or any other company owned or controlled, directly or indirectly, by the Central Government, or by any State Government, or Governments, or partly by the Central Government and partly by one or more State Governments, the first auditor shall be appointed by the Comptroller and Auditor-General of India within 60 days from the date of registration of the company.

In case the Comptroller and Auditor-General of India does not appoint such auditor within the above said period, the Board of Directors of the company shall appoint such auditor within the next 30 days. Further, in the case of failure of the Board to appoint such auditor within next 30 days, it shall inform the members of the company who shall appoint such auditor within 60 days at an extraordinary general meeting. Auditors shall hold office till the conclusion of the first annual general meeting.

- (b) **Applicability of provisions related to Rotation of Auditors:** The provisions related to rotation of auditor as provided under section 139(2) of the Companies Act, 2013 are applicable to all listed companies and other class or classes of companies as prescribed under Companies (Audit and Auditors) Rules, 2014.

As per rules prescribed in Companies (Audit and Auditors) Rules, 2014, for applicability of section 139(2) the class of companies shall mean the following classes of companies excluding one person companies and small companies:-

- (I) all unlisted public companies having paid up share capital of rupees ten crore or more;
- (II) all private limited companies having paid up share capital of rupees twenty crore or more;
- (III) all companies having paid up share capital of below threshold limit mentioned in (I) and (II) above, but having public borrowings from financial institutions, banks or public deposits of rupees fifty crores or more.



16. (a) **Deviations from Accounting Standards:** According to Section 129(5) of the Companies Act, 2013, if the financial statements of a company do not comply with the accounting standards, the company shall disclose in its financial statements the following namely:

- (i) the deviation from the accounting standards,
- (ii) the reasons for such deviation and
- (iii) the financial effects, if any, arising out of such deviation.

(b) **Utilisation of Share Premium:** Section 52 of the Companies Act, 2013 deals with application of premium received on issues of shares. Section 52(1) requires creation of Securities Premium Account and states that the provisions of this Act relating to the reduction of the share capital of a company shall, except as provided in this section, apply as if the premium account were paid-up share capital of the company. Section 52(2) lays down that the securities premium account may be applied by the company:

- (i) in paying up unissued shares of the company to be issued to members of the company as fully paid bonus shares;
- (ii) in writing off the preliminary expenses of the company;
- (iii) in writing off the expenses of, or the commission paid or discount allowed on, any issue of shares or debentures of the company;
- (iv) in providing for the premium payable on the redemption of any redeemable preference shares or of any debentures of the company; or
- (v) for the purchase of its own shares or other securities under Section 68.

Thus, it is clear from the above that share premium can be utilised only for specific purposes. Further, section 123 of the Companies Act, 2013 also specifies the sources from which dividends can be paid and requires the same to be only paid out of past profits, general reserve or any other free reserve. Hence, declaration of dividends out of share premium is not proper and, consequently, the auditor shall have to qualify the audit report.

17. (a) Director's Responsibility statement: The provisions related to Director's Responsibility Statement are provided under section 134(5) of the Companies Act, 2013. According to it, the report of board of directors on annual accounts shall also include a 'Director's Responsibility Statement' indicating therein:

- (i) in the preparation of the annual accounts, the applicable accounting standards had been followed along with proper explanation relating to material departures;
- (ii) the directors had selected such accounting policies and applied them consistently and made judgments and estimates that are reasonable and prudent so as to give a true and fair view of the state of affairs of the company at the end of the financial year and of the profit and loss of the company for that period;
- (iii) the directors had taken proper and sufficient care for the maintenance of adequate accounting records in accordance with the provisions of this Act for safeguarding the assets of the company and for preventing and detecting fraud and other irregularities;
- (iv) the directors had prepared the annual accounts on a going concern basis; and
- (v) the directors, in the case of a listed company, had laid down internal financial controls to be followed by the company and that such internal financial controls are adequate and were operating effectively.

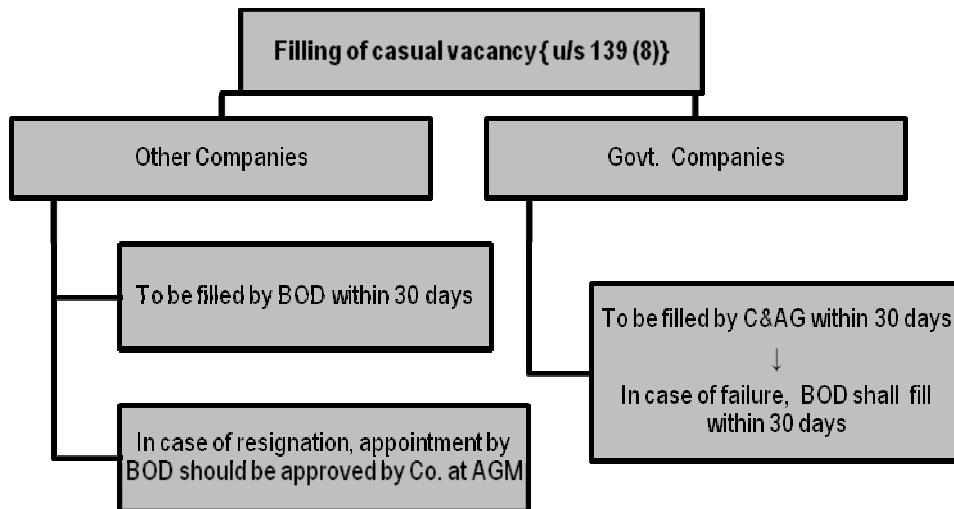
Explanation – For the purposes of this clause, the term “internal financial controls” means the policies and procedures adopted by the company for ensuring the orderly and efficient conduct of its business, including adherence to company's policies, the safeguarding of its assets, the prevention and detection of frauds and errors, the accuracy and completeness of the accounting records, and the timely preparation of reliable financial information.

- (vi) the directors had devised proper systems to ensure compliance with the provisions of all applicable laws and that such systems were adequate and operating effectively.
- (b) Issue of Shares at a Discount:** According to Section 53 of the Companies Act, 2013, except sweat equity shares issued as mentioned in section 54, any share issued by a company at a discounted price shall be void.

Where a company contravenes the provisions of this section, the company shall be punishable with fine which shall not be less than one lakh rupees but which may extend to five lakh rupees and every officer who is in default shall be punishable with imprisonment for a term which may extend to six months or with fine which shall not be less than one lakh rupees but which may extend to five lakh rupees, or with both.

- (c) **Filling of Casual Vacancy:** Section 139(8) of the Companies Act, 2013 states that any casual vacancy in the office of an auditor shall in the case of a company other than a company whose accounts are subject to audit by an auditor appointed by the Comptroller and Auditor-General of India, be filled by the Board of Directors within thirty days. But if such casual vacancy is as a result of the resignation of an auditor, such appointment shall also be approved by the company at a general meeting convened within three months of the recommendation of the Board and he shall hold the office till the conclusion of the next annual general meeting.

In the given case, vacancy in the office of an auditor has arisen because of death and not due to resignation, therefore applying the above provisions it would be filled by the Board of Directors within thirty days. Appointment made by the Managing Director of the Company is not valid.



18. (a) **Purchase of goods on credit by the auditor:** Section 141(3)(d)(ii) of the Companies Act, 2013 read with Companies (Audit and Auditors) Rules, 2014 specifies that a person shall be disqualified to act as an auditor if he is indebted to the company for an amount exceeding five lakh rupees.

Where an auditor purchases goods or services from a company audited by him on credit, he is definitely indebted to the company and if the amount outstanding

exceeds rupees five lakh, he is disqualified for appointment as an auditor of the company.

Further, as per section 141(4) of the said Act, where a person appointed as an auditor of a company incurs any of the disqualifications mentioned in sub-section (3) after his appointment, he shall vacate his office as such auditor and such vacation shall be deemed to be a casual vacancy in the office of the auditor.

It will not make any difference if the company allows him the same period of credit as it allows to other customers on the normal terms and conditions of the business. The auditor cannot argue that he is enjoying only the normal credit period allowed to other customers.

Therefore, in such a case he has become indebted to the company and consequently he has deemed to have vacated his office.

- (b) **Audit Opinion:** Section 146 of the Companies Act, 2013 empowers the auditors of a company to attend any general meeting of the company; to receive all the notices and other communications relating to the general meeting, unless otherwise exempted by the company, and to be heard at any general meeting in any part of the business of the meeting which concerns them as auditors.

Where the auditor has reason to believe that the directors concealed deliberately a serious fact from the shareholders which came to his notice after issuance of the audit report, he should exercise this right. Normally speaking, an auditor considers subsequent events only upto the date of issuance of the audit report.

The discovery of a fact after issuance of the financial statements that existed at the date of the audit report which would have caused the revision of the audit report, requires the auditor to bring this to the notice of shareholders.

Likewise, it may be advisable for the auditor to attend the meeting with a view to bringing to the notice of the shareholders any matter which came to his knowledge subsequent to his signing the report and if it had been known to him at the time of writing his audit report, he would have drawn up the report differently; or where the accounts have been altered after the report was attached to the accounts.

19. (a) **Role of C&AG in the Audit of a Government company :** Role of C&AG is prescribed under sub section (5), (6) and (7) of section 143 of the Companies Act, 2013.

In the case of a Government company, the comptroller and Auditor-General of India shall appoint the auditor under sub-section (5) or sub-section (7) of section 139 i.e. appointment of First Auditor or Subsequent Auditor and direct such auditor the manner in which the accounts of the Government company are required to be audited and thereupon the auditor so appointed shall submit a copy of the audit report to the Comptroller and Auditor-General of India which, among other things, include the directions, if any, issued by the Comptroller and Auditor-General of

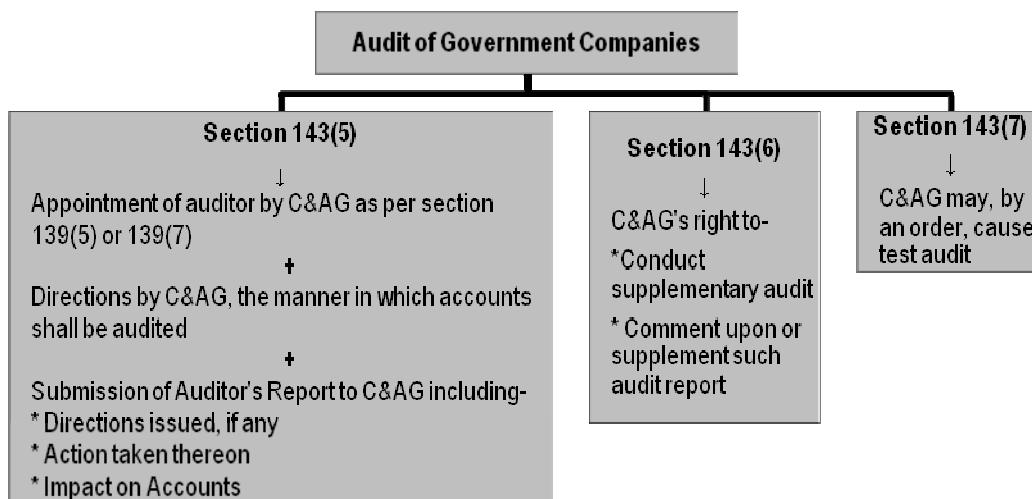
India, the action taken thereon and its impact on the accounts and financial statement of the company.

The Comptroller and Auditor-General of India shall within sixty days from the date of receipt of the audit report have a right to,

- (i) conduct a supplementary audit of the financial statement of the company by such person or persons as he may authorize in this behalf; and for the purposes of such audit, require information or additional information to be furnished to any person or persons, so authorised, on such matters, by such person or persons, and in such form, as the Comptroller and Auditor-General of India may direct; and
- (ii) comment upon or supplement such audit report:

It may be noted that any comments given by the Comptroller and Auditor-General of India upon, or supplement to, the audit report shall be sent by the company to every person entitled to copies of audited financial statements under sub-section (1) of section 136 i.e. every member of the company, to every trustee for the debenture-holder of any debentures issued by the company, and to all persons other than such member or trustee, being the person so entitled and also be placed before the annual general meeting of the company at the same time and in the same manner as the audit report.

Test Audit : Further, without prejudice to the provisions relating to audit and auditor, the Comptroller and Auditor- General of India may, in case of any company covered under sub-section (5) or sub-section (7) of section 139, if he considers necessary, by an order, cause test audit to be conducted of the accounts of such company and the provisions of section 19A of the Comptroller and Auditor-General's (Duties, Powers and Conditions of Service) Act, 1971, shall apply to the report of such test audit.



(b) **Audit of Stores and Inventories:** Audit of the accounts of stores and inventories has been developed as a part of expenditure audit with reference to the duties and responsibilities entrusted to C&AG. Audit is conducted to ascertain whether the Regulations governing purchase, receipt and issue, custody, sale and inventory taking of stores are well devised and properly carried out. The aim is also to bring to the notice of the government any deficiencies in quantities of stores held or any defects in the system of control. The audit of purchase of stores is conducted in the same manner as audit of expenditure, namely, that these are properly sanctioned, made economical and in accordance with the Rules for purchase laid down by the competent authority. The auditor has to ensure that the prices paid are reasonable and are in agreement with those shown in the contract for the supply of stores, and that the certificates of quality and quantity are furnished by the inspecting and receiving units. Cases of uneconomical purchase of stores and losses attributable to defective or inferior quality of stores are specifically brought by the audit. Accounts of receipts, issues and balances are checked regarding accuracy, correctness and reasonableness of balances in inventories with particular reference to the specified norms for level of consumption of inventory holding. Any excess or idle inventory is specifically mentioned in the report and periodical verification of inventory is also conducted to ensure their existence. When priced accounts are maintained, the auditor should see that the prices charged are reasonable and have been reviewed from time to time. The valuation of the inventories is seen carefully so that the value accounts tally with the physical accounts and that adjustment of profits or losses due to revaluation, inventory taking or other causes is carried out.

20. Audit of Hospital: While auditing the Income and Expenditure Account of a charitable institution running a hospital, following special points may be examined:

- (i) Verify the register of patients with duplicate copy of bills and patients admission record to see that bills have been properly and correctly prepared for all the services, tests and treatments.
- (ii) Check cash collections from patients by tracing the receipt issued into cash book.
- (iii) Check receipt of interest, rent, dividend etc., with receipt counterfoil into cash book and bank book and ensure that all such income has been duly accounted for.
- (iv) Check collection of subscription, donations from the receipt issued, correspondence etc., into cash book.
- (v) Verify that all grants from government and other bodies have been duly accounted for and have been applied in the manner as specified.
- (vi) Verify all recurring nature of revenue expenditure, with necessary evidence like bill, authority, period etc.

- (vii) Examine the internal check as regards the receipt and issue of stores, medicines, linen etc., to ensure that these have been properly recorded and issued/consumed only on proper authorisation.
- (viii) See that depreciation has been written off in respect of all the assets at appropriate rate and method as in the earlier year.
- (ix) Verify the receipts from supply of food and canteen receipts and compare the same with previous year as regards number of patients.
- (x) Ensure that all outstanding liabilities have been adequately provided for and similarly all accrued incomes and receipts have been duly accounted for.
- (xi) Obtain inventory of stock and stores as at the end of the year and physically check a percentage of items.

PAPER – 7: INFORMATION TECHNOLOGY AND STRATEGIC MANAGEMENT

SECTION – A: INFORMATION TECHNOLOGY

QUESTIONS

1. Define the following terms briefly:
 - (i) Mobile Hardware
 - (ii) Total Quality Management (TQM)
 - (iii) Primary Memory
 - (iv) Intrusion Detection System (IDS)
 - (v) Switch
 - (vi) Computer Network
 - (vii) Information System
 - (viii) Knowledge-Level Systems
 - (ix) Cryptography
 - (x) Segregation of Duties
2. Differentiate between the following:
 - (i) Public Data Network and Private Data Network
 - (ii) Parallel Data Transmission and Serial Data Transmission
 - (iii) Thick Client and Thin Client
 - (iv) Software as a Service (SaaS) and Platform as a Service (PaaS) in Cloud Computing
 - (v) Hardware Resources and Software Resources
 - (vi) Broadcast Networks and Switched Networks
 - (vii) Consumer-to-Business (C2B) e-Commerce and Consumer-to-Consumer (C2C) e-Commerce
 - (viii) Strategic-Level Systems and Operational-Level Systems
 - (ix) Private Cloud and Hybrid Cloud in Cloud Computing
 - (x) Role-based Access Control (RBAC) and Rules-based Access Control (RAC)
3. Write short note on the following:
 - (i) TouchPad
 - (ii) Protocols
 - (iii) Data Flow Diagram

- (iv) Star Network
- (v) Business Intelligence
- (vi) Intranet
- (vii) Network Virtualization
- (viii) Flowchart
- (ix) Instruction Set Architecture
- (x) Business Process Automation (BPA)

Business Process Management Life Cycle

4. Discuss different phases of Business Process Management (BPM) Life Cycle.

Input Controls in BPA

5. Discuss Input Controls and their categories in Business Process Automation.

OSI Model

6. Discuss OSI model in detail.

Supply Chain Management

7. Discuss Supply Chain Management (SCM) and its components.

Business Process Automation

8. What are the benefits of pursuing Business Process Automation (BPA)?

Operating System

9. Discuss Operating System and various activities performed by it?

Executive Information Systems

10. Discuss Executive Information System (EIS) and its components.

Relational Database Model

11. Discuss Relational Database Model.

Switched Networks

12. Discuss various switching techniques in telecommunication networks.

Network Vulnerabilities

13. Define Vulnerability in a Network. What are the factors responsible for the occurrence of Vulnerabilities?

Cloud Computing

14. Discuss advantages and disadvantages of Cloud Computing.

Mapping Systems

15. (a) Discuss different types of relationships in an E-R Diagram.
(b) Discuss advantages and limitations of using Data Flow Diagram.
(c) Discuss Decision Table in brief.

SUGGESTED ANSWERS/HINTS

1. (i) **Mobile Hardware:** Mobile Hardware includes mobile devices or device components that receive or access the service of mobility. They would range from Portable laptops, Smart phones, Tablet PC's to Personal Digital Assistants (PDAs). These devices will have receptors that are capable of sensing and receiving signals. These devices are configured to operate in full- duplex, whereby they are capable of sending and receiving signals at the same time.
- (ii) **Total Quality Management (TQM):** Total Quality Management (TQM) is a comprehensive and structured approach to organizational management that seeks to improve the quality of products and services through ongoing refinements in response to continuous feedback. TQM processes are divided into four sequential categories: Plan, Do, Check, and Act (the PDCA cycle).
- (iii) **Primary Memory:** These are devices in which any location can be accessed in any order (in contrast with sequential order) directly by the CPU. These are primarily of two types: Random Access Memory (RAM) and Read Only Memory (ROM).

Random Access Memory (RAM)

- This is Read Write memory.
- Information can be read as well as modified.
- Volatile in nature means Information is lost as soon as power is turned off.

Read Only Memory (ROM)

- This is non volatile in nature (contents remain even in absence of power).
- Usually, these are used to store small amount of information for quick reference by CPU.
- Information can be read not modified.
- Generally used by manufacturers to store data & programs.

- (iv) **Intrusion Detection System (IDS):** An Intrusion Detection System is a device or software application that monitors network or system activities for malicious activities or policy violations and produces reports to a Management Station. The goal of intrusion detection is to monitor network assets to detect anomalous behaviour and misuse. IDS are primarily of two types: Network Intrusion Detection (NID) and Host-based Intrusion Detection (HID).

- (v) **Switch:** Switch is a communications processor that makes connections between telecommunications circuits in a network so that a telecommunications message can reach its intended destination.
 - (vi) **Computer Network:** It is a collection of computers and other hardware interconnected by communication channels that allow sharing of resources and information. Where at least one process in one device is able to send/receive data to/from at least one process residing in a remote device, then the two devices are said to be in a network. A network is a group of devices connected to each other.
 - (vii) **Information System:** Information System (IS) is a combination of people, hardware, software, communication devices, network and data resources that processes (can be storing, retrieving, transforming information) data and information for a specific purpose. The system needs inputs from user (key in instructions and commands, typing, scanning) which will then be processed (calculating, reporting) using technology devices such as computers, and produce output (printing reports, displaying results) that will be sent to another user or other system via a network and a feedback method that controls the operation.
 - (viii) **Knowledge-Level Systems:** These are the systems that support discovery, processing and storage of knowledge and data workers. These further control the flow of paper work and enable group working.
 - (ix) **Cryptography:** Cryptography is the practice and study of techniques for secure communication in the presence of third parties (called Adversaries). More generally, it is about constructing and analyzing protocols that overcome the influence of adversaries and which are related to various aspects in information security such as data confidentiality, integrity, authentication, and non-repudiation. These are the programs that transform data into codes that appear meaningless to anyone who does not possess the authentication to access the respective system resource or file.
 - (x) **Segregation of Duties:** Segregation of duties refers to dividing responsibility for different portions of a transaction among several people. This ensures that duties are assigned to individuals in a manner that ensures that no one individual can control both the recording function and the procedures relative to processing a transaction. The functions to be performed by different people are authorizing (approval) transactions, recording (capture) transactions and maintaining custody (protect) of assets, thereby ensuring that business activities are performed efficiently and in accordance with management's objectives.
2. (i) Differences between Public Data Network and Private Data Network are given below:
- **Public Data Network:** A Public Data Network is defined as a network shared and accessed by users not belonging to a single organization. It is a network

established and operated by a telecommunications administration, or a recognized private operating agency, for the specific purpose of providing data transmission services for the public. The Internet is an example of a Public Data Network.

- **Private Data Network:** Private Data Network provides businesses, government agencies and organizations of all sizes as a dedicated network to continuously receive and transmit data critical to both the daily operations and mission critical needs of an organization.
- (ii) Differences between Parallel Data Transmission and Serial Data Transmission are given below:
- **Parallel Data Transmission:** In Parallel data transmission, there are separate parallel paths corresponding to each bit of the byte so that all character bits are transmitted simultaneously. Centronic port is the example of parallel port used for printer.
 - **Serial Data Transmission:** In Serial data transmission, the bits of each byte are sent along a single path one after another. As one bit follows another, so only one communication channel is required between two communicating devices. RS-232 is an example of serial port used for the mouse or MODEM.

- (iii) Differences between Thick client and Thin Client are as follows:

Thick Client: A Thick client is a client that performs the bulk of any data processing operations itself, and does not necessarily rely on the server. Unlike thin clients, thick clients do not rely on a central processing server because the processing is done locally on the user system, and the server is accessed primarily for storage purposes. For that reason, thick clients often are not well-suited for public environments. To maintain a thick client, IT needs to maintain all systems for software deployment and upgrades, rather than just maintaining the applications on the server. For example – Personal Computer.

Thin Client: A Thin client uses the resources of the host computer. A thin client generally only presents processed data provided by an application server, which performs the bulk of any required data processing. A thin client machine is going to communicate with a central processing server, meaning there is little hardware and software installed on the user's machine. A device using web application (such as Office Web Apps) is a thin client.

- (iv) Differences between Software as a Service (SaaS) and Platform as a Service (PaaS) in Cloud Computing are as follows:

Software as a Service (SaaS): Software as a Service (SaaS) features a complete application offered as a service on-demand. A service provider hosts the application at its data centre over the Internet and customer accesses it via a standard Web browser. For example - Google Apps.

Platform as a Service (PaaS): Platform as a Service (PaaS) delivery model allows a customer to rent virtualized servers and associated services used to run existing applications, or to design, develop, test, deploy and host applications. The consumer may create software using tools and/or libraries from the provider. The consumer may also control software deployment and configuration settings. The provider provides the networks, servers, storage, and other services. For example, AppScale allows a user to deploy some applications written for Google App Engine to their own servers.

(v) Differences between Hardware Resources and Software Resources are as follows:

Hardware Resources: These refer to Machines - computers, video monitors, magnetic disk drives, printers, optical scanners and Media - floppy disks, magnetic tape, optical disks, plastic cards, paper forms.

Software Resources: These refer to Programs - operating system programs, spreadsheet programs, word processing programs, payroll programs and Procedures - data entry procedures, error correction procedures, paycheck distribution procedures.

(vi) Differences between Broadcast Networks and Switched Networks are as follows:

Broadcast Networks: In Broadcast networks, data transmitted by one node is received by many, sometimes all, of the other nodes. This refers to a method of transferring a message to all recipients simultaneously. For example – a corporation or other voluntary association, that provides live television or recorded content such as movies, newscasts, sports, public affairs programming, and other television programs for broadcast over a group of radio stations or television stations.

Switched Networks - In switched-communication networks, the data transferred from source to destination is routed through the switch nodes. The way in which the nodes switch data from one link to another, as it is transmitted from source to destination node, is referred to as a switching technique. Three common switching techniques are Circuit Switching, Packet Switching, and Message Switching.

(vii) Differences between Consumer-to-Business (C2B) e-Commerce and Consumer-to-Consumer (C2C) are as follows:

Consumer-to-Business (C2B) e-Commerce: In C2B e-Commerce model, consumers directly contact with business vendors by posting their project work online so that the needy companies review it and contact the consumer directly with bid. The consumer reviews all the bids and selects the company for further processing. Some examples are guru.com, rentacoder.com, getacoder.com, freelancer.com.

Consumer-to-Consumer (C2C) e-Commerce: C2C e-Commerce is an Internet - facilitated form of commerce that has existed for the span of history in the form of barter, flea markets, swap meets, yard sales and the like. C2C e-Commerce sites

provide a virtual environment in which consumers can sell to one another through a third-party intermediary.

- (viii) Differences between Strategic-Level Systems and Operational-Level Systems are given as follows:

Strategic-Level Systems: These systems are strategic managers to track and deal with strategic issues that assist in long-range planning. A principle area is tracking changes in the external conditions (market sector, employment levels, share prices, etc.) and matching these with the internal conditions of the organization.

Operational-Level Systems: Support operational managers tracking elementary activities. These can include tracking customer orders, invoice tracking, etc. Operational-level systems ensure that business procedures are followed.

- (ix) Differences between Private Cloud and Hybrid Cloud in Cloud Computing are given as follows:

Private Cloud: This cloud computing environment resides within the boundaries of an organization and is used exclusively for the organization's benefits. These are also called internal clouds. They are built primarily by IT departments within enterprises who seek to optimize utilization of infrastructure resources within the enterprise by provisioning the infrastructure with applications using the concepts of grid and virtualization. The benefit of a Private Cloud is that it enables an enterprise to manage the infrastructure and have more control.

Hybrid Cloud: It is maintained by both internal and external providers. It is a composition of two or more clouds (Private, Community or Public). They have to maintain their unique identity, but are bound together by standardized data and application portability. With a hybrid cloud, organizations might run non-core applications in a public cloud, while maintaining core applications and sensitive data in-house in a private cloud.

- (x) Differences between Role-based Access Control (RBAC) and Rules-based Access Control (RAC) are as follows:

Role-based Access Control (RBAC): RBAC largely eliminates discretion when providing access to objects. Instead, administrators or automated systems place subjects into roles. Subjects receive only the rights and permissions assigned to those roles. When an employee changes jobs, all previous access is removed, and the rights and permissions of the new role are assigned.


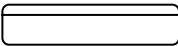
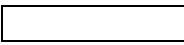
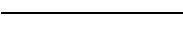
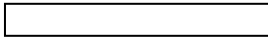

Rules-based Access Control (RAC): RAC differs from RBAC methods because it is largely context-based. RBAC, for example, enforces static constraints based on a user's role. RAC, however, also takes into account the data affected, the identity attempting to perform a task, and other triggers governed by business rules. A manager, for example, has the ability to approve his/her employees' hours worked. However, when s/he attempts to approve his/her own hours, a rule built into the

application compares the employee record and the user, sees they are the same, and temporarily removes approval privilege.

- 3. (i) **TouchPad:** A Touchpad is a pointing device featuring a tactile sensor, a specialized surface that can translate the motion and position of a user’s fingers to a relative position on screen. Touchpad is a common feature of laptop computers, and is also used as a substitute for a mouse where desk space is scarce. Because it varies in size, it can also be found on Personal Digital Assistants (PDAs) and some portable media players. Wireless touchpads are also available as detached accessories. Touchpads operate in one of several ways, including capacitive sensing and conductance sensing.
- (ii) **Protocols:** Protocols are software that performs a variety of actions necessary for data transmission between computers. Stated more precisely, protocols are a set of rules for inter-computer communication that have been agreed upon and implemented by many vendors, users and standards bodies to ensure that the information being exchanged between the two parties is received and interpreted correctly. Ideally, a protocol standard allows heterogeneous computers to talk to each other.

A protocol defines the following three aspects of digital communication.

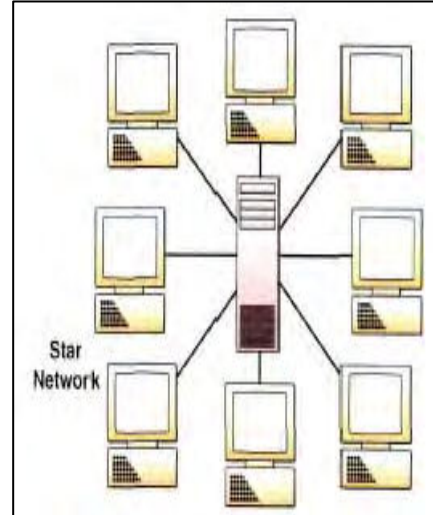
- (a) **Syntax:** The format of data being exchanged, character set used, type of error correction used, type of encoding scheme (e.g., signal levels) being used.
 - (b) **Semantics:** Type and order of messages used to ensure reliable and error free information transfer.
 - (c) **Timing:** Defines data rate selection and correct timing for various events during data transfer.
- (iii) **Data Flow Diagram (DFD):** It is a graphical representation of the flow of data through an information system. A DFD illustrates technical or business processes with the help of the external data stored, the data flowing from a process to another, and the results. The four major DFD component’s symbols are as follows:

Meaning	Symbols
Process	 or 
Data Store	 or 
Entity	
Data Flow	

DFDs may be partitioned into levels that represent increasing information flow and functional detail. Therefore, the DFD provides a mechanism for functional modeling as well as information flow modeling.

(iv) **Star Network:** The star network, a popular network configuration, involves a central unit that has a number of terminals tied into it. The characteristics of a star network are:

- It ties end user computers to a central computer.
- The central unit in the star network acts as the traffic controller among all the other computers tied to it. The central computer is usually a mainframe (host), which acts as the file server.
- A star network is well suited to companies with one large data processing facility shared by a number of smaller departments. Many star networks take the form of hierarchical networks with a centralized approach.



Advantages of the star network include the following:

- Several users can use the central unit at the same time.
- It is easy to add new nodes and remove existing nodes.
- A node failure does not bring down the entire network.
- It is easier to diagnose network problems through a central hub.

Disadvantages of the star network are as follows:

- The whole network is affected if the main unit “goes down,” and all communications stop.
- The other computers in the star are heavily dependent on the central host computer. If it fails, there is no backup processing and communications capability and the local computers will be cut off from the corporate headquarters and from each other, hence considered less reliable.
- Cost of cabling the central system and the points of the star network together are very high.

(v) **Business Intelligence:** In today’s IT-driven society, the success of an enterprise is heavily influenced by business intelligence. Business Intelligence (BI) enables managers to see things with more clarity, and empowers them to peek into the possible future.

There are many definitions of Business Intelligence (BI).

- (a) BI is essentially timely, accurate, high-value, and actionable business insights, and the work processes and technologies used to obtain them.
 - (b) Business Intelligence (BI) is the delivery of accurate, useful information to the appropriate decision makers within the necessary time frame to support effective decision making for business processes.
 - (c) BI in simple words, refers to the process of collecting and refining information from many sources, analyzing and presenting the information in useful ways so that users can make better business decisions.
- (vi) Intranet:** An Intranet is a network inside an organization that uses Internet technologies such as web browsers and servers, TCP/IP network protocols, HTML hypermedia document publishing and databases, and so on, to provide an Internet-like environment within an enterprise for information sharing, communications, collaboration, and the support of business processes.

An Intranet is protected by security measures such as passwords, encryption, and firewalls, and thus can be accessed by authorized users through the Internet. A Company's Intranet can also be accessed through the Intranets of customers, suppliers, and other business partners via extranet links.

- (vii) Network Virtualization:** In IT, Virtualization is the process of creating logical computing resources from available physical resources. Network Virtualization allows a large physical network to be provisioned into multiple smaller logical networks and conversely allows multiple physical LANs to be combined into a larger logical network. This behavior allows administrators to improve network traffic control, enterprise and security.

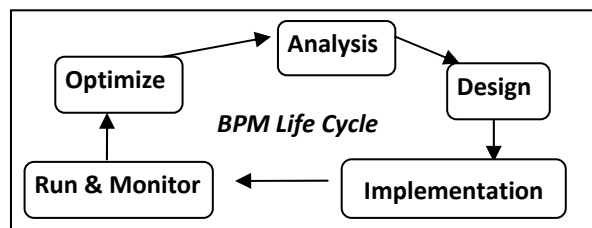
Major applications of the concepts of the virtualization are Server Consolidation, Disaster Recovery, Testing & Planning, Portable Applications and Portable Workspaces.

- (viii) Flowchart:** A Flowchart is a type of diagram that represents an algorithm, workflow or process, showing the steps as boxes of various kinds, and their order by connecting them with arrows. Flowcharts are used in analyzing, designing, documenting or managing process or program in various fields. It is like a blueprint, in that it shows the general plan, architecture, and essential details of the proposed structure. It is an essential tool for programming and it illustrates the strategy and thread of logic followed in the program. It allows the programmer to compare different approaches and alternatives on paper and often shows interrelationships that are not immediately apparent. A flowchart helps the programmer avoid fuzzy thinking and accidental omissions of intermediate steps.
- (ix) Instruction Set Architecture:** Instruction Set Architecture (ISA) is the abstract model of a computing system that is seen by a machine language programmer

including the instruction set; memory address modes; processor registers; and address and data formats. Basically, ISA is related to the programming of a computer – that is, how the computer understands what each element in its basic language means, what instructions are to be carried out and in what order, etc. The ISA basically deals with what the chip does. It's a sort of 'bridge' between software and hardware. Understanding how it all works requires knowledge of the structure of a computer and its assembly language. The instructions may be Data Movement Instructions, Transfer of Control, Arithmetic/Logical Instructions; Input/output and some miscellaneous instructions that handle interrupts and activities.

- (x) **Business Process Automation (BPA):** BPA is a strategy to automate business processes so as to bring benefit to enterprise in terms of cost, time and effort. The core objective of BPA is achieved through integrating various business processes. The key benefits of BPA are given below:
- ◆ **Saving on costs:** Automation leads to saving in time and labor costs.
 - ◆ **Staying ahead in competition:** Today, in order to survive, businesses need to adopt automation.
 - ◆ **Fast service to customers:** Gradually business managers realized that automation could help them to serve their customers faster and better.

4. **Business Process Management Life Cycle (BPM-L Cycle):** An Enterprise Resource Planning (ERP) application divides BPM into the following phases:
- (i) **Analysis phase:** This involves analysis of the current environment and current processes, identification of needs and definition of requirements.
- (ii) **Design phase:** This involves evaluation of potential solutions to meet the identified needs, business process designing and business process modeling.



BPM Life Cycle

- (iii) **Implementation phase:** This involves project preparation, blue printing, realization, final preparation, go live and support.
- (iv) **Run and Monitor phase:** This involves business process execution or deployment and business process monitoring.
- (v) **Optimize:** Iterate for continuous improvement.

5. **Input Controls:** These are responsible for ensuring the accuracy and completeness of data that are input into an application system. Input controls are important since substantial time is spent on inputting data which involves human intervention and are therefore prone to errors and fraud. The type of data input method used in an information system affects asset safeguarding, data integrity, system effectiveness, and system efficiency objectives. If data is keyed into an information system via a terminal, high-quality screen design is important to minimizing input errors and to achieving effective and efficient input of data. Different categories of Input Controls in BPA environment are as follows:
- **Source Document Controls:** From a control viewpoint, a well-designed source document reduces the likelihood of data recording errors, increases the speed with which data can be recorded and controls the work flow. Source Document Controls facilitate the data entry into a computer system and subsequent reference checking.
 - **Data Coding Controls:** Data Coding Controls are put in place to reduce user error during data feeding.
 - **Batch Controls:** These are put in place at locations where batch processing is being used. Batch processing is where there is a time gap between occurrence and recording of transactions, that is, transactions are not recorded at the time of occurrence but are accumulated and a set (based on number/ time) is processed.
 - **Validation Controls:** These validate the accuracy/correctness of input data. Input Validation Controls are intended to detect errors in transaction data before the data are processed.
6. **The OSI Model:** It is a seven-layer model developed by the International Standards Organization (ISO) to serve as a standard model for network architectures. Seven layers of OSI include the following:
- **Layer 7 or Application Layer:** The application layer of OSI layer architecture is closest to the end user that interacts with software applications and provides user services by file transfer, file sharing, etc. Database concurrency and deadlock situation controls are undertaken at this layer level. This is the layer at which communication partners are identified, quality of service is identified, user authentication and privacy are considered, and any constraints on data syntax are identified.
 - **Layer 6 or Presentation Layer:** This layer is usually a part of an operating system that converts incoming and outgoing data from one presentation format to another. The presentation service data units are then encapsulated into Session Protocol Data Units, and moved down the stack. It further controls on screen display of data, transforms data to a standard application interface. Encryption, data compression can also be undertaken at this layer level.

- **Layer 5 or Session Layer:** This layer sets up, coordinates, and terminates conversations, exchanges, and dialogs between the applications at each end. It deals with session and connection coordination. It provides for full-duplex, half-duplex, or simplex operation, and establishes check pointing, adjournment, termination, and restart procedures.
 - **Layer 4 or Transport Layer:** This layer ensures reliable and transparent transfer of data between user processes, assembles and disassembles message packets, and provides error recovery and flow control. Multiplexing and encryption are undertaken at this layer level. This means that the Transport Layer can keep track of the segments and retransmit those that fail.
 - **Layer 3 or Network Layer:** The Network Layer provides the functional and procedural means of transferring variable length data sequences from a source to a destination via one or more networks, while maintaining the quality of service requested by the Transport Layer. The Network Layer makes a choice of the physical route of transmission, creates a virtual circuit for upper layers to make them independent of data transmission and switching, establishes, maintains, terminates connections between the nodes and ensure proper routing of data.
 - **Layer 2 or Data Link Layer:** The Data Link Layer responds to service requests from the Network Layer and issues service requests to the Physical Layer. The Data Link Layer is the protocol layer which transfers data between adjacent network nodes in a wide area network or between nodes on the same local area network segment. This layer is also a hardware layer which specifies channel access control method and ensures reliable transfer of data through the transmission medium. It provides the functional and procedural means to transfer data between network entities and to detect and possibly correct errors that may occur in the Physical Layer.
 - **Layer 1 or Physical Layer:** The Physical Layer is a hardware layer which specifies mechanical features as well as electromagnetic features of the connection between the devices and the transmission. In particular, it defines the relationship between a device and a physical medium. This includes the layout of pins, voltages, cable specifications, Hubs, repeaters, network adapters, Host Bus Adapters (HBAs used in Storage Area Networks) and more.
7. **Supply Chain Management (SCM):** Supply Chain Management is a chain that starts with customers and ends with customers. Supply Chain Management may be defined as the process of planning, implementing and controlling the operations of the supply chain with the purpose of satisfying the customer's requirement as efficiently as possible. Supply Chain spans all movement and storage of raw materials, Work-in-process, inventory and finished goods from the point of origin to the point of consumption.
- Components of SCM are as follows:

- (a) **Procurement/Purchasing** - This begins with the purchasing of parts, components, or services. Procurement must ensure that the right items are delivered in the exact quantities at the correct location on the specified time schedule at minimal cost. This means that procurement must concern itself with the determination of who should supply the parts, the components, or the services. It must address the question of assurance that these suppliers will deliver as promised
 - (b) **Operations** - The second major element of SCM system is operations. Having received raw materials, parts, components, assemblies, or services from suppliers, the firm must transform them and produce the products or the services that meet the needs of its consumers. It must conduct this transformation in an efficient and effective manner for the benefit of the supply chain management system.
 - (c) **Distribution** - The third element of the SCM system is distribution. Distribution involves several activities—transportation (logistics), warehousing, and Customer Relationship Management (CRM). The first and most obvious is logistics—the transportation of goods across the entire supply chain.
 - (d) **Integration** - The last element of SCM is the need for integration. It is critical that all participants in the service chain recognize the entirety of the service chain. The impact of the failure to adopt a system-wide perspective—that is, examining the totality of the chain can significantly increase costs and destroy value.
8. Business Process Automation is the basic component of an enterprise-wide automation and management scheme for both business and IT workflow. With BPA, we can optimize and streamline our business processes by automating the process components. By improving the performance, accuracy and efficiency of the key business processes, the enterprise is made more efficient and responsive to customer and employee needs. Some benefits of pursuing such automation include the following:
- **Reducing the Impact of Human Error:** BPA removes human participation in the process, which is the source of many errors.
 - **Transforming Data into Information:** BPA can, apart from collecting and storing data also analyze data and make it available in a form that is useful for decision-making.
 - **Improving performance and process effectiveness:** In many cases, tasks that must be done manually are the bottleneck in the process. Automating those manual tasks speeds up the effective throughput of the application.
 - **Making users more efficient and effective:** People can focus their energies on the tasks they do best, allowing the computers to handle those that machines are best suited for.

- **Making the business more responsive:** Enterprises can easily automate new applications and processes as they are introduced that provide greater control over business and IT processes.
 - **Improving Collaboration and Information Sharing:** Business processes designed through a collaborative interface mean IT can integrate its processes with the business-side logic that drives day-to-day operations.
 - **Cost Saving:** Automation leads to saving in time and labor costs through higher efficiency and better management of the people involved;
 - **To remain competitive:** To provide the level of products and services as offered by competition.
 - **Fast service to customers:** Automation shortens cycle times in the execution of processes through improved and refined business workflows and help enterprises to serve their customers faster and better.
9. **Operating System:** An Operating System (OS) is a set of computer programs that manages computer hardware resources and acts as an interface with computer applications programs. The operating system is a vital component of the system software in a computer system. Application programs usually require an operating system to function that provides a convenient environment to users for executing their programs. Computer hardware with operating system can thus be viewed as an extended machine, which is more powerful and easy to use. Some prominent Operating systems used nowadays are Windows 7, Windows 8, Linux, UNIX, etc.

A variety of activities that are executed by Operating systems include the following:

- **Performing hardware functions:** Application programs to perform tasks have to obtain input from keyboards, retrieve data from disk & display output on monitors. Achieving all this is facilitated by operating system. Operating system acts as an intermediary between the application program and the hardware.
- **User Interfaces:** An important function of any operating system is to provide user interface. Command based User Interface (UI) and Graphic User Interface (GUI) which uses icons & menus like in the case of Windows, will be provided by Operating system.
- **Hardware Independence:** Every computer could have different specifications and configurations of hardware. Operating system provides Application Program Interfaces (API) which can be used by application developers to create application software, thus obviating the need to understand the inner workings of Operating System and hardware. Thus, Operating System gives us hardware independence.
- **Memory Management:** Memory Management feature of Operating System allows controlling how memory is accessed and maximize available memory & storage.

Operating System also provides Virtual Memory by carving an area of hard disk to supplement the functional memory capacity of RAM. In this way, it augments memory by creating a virtual RAM.

- **Task Management:** Task Management feature of Operating System helps in allocating resources to make optimum utilization of resources. This facilitates a user to work with more than one application at a time i.e. multitasking and also allows more than one user to use the system i.e. timesharing.
 - **Networking Capability:** Operating Systems can provide systems with features & capabilities to help connect computer networks. Like Linux & Windows 8 give us an excellent capability to connect to internet.
 - **Logical Access Security:** Operating System provide logical security by establishing a procedure for identification & authentication using a User ID and Password. It can log the user access thereby providing security control.
 - **File Management:** The operating system keeps a track of where each file is stored and who can access it, based on which it provides the file retrieval.
10. **Executive Information Systems (EIS):** An Executive Information System (EIS) is the nature of Information System used by executives to access and administer the data they entail to make informed business decisions. In the hierarchical structure of information systems, the EIS is at the pinnacle and is designed to renovate all significant data (from project to process to budget) into aggregated information that makes sense and brings value to the by and large business strategy. EIS is able to link data from various sources both internal and external to provide the amount and kind of information executives find useful. These systems are designed for top management; easy to use; present Information in condensed view; access organization's databases and data external to the organization.

The components of an EIS can typically be classified as below:

Component	Description
Hardware	Includes Input data-entry devices, CPU, Data Storage files and Output Devices.
Software	Includes Text base software, Database, and Graphic types such as time series charts, scatter diagrams, maps, motion graphics, sequence charts, and comparison-oriented graphs (i.e., bar charts) Model base.
User Interface	Includes hardware (physical) and software (logical) components by which people (users) interact with a machine. Several types of interfaces can be available to the EIS structure, such as scheduled reports, questions/answers, menu driven, command language,

	natural language, and input/output.
Telecommunication	Involves transmitting data from one place to another in a reliable networked system.

- 11. Relational Database Model:** A relational database allows the definition of data and their structures, storage and retrieval operations and integrity constraints that can be organized in a table structure. A table is a collection of records and each record in a table contains the same fields. Both the hierarchical and network data structures require explicit relationships, or links, between records in the database. Both structures also require that data be processed one record at a time. The relational database structure departs from both these requirements. Three key terms are used extensively in relational database models: **Relations, Attributes, and Domains.**

A Relation is a table with columns and rows. The named columns of the relation are called Attributes, and the Domain is the set of values the attributes are allowed to take.

All relations in a relational database have to adhere to some basic rules to qualify as relations. First, the ordering of columns is immaterial in a table. Second, there can't be identical record in a table. And third, each record will contain a single value for each of its attributes.

- 12. Three common switching techniques are Circuit Switching, Packet Switching, and Message Switching.**
- (i) **Circuit Switching:** A Circuit Switching network is one that establishes a fixed bandwidth circuit (or channel) between nodes and terminals before the users may communicate, as if the nodes were physically connected with an electrical circuit. The route is dedicated and exclusive, and released only when the communication session terminates. Circuit switching is what most of us encounter on our home phones.
 - (ii) **Packet Switching:** Packet switching refers to protocols in which messages are broken up into small transmission units called packets, before they are sent. Each packet is transmitted individually across the net. The packets may even follow different routes to the destination. Since there is no fixed path, different packets can follow different path and thus they may reach to destination out of order.
 - (iii) **Message Switching:** In message switching, end-users communicate by sending each other a message, which contains the entire data being delivered from the source to destination node. As a message is routed from its source to its destination, each intermediate switch within the network stores the entire message, providing a very reliable service. The intermediary nodes (switches) have the responsibility of conveying the received message from one node to another in the network. Therefore, each intermediary node within the network must store all messages before retransmitting them one at a time as proper resources become

available. Electronic mail (e-mail) and voice mail are examples of message switching systems.

13. **Vulnerability:** Vulnerability is an inherent weakness in the design, configuration, or implementation of a network or system that renders it susceptible to a threat.

The following factors are responsible for occurrence of vulnerabilities in the software:

- **Software Bugs** - Software bugs are so common that users have developed techniques to work around the consequences, and bugs that make saving work necessary every half an hour or crash the computer every so often are considered to be a normal part of computing. For example - buffer overflow, failure to handle exceptional conditions, access validation error, input validation errors are some of the common software flaws.
 - **Timing Windows** - This problem may occur when a temporary file is exploited by an intruder to gain access to the file, overwrite important data, and use the file as a gateway for advancing further into the system.
 - **Insecure default configurations** - Insecure default configurations occur when vendors use known default passwords to make it as easy as possible for consumers to set up new systems. Unfortunately, most intruders know these passwords and can access systems effortlessly.
 - **Trusting Untrustworthy information** - This is usually a problem that affects routers, or those computers that connect one network to another. When routers are not programmed to verify that they are receiving information from a unique host, bogus routers can gain access to systems and do damage.
 - **End users** - Generally, users of computer systems are not professionals and are not always security conscious. For example, when the number of passwords of an user increases, user may start writing them down, in the worst case to places from where they are easy to find. In addition to this kind of negligence towards security procedures users do human errors, for example save confidential files to places where they are not properly protected.
14. Advantages of Cloud Computing are as follows:
- **Cost Efficient:** Cloud computing is probably the most cost efficient method to use, maintain and upgrade.
 - **Almost Unlimited Storage:** Storing information in the cloud gives us almost unlimited storage capacity.
 - **Backup and Recovery:** Since all the data is stored in the cloud, backing it up and restoring the same is relatively much easier than storing the same on a physical

device. Furthermore, most cloud service providers are usually competent enough to handle recovery of information.

- **Automatic Software Integration:** In the cloud, software integration is usually something that occurs automatically. Not only that, cloud computing allows us to customize the options with great ease. Hence, we can handpick just those services and software applications that we think will best suit the particular enterprise.
- **Easy Access to Information:** Once we register ourselves in the cloud, we can access the information from anywhere, where there is an Internet connection.
- **Quick Deployment:** Once we opt for this method of functioning, the entire system can be fully functional in a matter of a few minutes. Of course, the amount of time taken here will depend on the exact kind of technology that we need for our business.

Disadvantages of Cloud Computing are as follows:

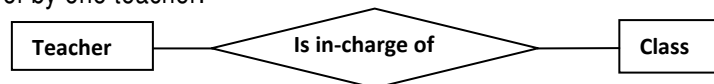
- **Technical Issues:** This technology is always prone to outages and other technical issues. Even the best cloud service providers run into this kind of trouble, in spite of keeping up high standards of maintenance. We will invariably be stuck in case of network and connectivity problems.
- **Security in the Cloud:** Surrendering all the company's sensitive information to a third-party cloud service provider could potentially put the company to great risk.
- **Prone to Attack:** Storing information in the cloud could make the company vulnerable to external hack attacks and threats. Nothing on the Internet is completely secure and hence, there is always the lurking possibility of stealth of sensitive data.

15. (a) Types of Relationships in E-R Diagram

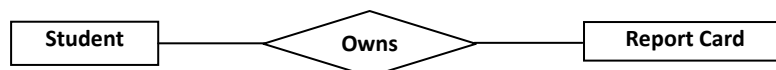
The various types of relationships are as follows:

- (i) **One-to-One relationship (1:1)** - A One-to-One relationship is shown on the diagram by a line connecting the two entities.

Example: A Teacher may be in-charge of a class. Each class must be in-charge of by one teacher.



A student has one and only one Report card. Each report card is owned by one and only one student.



- (ii) **One-to-Many relationships (1:N)** – A One-to-Many relationship is shown on the diagram by a line connecting the two entities with a “crow's foot” symbol denoting the 'many' end of the relationship.

Example: A student may borrow some books from the library. A book in the library may be borrowed by at most a student.



A class is formed by a group of atleast one student. Each student is allocated to one and only one class.



Further, a teacher teaches many courses.

- (iii) **Many-to-One relationships (M:1)** – It is the reverse of One-to-Many relationship.

Example: As in two or more parent records to a single child record. For example,



When three administrators in a small town report to one minister.

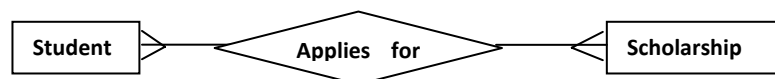


- (iv) **Many-to-Many relationships (M:N)** – A Many-to-Many relationship is shown on the diagram by a line connecting the two entities with 'crow's foot' symbols at both ends.

Example: A student enrolls in atleast one course. A course is enrolled by at least one student.



A student may apply for more than one scholarship. Each scholarship may receive some applications from student, or none.



(b) Advantages of using Data Flow Diagram are as follows:

- It aids in describing the boundaries of the system.
- It is beneficial for communicating existing system knowledge to the users.
- A straightforward graphical technique which is easy to recognize.
- DFDs can provide a detailed representation of system components.
- It is used as the part of system documentation file.
- DFDs are easier to understand by technical and nontechnical audiences
- It supports the logic behind the data flow within the system.

Limitations of using Data Flow Diagram are as follows:

- It make the programmers little confusing concerning the system.
- The biggest drawback of the DFD is that it simply takes a long time to create, so long that the analyst may not receive support from management to complete it.
- Physical considerations are left out.

(c) **Decision Table:** A Decision Table is a table which may accompany a flowchart, defining the possible contingencies that may be considered within the program and the appropriate course of action for each contingency. A Decision Table is divided into four parts:

Condition Stub	Condition Entries
Action stub	Action Entries

- (i) **Condition Stub** - which comprehensively lists the comparisons or conditions;
- (ii) **Action Stub**- which comprehensively lists the actions to be taken along the various program branches;
- (iii) **Condition Entries** - which list in its various columns the possible permutations of answer to the questions in the conditions stub; and
- (iv) **Action Entries** - which lists, in its columns corresponding to the condition entries the actions contingent upon the set of answers to questions of that column.

SECTION – B: STRATEGIC MANAGEMENT**QUESTIONS****Correct/Incorrect with reasoning**

1. State with reasons which of the following statements are correct/incorrect:
 - (a) Substitute products are latent source of competition.
 - (b) Enterprises pursue multiple objectives rather than a single objective.
 - (c) The management of funds can play a pivotal role in strategy implementation.
 - (d) Not-for-profit organizations are not required to have a strategy.
 - (e) The process of strategy avoids matching potential of the organization with the environment opportunities.
 - (f) There is both opportunity and challenge in 'Change'.
 - (g) Efficiency and effectiveness mean the same in strategic management.
 - (h) Production strategy implements, supports and drives higher strategies.
 - (i) E-commerce technology opens up a host of opportunities for reconfiguring industry and company value chains.
 - (j) A company's strategy has always to be proactive in nature.

Differences between the two concepts

2. Distinguish between the following:
 - (a) Operational Control and Management Control.
 - (b) Strategy Formulation and Strategy Implementation.
 - (c) DMAIC and DMADV Methodology of Six Sigma.
 - (d) Top-Down and Bottom-Up Strategic Planning.

Short notes

3. Write short notes on the following:
 - (a) Socio-cultural environment
 - (b) Portfolio analysis
 - (c) Augmented marketing
 - (d) Six sigma
 - (e) Strategic groups

Brief answers

4. Briefly answer the following questions:
 - (a) Briefly explain Premise Control.
 - (b) Define Total Quality Management.
 - (c) Explain the Concept of strategic Intent.
 - (d) Define Forward and Backward Linkages.
 - (e) Explain briefly the Competitive advantage.

Descriptive Answers*Chapter 1-Business Environment*

5. Discuss the Porter's model for systematically diagnosing the significant competitive pressures in a market.
6. Briefly explain macro environmental factors that affect an organization's strategy.

Chapter 2-Business Policy and Strategic Management

7. What is Strategic Management? What benefits accrue by following a strategic approach to managing?
8. What are the major dimensions of strategic decision making?

Chapter 3-Strategic Analysis

9. Explain how TOWS matrix can generate strategic options within external and internal environment.
10. How an organization analyses its business portfolio explain on market growth rate and relative market share.

Chapter 4-Strategic Planning

11. What is turnaround management? What are various stages in its implementation?
12. Discuss strategic alternatives with reference to Michael Porter's strategies.

Chapter 5-Formulation of Functional Strategy

13. What is supply chain management? Is it same as logistics management? Discuss.
14. What do you mean by financial strategy of an organization? How the worth of a business is evaluated?

Chapter 6-Strategic Implementation and Control

15. "The role played by middle management is diminishing as the tasks performed by them are increasingly being replaced by the technological tools." Elucidate the statement in terms of its effect on organization structure.

16. Define corporate culture. Also elucidate the statement “Culture is a strength that can also be a weakness”.

Chapter 7-Reaching Strategic Edge

17. What is Benchmarking? What are the areas where benchmarking can help?
18. Define Business Process Re-engineering. Briefly outline the steps therein.

SUGGESTED ANSWERS / HINTS

1. (a) **Correct:** Substitute products are a latent source of competition in an industry. In many cases, they become a major constituent of competition. Substitute products offering a price advantage and/or performance improvement to the consumer can drastically alter the competitive character of an industry. For example, coir suffered at the hands of synthetic fibre. Wherever, substantial investment in R&D is taking place, threats from substitute products can be expected. Substitutes, too, usually limit the prices and profits in an industry.
- (b) **Correct:** Enterprises pursue multiple objectives rather than a single objective. In general, we may identify a set of business objectives pursued by a large cross-section of enterprises. These relate to profitability, productive efficiency, growth, technological dynamism, stability, self-reliance, survival, competitive strength, customer service, financial solvency, product quality, diversification, employee satisfaction and welfare, and so on. Enterprises seek to balance these objectives in some appropriate manner.
- (c) **Correct:** The management of funds can play a pivotal role in strategy implementation as it aims at the conservation and optimum utilization of funds objectives which are central to any strategic action. Organizations that implement strategies of stability, growth or retrenchment cannot escape the rigours of a proper management of funds. In fact, good management of funds often creates the difference between a strategically successful and unsuccessful company.
- (d) **Incorrect:** Similar to commercial organizations, ‘not-for-profit’ organizations must also have a strategy. It is required to give it direction, focus and efficient utilization of resources. In many ‘not-for-profit’ organizations surpluses are important for their survival and growth.
- (e) **Incorrect:** In the process of strategic management an organisation continuously scan its relevant environment to identify various opportunities and threats. Organisations keen to grow and expand often look for promising opportunities that match their potential. Such opportunities become a good stepping stone for achieving the goals of the organisation.

- (f) **Correct:** It is said that change is inevitable, especially in the context of business environment. Changes in the business environment from time to time throw up new issues before businesses. A right perspective of such new issues is to view them both as challenges and opportunities - challenge because appropriate action is called for and, opportunity because it opens up new potentials for the future plans that would lead to prosperous business.
 - (g) **Incorrect:** Efficiency pertains to designing and achieving suitable input output ratios of funds, resources, facilities and efforts whereas effectiveness is concerned with the organization's attainment of goals including that of desired competitive position. While efficiency is essentially introspective, effectiveness highlights the links between the organization and its environment. In general terms, to be effective is to do the right things while to be efficient is to do things rightly.
 - (h) **Correct:** For effective implementation of higher level strategies, strategists need to provide direction to functional managers, including production, regarding the plans and policies to be adopted. Production strategy provides a path for transmitting corporate and business level strategy to the production systems and makes it operational. It may relate to production planning, operational system, control and research & development.
 - (i) **Correct:** The impact of e-commerce technology on industry and company value chains is profound, paving the way for fundamental changes in the ways business is conducted both internally, and with suppliers and customers. Using the network to link the customers and the suppliers enables just-in-time delivery, reducing inventory costs and allowing production to match demand.
 - (j) **Incorrect:** A company's strategy is a blend of proactive actions and reactive actions by the management. Reactive actions are required to address unanticipated developments and environmental conditions. Thus, not every strategic move is the result of proactive and deliberate management actions. At times, some kind of strategic reaction or adjustments are also required.
2. (a) Differences between Operational Control and Management Control are as under:
- (i) The thrust of operational control is on individual tasks or transactions as against total or more aggregative management functions. When compared with operational, management control is more inclusive and more aggregative, in the sense of embracing the integrated activities of a complete department, division or even entire organisation, instead or mere narrowly circumscribed activities of sub-units. For example, procuring specific items for inventory is a matter of operational control, in contrast to inventory management as a whole.
 - (ii) Many of the control systems in organisations are operational and mechanistic in nature. A set of standards, plans and instructions are formulated. On the other hand the basic purpose of management control is the achievement of

enterprise goals – short range and long range – in an effective and efficient manner.

(b) Strategy formulation and implementation can be distinguished in the following ways:

Strategy Formulation	Strategy Implementation
- It involves the design and choice of appropriate organisational strategies.	- It is the process of putting the various strategies into action of organizations.
- It is positioning forces before the action.	- It is managing forces during the action
- It focuses on effectiveness.	- It focuses on efficiency.
- It is primarily an intellectual process.	- It is primarily an operational process.
- It requires good intuitive and analytical skills.	- It requires special motivation and leadership skills.
- It requires coordination among a few individuals.	- It requires coordination among many individuals.

(c) For implementing six sigma, there are two separate key methodologies for existing and new processes. They are known as DMAIC and DMADV.

DMAIC is an acronym for five different steps used in six sigma - Define, Measure, Analyze Improve, and control. DMAIC methodology is directed towards improvement of existing product, process or service.

- **Define:** To begin with six sigma experts define the process improvement goals that are consistent with the strategy of the organization and customer demands. They discuss different issues with the senior managers so as to define what needs to done.
- **Measure:** The existing processes are measured to facilitate future comparison. Six sigma experts collect process data by mapping and measuring relevant processes.
- **Analyze:** Verify cause-and-effect relationship between the factors in the processes. Experts need to identify the relationship between the factors. They have to make a comprehensive analysis to identify hidden or not so obvious factor.
- **Improve:** On the basis of the analysis experts make a detailed plan to improve.

- **Control:** Initial trial or pilots are run to establish process capability and transition to production. Afterwards continuously measure the process to ensure that variances are identified and corrected before they result in defects.

DMADV is an acronym for Define, Measure, Analyze, Design, and Verify. DMADV is a strategy for designing new products, processes and services.

- **Define:** As in case of DMAIC six sigma experts have to formally define goals of the design activity that are consistent with strategy of the organization and the demands of the customer.
- **Measure:** Next identify the factors that are critical to quality (CTQs). Measure factors such as product capabilities and production process capability. Also assess the risks involved.
- **Analyze:** Develop and design alternatives. Create high-level design and evaluate to select the best design.
- **Design:** Develop details of design and optimise it. Verify designs may require using techniques such as simulations.
- **Verify:** Verify designs through simulations or pilot runs. Verified and implemented processes are handed over to the process owners.

However, in spite of different orientation in two methodologies, conceptually there is overlapping between the DMAIC and DMADV as both are essentially having similar objectives.

- (d) **Top-Down and Bottom-Up Strategic Planning:** Strategic planning determines where an organization is going over the next year or more and the ways for going there. The process is organization-wide, or focused on a major function such as a division or other major function. As such strategic planning is a top level management function. The flow of planning can be from corporate to divisional level or vice-versa. There are two approaches for strategic planning - top down or bottom up.

Top down strategic planning describes a centralized approach to strategy formulation in which the corporate centre or head office determines mission, strategic intent, objectives and strategies for the organization as a whole and for all parts. Unit managers are seen as implementers of pre-specified corporate strategies.

Bottom up strategic planning is the characteristic of autonomous or semi-autonomous divisions or subsidiary companies in which the corporate centre does not conceptualize its strategic role as being directly responsible for determining the mission, objectives, or strategies of its operational activities. It may prefer to act as a catalyst and facilitator, keeping things reasonably simple and confining itself to perspective and broader strategic intent.

3.
 - (a) Socio-cultural environment consist of factors related to human relationships and the impact of social attitudes and cultural values which has bearing on the business of the organization. The beliefs, values and norms of a society determine how individuals and organizations should be interrelated. The core beliefs of a particular society tend to be persistent. It is difficult for businesses to change these core values, which becomes a determinant of its functioning.
 - (b) Portfolio analysis can be defined as a set of techniques that help strategists in taking strategic decisions with regard to individual products or businesses in a firm's portfolio. It is primarily used for competitive analysis and corporate strategic planning in multi product and multi business firms.
 - (c) Augmented marketing refers to deliberate and accelerated efforts to get better marketing returns through additional means. It includes provision of additional customer services and benefits built around the care and actual products that relate to introduction of hi-tech services like movies on demand, on-line computer repair services, secretarial services, etc. Such innovative offerings provide a set of benefits that promise to elevate customer service to unprecedented levels.
 - (d) Six Sigma is a highly disciplined process that helps in developing and delivering near-perfect products and services. It strives to meet and improve organizational outputs in terms of quality, cost, scheduling, manpower, new products and so on. It works continuously towards revising the current standards and establishing higher ones. It means taking systemic and integrated efforts toward improving quality and reducing cost.
 - (e) Strategic groups are conceptually defined clusters of competitors that share similar strategies and therefore compete more directly with one another than with other firms in the same industry. Strong economic compulsions often constrain these firms from switching one competitive posture to another. Any industry contains only one strategic group when all firms essentially have identical strategies and have comparable market positions. At the other extreme, there are as many strategic groups as there are competitors when each rival pursues a distinctively different competitive approach and occupies a substantially different competitive position in the market place.
4.
 - (a) A strategy is formed on the basis of certain assumptions or premises about the complex and turbulent organizational environment. Over a period of time these premises may not remain valid. Premise control is a tool for systematic and continuous monitoring of the environment to verify the validity and accuracy of the premises on which the strategy has been built. It primarily involves monitoring two types of factors:
 - (i) Environmental factors such as economic (inflation, liquidity, interest rates), technological, social, legal and regulatory factors.

(ii) Industry factors such as competitors, suppliers, substitutes.

It is neither feasible nor desirable to control all types of premises in the same manner. Different premises may require different amount of control. Thus, managers are required to select those premises that are likely to change and would severely impact the functioning of the organization and its strategy.

- (b) **Total Quality Management:** TQM or Total Quality Management is a people-focused management system that aims at continual increase in customer satisfaction at continually lower real cost. There is a sustained management commitment to quality and everyone in the organisation and the supply chain is responsible for preventing rather than detecting defects.

TQM is a total system approach (not a separate area or program) and an integral part of high-level strategy. It works horizontally across functions and departments, involves all employees, top to bottom, and extends backward and forward to include the supply chain and the customer chain. TQM stresses learning and adaptation to continual change as keys to organizational success.

- (c) **Concept of Strategic Intent:** A company exhibits strategic intent when it relentlessly pursues an ambitious strategic objective and concentrates its full resources and competitive actions on achieving that objective. A company's objectives sometimes play an other role – that of signaling unmistakable strategic intent to make quantum gains in competing against key rivals and establish itself as a clear-cut winner in the marketplace, often against long odds. A company's strategic intent can entail becoming the dominant company in the industry, unseating the existing industry leader, delivering the best customer service of any company in the industry (or the world), or turning a new technology into products capable of changing the way people work and live. Ambitious companies almost invariably begin with strategic intents that are out of proportion to their immediate capabilities and market positions. They set aggressive objectives and pursue them relentlessly, sometimes even obsessively.

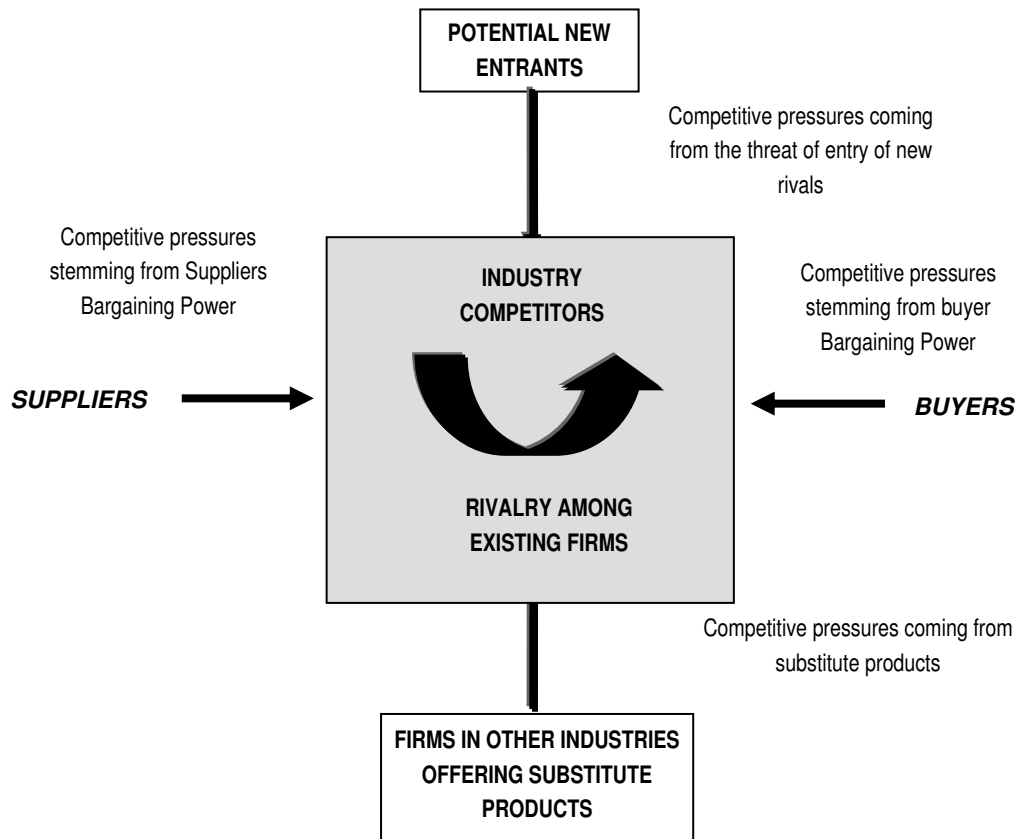
- (d) **Forward Linkages:** The different elements in strategy formulation starting with objective setting through environmental and organizational appraisal, strategic alternatives and choice to the strategic plan determine the course that an organization adopts for itself. With the formulation of new strategies, or reformulation of existing strategies, many changes have to be effected within the organization. For instance, the organizational structure has to undergo a change in the light of the requirements of the modified or new strategy. The style of leadership has to be adapted to the needs of the modified or new strategies. In this way, the formulation of strategies has forward linkages with their implementation.

Backward Linkages: Just as implementation is determined by the formulation of strategies, the formulation process is also affected by factors related with 'implementation. While dealing with strategic choice, remember that past strategic

actions also determine the choice of strategy. Organizations tend to adopt those strategies which can be implemented with the help of the present structure of resources combined with some additional efforts. Such incremental changes, over a period of time, take the organization from where it is to where it wishes to be.

- (e) Competitive advantage is position of a firm to maintain and sustain a favorable market position when compared to the competitors. Competitive advantage is ability to offer buyers something different and thereby providing more value for the money. It is the result of a successful strategy. This position gets translated into higher market share, higher profits when compared to those that are obtained by competitors operating in the same industry. Competitive advantage may also be in the form of low cost relationship in the industry or being unique in the industry along dimensions that are widely valued by the customers in particular and the society at large.
5. Five forces model of Michael Porter is a powerful and widely used tool for systematically diagnosing the significant competitive pressures in the market and assessing their strength and importance. The model holds that the state of competition in an industry is a composite of competitive pressures operating in five areas of the over all market. These five forces are:
1. **Threat of new entrants:** New entrants are a powerful source of competition. The new capacity and product range they bring in throw up new competitive pressures. The bigger the new entrant, the more severe the competitive effect. New entrants also place a limit on prices and affect the profitability of existing players.
 2. **Bargaining power of customers:** This is another force that influences the competitive condition of the industry. This force will become heavier depending on the possibilities of the buyers forming groups or cartels. The bargaining power of the buyers influences not only the prices that the producer can charge but also influences in many cases, costs and investments of the producer because powerful buyers usually bargain for better services which involve costs and investment on the part of the producer.
 3. **Bargaining power of suppliers:** Quite often suppliers, too, exercise considerable bargaining power. The more specialised the offering from the supplier, greater is his clout. And, if the suppliers are also limited in number they stand a still better chance to exhibit their bargaining power. The bargaining power of suppliers determines the cost of raw materials and other inputs of the industry and, therefore, industry attractiveness and profitability.
 4. **Rivalry among current players:** The rivalry among existing players is quite obvious. This is what is normally understood as competition. For any player, the competitors influence strategic decisions at different strategic levels. The impact is evident more at functional level in the prices being changed, advertising, and pressures on costs, product and so on.

5. **Threats from substitutes:** Substitute products are a latent source of competition in an industry. In many cases they become a major constituent of competition. Substitute products offering a price advantage and/or performance improvement to the consumer can drastically alter the competitive character of an industry. And they can bring it about all of a sudden. For example, coir suffered at the hands of synthetic fibre. Wherever substantial investment in R&D is taking place, threats from substitute products can be expected.



6. Macro environment is explained as one which is largely external to the enterprise and thus beyond the direct influence and control of the organization, but which exerts powerful influence over its functioning. Important elements of macro environment are:
- **Demographic Environment:** The term demographics denote characteristics of population in an area, district, country or in world. Some of the demographic factors have great impact on the business. Factors such as general age profile, sex ratio, income, education, growth rate affect the business with different magnitude.
 - **Economic Environment:** The economic environment refers to the nature and direction of the economy in which a company competes or may compete. The

economic environment includes general economic situation in the region and the nation, conditions in resource markets (money, manpower, raw material and so on) which influence the supply of inputs to the enterprise, their costs, quality, availability and reliability of supplies.

- **Political-Legal Environment:** There are three important elements in political-legal environment:
 - **Government:** Business is highly guided and controlled by government policies. Hence the type of government running a country is a powerful influence on business.
 - **Legal:** Business organizations prefer to operate within a sound legal system. Legal environment consists of laws governing business.
 - **Political:** Political pressure groups influence and limit organizations. Apart from sporadic movements against certain products, service and organizations, politics has deeply seeped into unions.
 - **Socio-Cultural Environment:** Socio-cultural environment consist of factors related to human relationships and the impact of social attitudes and cultural values which has bearing on the business of the organization. The beliefs, values and norms of a society determine how individuals and organizations should be interrelated.
 - **Technological Environment:** Technology can act as both opportunity and threat to a business. It can act as opportunity as business can take advantage of adopting technological innovations to their strategic advantage. However, at the same time technology can act as threat if organisations are not able to adopt it to their advantage.
 - **Global Environment:** In simple economic terms, globalization refers to the process of integration of the world into one huge market. At the company level, globalization means two things: (a) the company commits itself heavily with several manufacturing locations around the world and offers products in several diversified industries, and (b) it also means ability to compete in domestic markets with foreign competitors.
7. In a highly competitive marketplace, companies can operate successfully by creating and delivering superior value to target customers and also learning how to adapt to a continuously changing business environment. Strategic management starts with developing a company mission (to give it direction), objectives and goals (to give it means and methods for accomplishing its mission), business portfolio (to allow management to utilise all facets of the organisation), and functional plans (plans to carry out daily operations from the different functional disciplines).

The overall objective of strategic management is two fold:

- (1) To create competitive advantage, so that the company can outperform the competitors in order to have dominance over the market.

(2) To guide the company successfully through all changes in the environment.

The following are the benefits of strategic approach to managing:

- Strategic management helps organisations to be more proactive instead of reactive in shaping its future. Organisations are able to analyse and take actions instead of being mere spectators. Thereby they are able to control their own destiny in a better manner. It helps them in working within vagaries of environment and shaping it, instead of getting carried away by its turbulence or uncertainties.
 - Strategic management provides framework for all the major business decisions of an enterprise such as decisions on businesses, products, markets, manufacturing facilities, investments and organisational structure. It provides better guidance to entire organisation on the crucial point - what it is trying to do.
 - Strategic management is concerned with ensuring a good future for the firm. It seeks to prepare the corporation to face the future and act as pathfinder to various business opportunities. Organisations are able to identify the available opportunities and identify ways and means as how to reach them.
 - Strategic management serves as a corporate defence mechanism against mistakes and pitfalls. It helps organisations to avoid costly mistakes in product market choices or investments. Over a period of time strategic management helps organisation to evolve certain core competencies and competitive advantages that assist in its fight for survival and growth.
8. Strategic decisions are different in nature than all other decisions which are taken at various levels of the organization during day-to-day working of the organizations. The major dimensions of strategic decisions are given below:
- *Strategic issues require top-management decisions:* Strategic issues involve thinking in totality of the organizations and also there is lot of risk involved. Hence, problems calling for strategic decisions require to be considered by top management.
 - *Strategic issues involve the allocation of large amounts of company resources:* It may require huge financial investment to venture into a new area of business or the organization may require huge number of manpower with new set of skills in them.
 - *Strategic issues are likely to have a significant impact on the long term prosperity of the firm:* Generally the results of strategic implementation are seen on a long term basis and not immediately.
 - *Strategic issues are future oriented:* Strategic thinking involves predicting the future environmental conditions and how to orient for the changed conditions.
 - *Strategic issues usually have major multifunctional or multi-business consequences:* As they involve organization in totality they affect different sections of the organization with varying degree.

- *Strategic issues necessitate consideration of factors in the firm’s external environment:* Strategic focus in organization involves orienting its internal environment to the changes of external environment.
9. Through SWOT analysis organisations identify their strengths, weaknesses, opportunities and threats. While conducting the SWOT Analysis managers are often not able to come to terms with the strategic choices that the outcomes demand. Heinz Wehrich developed a matrix called TOWS matrix by matching strengths and weaknesses of an organization with the external opportunities and threats. The incremental benefit of the TOWS matrix lies in systematically identifying relationships between these factors and selecting strategies on their basis. Thus TOWS matrix has a wider scope when compared to SWOT analysis. TOWS analysis is an action tool whereas SWOT analysis is a planning tool. The matrix is outlined below:

Internal elements External Elements	Organizational Strengths	Organizational Weaknesses
	Strategic Options	
Environmental opportunities(and risks)	SO : Maxi – Maxi	WO : Mini – Maxi
Environmental threats	ST : Maxi – Mini	WT : Mini – Mini

Figure: The TOWS Matrix (Source: Wehrich, H)

The TOWS Matrix is a relatively simple tool for generating strategic options. Through TOWS matrix four distinct alternative kinds of strategic choices can be identified.

SO(Maxi-Maxi): SO is a position that any firm would like to achieve. The strengths can be used to capitalize or build upon existing or emerging opportunities. Such firms can take lead from their strengths and utilize the resources to take the competitive advantage.

ST(Maxi-Mini): ST is a position in which a firm strives to minimize existing or emerging threats through its strengths.

WO(Mini-Maxi): The strategies developed need to overcome organizational weaknesses if existing or emerging opportunities are to be exploited to maximum.

WT(Mini-Mini): WT is a position that any firm will try to avoid. An organization facing external threats and internal weaknesses may have to struggle for its survival. WT strategy is a strategy which is pursued to minimize or overcome weaknesses and as far as possible, cope with existing or emerging threats.

By using TOWS Matrix, one can look intelligently at how one can best take advantage of the opportunities open to him, at the same time that one can minimize the impact of weaknesses and protect oneself against threats. Used after detailed analysis of threats,

opportunities, strength and weaknesses, it helps one to consider how to use the external environment to strategic advantage, and so one can identify some of the strategic options that are available.

10. The BCG growth-share matrix is the simplest way to portray a corporation's portfolio of investments. Growth share matrix also known for its cow and dog metaphors is popularly used for resource allocation in a diversified company. Using the BCG approach, a company classifies its different businesses on a two-dimensional growth-share matrix. In the matrix:

- The vertical axis represents market growth rate and provides a measure of market attractiveness.
- The horizontal axis represents relative market share and serves as a measure of company strength in the market.

Using the matrix, organisations can identify four different types of products or SBU as follows:

- **Stars** are products or SBUs that are growing rapidly. They also need heavy investment to maintain their position and finance their rapid growth potential. They represent best opportunities for expansion.
- **Cash Cows** are low-growth, high market share businesses or products. They generate cash and have low costs. They are established, successful, and need less investment to maintain their market share. In long run when the growth rate slows down, stars become cash cows.

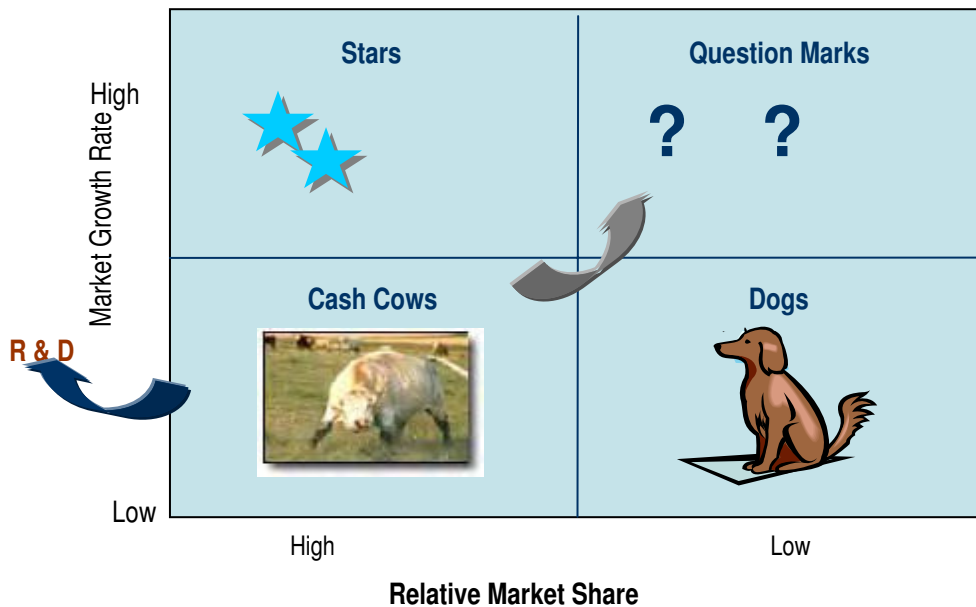


Figure: BCG Growth-Share Matrix

- **Question Marks**, sometimes called problem children or wildcats, are low market share business in high-growth markets. They require a lot of cash to hold their share. They need heavy investments with low potential to generate cash. Question marks if left unattended are capable of becoming cash traps. Since growth rate is high, increasing it should be relatively easier. It is for business organisations to turn them stars and then to cash cows when the growth rate reduces.
- **Dogs** are low-growth, low-share businesses and products. They may generate enough cash to maintain themselves, but do not have much future. Sometimes they may need cash to survive. Dogs should be minimised by means of divestment or liquidation.

Once the organisations have classified its products or SBUs, it must determine what role each will play in the future. The four strategies that can be pursued are:

- (i) **Build:** Here the objective is to increase market share, even by forgoing short-term earnings in favour of building a strong future with large market share.
- (ii) **Hold:** Here the objective is to preserve market share.
- (iii) **Harvest:** Here the objective is to increase short-term cash flow regardless of long-term effect.
- (iv) **Divest:** Here the objective is to sell or liquidate the business because resources can be better used elsewhere.

The growth-share matrix has done much to help strategic planning study; however, there are problems and limitations with the method. BCG matrix can be difficult, time-consuming, and costly to implement. Management may find it difficult to define SBUs and measure market share and growth. It also focuses on classifying current businesses but provide little advice for future planning. They can lead the company to placing too much emphasis on market-share growth or growth through entry into attractive new markets. This can cause unwise expansion into hot, new, risky ventures or giving up on established units too quickly.

11. Turnaround Management is the formulation and implementation of a strategic plan and a set of actions aimed towards corporate renewal and restructuring, during times of severe distress. Rising competition, business cycles and economic volatility create a climate where no business can take viability for granted. Turnaround strategy is a highly targeted effort to return an organization to profitability and increase positive cash flows to a sufficient level. Turnaround strategy is used when both threats and weaknesses adversely affect the health of an organization so much that its basic survival is a question. When organization is facing both internal and external pressures making things difficult then it has to find something which is entirely new, innovative and different. Through turnaround the organization's first objective is to survive and then grow in the market. Once turnaround is successful the organization may turn to focus on growth.

Action plan for turnaround strategy

- (i) **Assessment of current problems:** The first step is to assess the current problems and get to the root causes and the extent of damage the problem has caused. Once the problems are identified, the resources should be focused toward those areas essential to efficiently work on correcting and repairing any immediate issues.
- (ii) **Analyze the situation and develop a strategic plan:** Before making any major changes, chances of survival may be ascertained. Identify appropriate strategies and develop a preliminary action plan. For this one should look for the viable core businesses, adequate bridge financing and available organizational resources. Once major problems and opportunities are identified, develop a strategic plan with specific goals and detailed functional actions.
- (iii) **Implementing an emergency action plan:** If the organization is in a critical stage, an appropriate action plan must be developed to stop the bleeding and enable the organization to survive. The plan typically includes human resource, financial, marketing and operations actions to restructure debts, improve working capital, reduce costs, improve budgeting practices, prune product lines and accelerate high potential products. A positive operating cash flow must be established as quickly as possible and raise enough funds to implement the turnaround strategies.
- (iv) **Restructuring the business:** The financial state of the organization's core business is particularly important. If the core business is irreparably damaged, then the outlook for the entire organization may be bleak. Prepare cash forecasts, analyze assets and debts, review profits and analyze other key financial functions to position the organization for rapid improvement.

During the turnaround, the "product mix" may be changed, requiring the organization to do some repositioning. Core products neglected over time may require immediate attention to remain competitive. Some facilities might be closed. Organizations may even withdraw from certain markets. The 'people mix' is another important ingredient in the organization's competitive effectiveness. Reward and compensation systems that encourage dedication and creativity encourage employees to think profits and return on investments.

- (v) **Returning to normal:** In the final stage of turnaround strategy process, the organization should begin to show signs of profitability, return on investments and enhancing economic value-added. Emphasis is placed on a number of strategic efforts to take the organisation on growth path.
12. According to Porter, strategies allow organizations to gain competitive advantage from three different bases: cost leadership, differentiation, and focus. Porter calls these base generic strategies. Cost leadership emphasizes producing standardized products at a very low per-unit cost for consumers who are price-sensitive. Differentiation is a strategy aimed at producing products and services considered unique industry wide and directed

at consumers who are relatively price-insensitive. Focus means producing products and services that fulfill the needs of small groups of consumers.

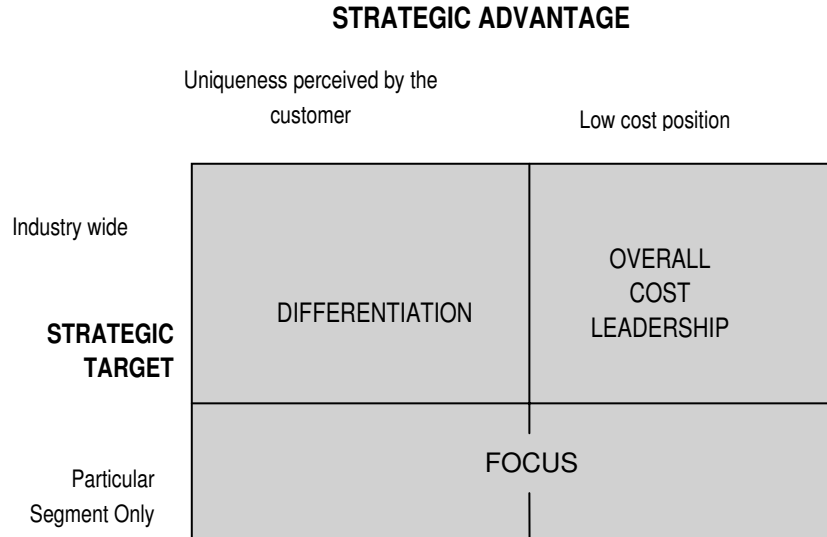


Figure: Michael Porter’s Generic Strategy

Cost Leadership Strategies: A primary reason for pursuing forward, backward, and horizontal integration strategies is to gain cost leadership benefits. But cost leadership generally must be pursued in conjunction with differentiation. A number of cost elements affect the relative attractiveness of generic strategies, including economies or diseconomies of scale achieved, capacity utilization and linkages with suppliers and distributors and so on.

Differentiation Strategies: Different strategies offer different degrees of differentiation. A differentiation strategy should be pursued only after a careful study of buyers’ needs and preferences to determine the feasibility of incorporating one or more differentiating features into a unique product that features the desired attributes. A successful differentiation strategy allows a firm to charge a higher price for its product and to gain customer loyalty. Special features that differentiate one's product can include superior service, spare parts availability, design, product performance, useful life, or ease of use and so on.

Focus Strategies: A successful focus strategy depends on an industry segment that is of sufficient size, has good growth potential, and is not crucial to the success of other major competitors. Strategies such as market penetration and market development offer substantial focusing advantages. Midsize and large firms can effectively pursue focus-based strategies only in conjunction with differentiation or cost leadership-based strategies. All firms in essence follow a differentiated strategy.

13. The term supply chain refers to the linkages between suppliers, manufacturers and customers. Supply chains involve all activities like sourcing and procurement of material, conversion, and logistics. Planning and control of supply chains are important components of its management. Naturally, management of supply chains include closely working with channel partners – suppliers, intermediaries, other service providers and customers.

Supply chain management is defined as the process of planning, implementing, and controlling the supply chain operations. It is a cross-functional approach to managing the movement of raw materials into an organization and the movement of finished goods out of the organization toward the end-consumer who are to be satisfied as efficiently as possible.

Is logistic management same as supply chain management?

Supply chain management is an extension of logistic management. However, there is difference between the two. Logistical activities typically include management of inbound and outbound goods, transportation, warehousing, handling of material, fulfilment of orders, inventory management, supply/demand planning. Although these activities also form part of Supply chain management, the latter has different components. Supply chain management includes more aspects apart from the logistics function. It involves working cohesively with the channel partners to streamline the flow of materials. It is a tool of business transformation and involves delivering the right product at the right time to the right place and at the right price. It reduces costs of organizations and enhances customer service.

14. The financial strategies of an organization are related to several finance/ accounting concepts considered to be central to strategy implementation. These are: acquiring needed capital/sources of fund, developing projected financial statements/budgets, management/ usage of funds, and evaluating the worth of a business.

Various methods for determining a business's worth can be grouped into three main approaches which are as follows:

- (i) Net worth or stockholders' equity: Net worth is the total assets minus total outside liabilities of an individual or a company.
- (ii) Future benefits to owners through net profits: These benefits are considered to be much greater than the amount of profits. A conservative rule of thumb is to establish a business's worth as five times the firm's current annual profit. A five-year average profit level could also be used.
- (iii) Market-determined business worth: This, in turn, involves three methods. First, the firm's worth may be based on the selling price of a similar company. The second approach is called the price-earnings ratio method whereby the market price of the firm's equity shares is divided by the annual earnings per share and multiplied by the firm's average net income for the preceding years. The third approach can be

called the outstanding shares method whereby one has to simply multiply the number of shares outstanding by the market price per share and add a premium.

15. In the recent years information technology and communications have significantly altered the functioning of organizations. The role played by middle management is diminishing as the tasks performed by them are increasingly being replaced by the technological tools. Hourglass organization structure consists of three layers with constricted middle layer. The structure has a short and narrow middle-management level. Information technology links the top and bottom levels in the organization taking away many tasks that are performed by the middle level managers. A shrunken middle layer coordinates diverse lower level activities. Contrary to traditional middle level managers who are often specialist, the managers in the hourglass structure are generalists and perform wide variety of tasks. They would be handling cross-functional issues emanating such as those from marketing, finance or production.

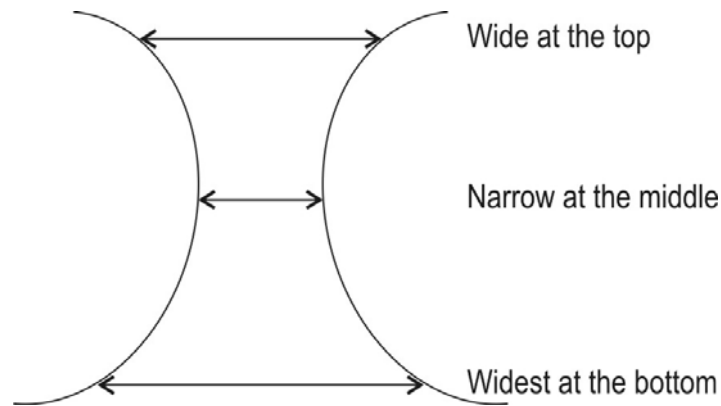


Figure: Hourglass Organisation Structure

Hourglass structure has obvious benefit of reduced costs. It also helps in enhancing responsiveness by simplifying decision making. Decision making authority is shifted close to the source of information so that it is faster. However, with the reduced size of middle management the promotion opportunities for the lower levels diminish significantly. Continuity at same level may bring monotony and lack of interest and it becomes difficult to keep the motivation levels high. Organisations try to overcome these problems by assigning challenging tasks, transferring laterally and having a system of proper rewards for performance.

16. The phenomenon which often distinguishes good organizations from bad ones could be summed up as 'corporate culture'. Corporate culture refers to a company's values, beliefs, business principles, traditions, ways of operating and internal work environment. Every corporation has a culture that exerts powerful influences on the behaviour of managers. Culture affects not only the way managers behave within an organization but also the decisions they make about the organization's relationships with its environment and its strategy.

“Culture is a strength that can also be a weakness”. This statement can be explained by splitting it in to two parts.

Culture as a strength: As a strength, culture can facilitate communication, decision-making & control and create cooperation & commitment. An organization’s culture could be strong and cohesive when it conducts its business according to a clear and explicit set of principles and values, which the management devotes considerable time to communicating to employees and which values are shared widely across the organization.

Culture as a weakness: As a weakness, culture may obstruct the smooth implementation of strategy by creating resistance to change. An organization’s culture could be characterized as weak when many subcultures exist, few values and behavioral norms are shared and traditions are rare. In such organizations, employees do not have a sense of commitment, loyalty and sense of identity.

17. In simple words, benchmarking is an approach of setting goals and measuring productivity based on best industry practices. It developed out of need to have information against which performances can be measured. For example, a customer support engineer of a television manufacturer attends a call within forty-eight hours. If the industry norm is that all calls are attended within twenty-four hours, then the twenty-four hours can be a benchmark.

Benchmarking helps in improving performance by learning from best practices and the processes by which they are achieved. It involves regularly comparing different aspects of performance with the best practices, identifying gaps and finding out novel methods to not only reduce the gaps but to improve the situations so that the gaps are positive for the organization. Benchmarking can help in almost all aspect of business that are amenable to comparison and are significant to business. Typically organisations can use benchmarking process to achieve improvement in diverse range of management function like:

- ◆ Maintenance operations
- ◆ Assessment of total manufacturing costs
- ◆ Product development
- ◆ Product distribution
- ◆ Customer services
- ◆ Plant utilization levels
- ◆ Human resource management

18. Business Process Reengineering (BPR) is an approach to unusual improvement in operating effectiveness through the redesigning of critical business processes and supporting business systems. It is revolutionary redesign of key business processes that

involves examination of the basic process itself. It looks at the minute details of the process, such as why the work is done, who does it, where is it done and when it is done. BPR refers to the analysis and redesign of workflows and processes both within the organization and between the organization and the external entities like suppliers, distributors, and service providers.

The orientation of redesigning efforts is basically radical. In other words, it is a total deconstruction and rethinking of business process in its entirety, unconstrained by its existing structure and pattern. Its objective is to obtain quantum jump in process performance in terms of time, cost, output, quality, and responsiveness to customers. BPR is a revolutionary redesigning of key business processes.

BPR involves the following steps:

1. **Determining objectives and framework:** Objectives are the desired end results of the redesign process which the management and organization attempts to achieve. This will provide the required focus, direction, and motivation for the redesign process. It helps in building a comprehensive foundation for the reengineering process.
2. **Identify customers and determine their needs:** The designers have to understand customers – their profile, their steps in acquiring, using and disposing a product. The purpose is to redesign business process that clearly provides added value to the customer.
3. **Study the existing process:** The existing processes will provide an important base for the redesigners. The purpose is to gain an understanding of the 'what', and 'why' of the targeted process. However, some companies go through the reengineering process with clean perspective without laying emphasis on the past processes.
4. **Formulate a redesign process plan:** The information gained through the earlier steps is translated into an ideal redesign process. Formulation of redesign plan is the real crux of the reengineering efforts. Customer focused redesign concepts are identified and formulated. In this step alternative processes are considered and the best is selected.
5. **Implement the redesign:** It is easier to formulate new process than to implement them. Implementation of the redesigned process and application of other knowledge gained from the previous steps is key to achieve dramatic improvements. It is the joint responsibility of the designers and management to operationalise the new process.