

PAPER – 5: ADVANCED ACCOUNTING

PART – I: ANNOUNCEMENTS STATING APPLICABILITY & NON-APPLICABILITY For MAY, 2017 EXAMINATION

A. Applicable for May, 2017 Examination

I. Companies Act, 2013

Relevant Sections of the Companies Act, 2013 notified up to 31st October, 2016 will be applicable for May, 2017 Examination.

II. Amendments made by MCA in the Companies (Accounting Standards) Rules, 2006

Amendments made by MCA on 30.3.2016 in the Companies (Accounting Standards) Rules, 2006 have been made applicable for May, 2017 examination.

MCA has issued Companies (Accounting Standards) Amendment Rules, 2016 to amend Companies (Accounting Standards) Rules, 2006 by incorporating the references of the Companies Act, 2013, wherever applicable. Also, the Accounting Standard (AS) 2, AS 4, AS 10, AS 13, AS 14, AS 21 and AS 29 as specified in these Rules will substitute the corresponding Accounting Standards with the same number as specified in Companies (Accounting Standards) Rules, 2006.

Following table summarizes the changes made by the Companies (Accounting Standards) Amendment Rules, 2016 vis a vis the Companies (Accounting Standards) Rules, 2006 in the accounting standards relevant for Paper 5:

Name of the standard	Para no.	As per the Companies (Accounting Standards) Rules, 2006	As per the Companies (Accounting Standards) Amendment Rules, 2016	Implication
AS 4	Footnote to AS 4	Pursuant to AS 29, Provisions, Contingent Liabilities and Contingent Assets, becoming mandatory in respect of accounting periods commencing on or after 1-4-2004, all paragraphs of this Standard that deal	All paragraphs of this Standard that deal with contingencies are applicable only to the extent not covered by other Accounting Standards prescribed by the Central Government. For example, the	Footnote has been modified.

		with contingencies (viz. paragraphs 1(a), 2, 3.1, 4 (4.1 to 4.4), 5 (5.1 to 5.6), 6, 7 (7.1 to 7.3), 9.1 (relevant portion), 9.2, 10, 11, 12 and 16) stand withdrawn except to the extent they deal with impairment of assets not covered by other Indian Accounting Standards. For example, impairment of receivables (commonly referred to as the provision for bad and doubtful debts), would continue to be covered by AS 4.	impairment of financial assets such as impairment of receivables (commonly known as provision for bad and doubtful debts) is governed by this Standard.	
	8.5	There are events which, although they take place after the balance sheet date, are sometimes reflected in the financial statements because of statutory requirements or because of their special nature. Such items include the amount of dividend proposed or declared by the enterprise after the balance sheet date in respect of the period covered by the financial statements.	There are events which, although they take place after the balance sheet date, are sometimes reflected in the financial statements because of statutory requirements or because of their special nature. For example, if dividends are declared after the balance sheet date but before the financial statements are approved for issue, the dividends are not recognized as a liability at the balance sheet date	No liability for proposed dividends must be created now. Such proposed dividends are to be disclosed in the notes.

			because no obligation exists at that time unless a statute requires otherwise. Such dividends are disclosed in the notes.	
	14	Dividends stated to be in respect of the period covered by the financial statements, which are proposed or declared by the enterprise after the balance sheet date but before approval of the financial statements, should be adjusted.	If an enterprise declares dividends to shareholders after the balance sheet date, the enterprise should not recognise those dividends as a liability at the balance sheet date unless a statute requires otherwise. Such dividends should be disclosed in notes.	No liability for proposed dividends should be created now. Such proposed dividends are to be disclosed in the notes.
AS 14	3(a)	Amalgamation means an amalgamation pursuant to the provisions of the Companies Act, 1956 or any other statute which may be applicable to companies.	Amalgamation means an amalgamation pursuant to the provisions of the Companies Act, 2013 or any other statute which may be applicable to companies and includes 'merger'.	Definition of Amalgamation has been made broader by specifically including 'merger'.
	18 and 39	In such cases the statutory reserves are recorded in the financial statements of the transferee company by a corresponding debit to a suitable account head (e.g.,	In such cases the statutory reserves are recorded in the financial statements of the transferee company by a corresponding debit to a suitable account head (e.g.,	Corresponding debit on account of statutory reserve in case of amalgamation in the nature of

		<p>'Amalgamation Adjustment Account') which is disclosed as a part of 'miscellaneous expenditure' or other similar category in the balance sheet. When the identity of the statutory reserves is no longer required to be maintained, both the reserves and the aforesaid account are reversed.</p>	<p>'Amalgamation Adjustment Reserve') which is presented as a separate line item. When the identity of the statutory reserves is no longer required to be maintained, both the reserves and the aforesaid account are reversed.</p>	<p>purchase is termed as 'Amalgamation Adjustment Reserve' and is now to be presented as a separate line item since there is not sub-heading like 'miscellaneous expenditure' in Schedule III to the Companies Act, 2013</p>
AS 29	35 (An extract)	<p>The amount of a provision should not be discounted to its present value.</p>	<p>The amount of a provision should not be discounted to its present value except in case of decommissioning, restoration and similar liabilities that are recognised as cost of Property, Plant and Equipment. The discount rate (or rates) should be a pre-tax rate (or rates) that reflect(s) current market assessments of the time value of money and the risks specific to the liability. The discount rate(s)</p>	<p>Now discounting of provision for decommissioning, restoration and similar liabilities should be done as per the pre-tax discount rate as mentioned therein.</p>

			should not reflect risks for which future cash flow estimates have been adjusted. Periodic unwinding of discount should be recognized in the statement of profit and loss.	
	73		<p><u>Transitional Provisions</u></p> <p>All the existing provisions for decommissioning, restoration and similar liabilities (see paragraph 35) should be discounted prospectively, with the corresponding effect to the related item of property, plant and equipment.</p>	Discounting of above existing provisions and similar liabilities should be prospectively, with the corresponding effect to the related item of property, plant and equipment.

III Maintenance of Statutory Liquidity Ratio (SLR)

In exercise of the powers conferred by sub-section (2A) of Section 24 read with Section 51 and Section 56 of the Banking Regulation Act, 1949 (10 of 1949) and in partial modification of the Notification DBR.No.Ret.BC.63/12.01.001/2015-16 dated December 10, 2015, the Reserve Bank hereby specifies that:

- (i) with effect from the dates given below, every scheduled commercial bank, local area bank, primary co-operative bank, state co-operative bank and central cooperative bank shall maintain in India assets (hereinafter referred to as 'SLR assets') the value of which shall not, at the close of business on any day, be less than:

- (a) 20.75 per cent from October 1, 2016; and
 (b) 20.50 per cent from January 7, 2017

of their total net demand and time liabilities in India as on the last Friday of the second preceding fortnight, valued in accordance with the method of valuation specified by the Reserve Bank from time to time; and

- (ii) such SLR assets shall be maintained by:
- A. Scheduled commercial banks and local area banks, as -
- (a) cash; or
 - (b) gold as defined in Section 5(g) of Banking Regulation Act, 1949 valued at a price not exceeding the current market price: or
 - (c) unencumbered investment in any of the following instruments [hereinafter referred to as Statutory Liquidity Ratio securities ("SLR securities")], namely:-
 - (1) Dated securities of the Government of India issued from time to time under the market borrowing programme and the Market Stabilization Scheme; or
 - (2) Treasury Bills of the Government of India; or 3) State Development Loans (SDLs) of the State Governments issued from time to time under the market borrowing programme:
 - (d) the deposit and unencumbered approved securities required, under sub-section (2) of section 11 of the Banking Regulation Act, 1949(10 of 1949), to be made with the Reserve Bank by a banking company incorporated outside India;
 - (e) any balance maintained by a scheduled bank with the Reserve Bank in excess of the balance required to be maintained by it under section 42 of the Reserve Bank of India Act, 1934 (2 of 1934);

Provided that the instruments referred to in items (1) to (3) above that have been acquired under reverse repo with Reserve Bank of India, shall not be included as SLR securities for the purpose of maintenance of SLR assets up to October 2, 2016.

IV 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.

B. Not applicable for May, 2017 examination**Non-Applicability of Ind ASs for May, 2017 Examination**

The Ministry of Corporate Affairs has notified Companies (Indian Accounting Standards) Rules, 2015 on 16th February, 2015, for compliance by certain class of companies. These Ind AS have not been made applicable for May, 2017 Examination.

PART – II : QUESTIONS AND ANSWERS**QUESTIONS****Partnership Accounts****Dissolution of a partnership firm**

1. L, M and N were in partnership sharing profits and losses in the ratio of 3:2:1 respectively. They decided to dissolve the partnership firm on 31.3.2016, when the Balance Sheet of the firm appeared as under:

Balance Sheet of the firm as on 31.3.2016

<i>Liabilities</i>	₹		<i>Assets</i>	₹
Sundry Creditors		4,25,250	Plant and Machinery	7,97,850
Bank Overdraft		4,54,837	Furniture	48,487
Joint Life Policy Reserve		1,99,125	Stock	1,77,525
Loan from Mrs.L		1,12,500	Sundry Debtors	4,00,500
Capital Accounts:			Joint Life Policy	1,99,125
L	3,15,000		Commission Receivable	1,05,413
M	1,68,750		Cash in Hand	36,562
N	<u>90,000</u>	<u>5,73,750</u>		
		<u>17,65,462</u>		<u>17,65,462</u>

The following details are relevant for dissolution:

- (i) The joint life policy was surrendered for ₹1,74,375.
- (ii) L took over plant and machinery for ₹6,75,000.
- (iii) L also agreed to discharge bank overdraft and loan from Mrs. L.
- (iv) Furniture and stocks were divided equally between L and M at an agreed valuation of ₹2,70,000.
- (vi) Sundry debtors were assigned to firm's creditors in full satisfaction of their claims.

- (vi) Commission receivable was received in time.
- (vii) A bill discounted was subsequently returned dishonoured and proved valueless ₹23,062 (including ₹375 noting charges).
- (viii) L paid the expenses of dissolution amounting to ₹13,500.

You are required to prepare:

- (i) Realisation Account
- (ii) Partners' Capital Accounts and
- (ii) Cash Account.

Amalgamation of partnership firms

2. Firm Bhalla & Co. consists of partners Maan and Hello sharing Profits and Losses in the ratio of 3 : 2. The firm Chand & Co. consists of partners Hello and Proud sharing Profits and Losses in the ratio of 5 : 3. On 31st March, 2016 it was decided to amalgamate both the firms and form a new firm Chand Bhalla & Co., wherein Maan, Hello and Proud would be partners sharing Profits and Losses in the ratio of 4:5:1.

Balance Sheet as at 31.3.2016

Liabilities	Bhalla & Co. ₹	Chand & Co. ₹	Assets	Bhalla & Co. ₹	Chand & Co. ₹
Capitals:			Cash in hand/bank	2,40,000	1,80,000
Maan	9,00,000	---	Debtors	3,60,000	4,80,000
Hello	6,00,000	4,50,000	Stock	300,000	1,20,000
Proud	---	3,00,000	Vehicles	---	5,40,000
Reserve	3,00,000	2,40,000	Machinery	7,20,000	---
Creditors	<u>7,20,000</u>	<u>3,30,000</u>	Building	<u>9,00,000</u>	<u>---</u>
	<u>25,20,000</u>	<u>13,20,000</u>		<u>25,20,000</u>	<u>13,20,000</u>

The following were the terms of amalgamation:

- (i) Goodwill of Bhalla & Co., was valued at ₹ 4,50,000. Goodwill of Chand & Co. was valued at ₹2,40,000. Goodwill account not to be opened in the books of the new firm but adjusted through the Capital accounts of the partners.
- (ii) Building, Machinery and Vehicles are to be taken over at ₹ 12,00,000, ₹ 6,00,000 and ₹ 4,44,000 respectively.
- (iii) Provision for doubtful debts at ₹30,000 in respect of Bhalla & Co. and ₹ 24,000 in respect of Chand & Co. are to be provided.

You are required to:

- (i) Show, how the Goodwill value is adjusted amongst the partners.
- (ii) Prepare the Balance Sheet of Chand Bhalla & Co. as at 31.3.2016 by keeping partners capital in their profit sharing ratio and by taking capital of 'Hello' as the basis. The excess or deficiency to be kept in the respective Partners' Current account.

Conversion of Partnership firm to Company

3. Arun and Varun, sharing profits and losses equally, directed to convert their business into a limited company on 31st December, 2016 when their balance sheet stood as follows:

<i>Liabilities</i>	₹	₹	<i>Assets</i>	₹
Sundry creditors		96,000	Sundry debtors	1,20,000
Loan creditors		80,000	Bills receivable	20,000
Bank overdraft		32,000	Stock in trade	72,000
Reserve fund		12,000	Patents	16,000
Capital accounts:			Plant and machinery	32,000
Arun	80,000		Land and building	1,20,000
Varun	<u>80,000</u>	<u>1,60,000</u>		
		<u>3,80,000</u>		<u>3,80,000</u>

- (a) The goodwill of the firm was to be valued at two years' purchase of the profits of the previous three years.
- (b) The loan creditors were agreed to accept 7½% redeemable preference shares in settlement of their claim.
- (c) Land and buildings and plant and machinery were to be valued at ₹2,00,000 and ₹48,000 respectively.
- (d) The vendors were to be allotted equity shares of the value of ₹2,10,000.
- (e) The past working results of the firm showed that they had made profits of ₹60,000 in 2014, ₹72,000 in 2015 and ₹84,000 in 2016 after setting aside ₹4,000 to reserve fund each year.

You are required to show realisation account and partners' capital accounts in the books of the firm assuming that all the transactions are duly completed.

LLP

4. Explain the Limitations of Liability of Limited Liability Partnership (LLP) and its partners.

Employees Stock Option Plan

5. At the beginning of year 1, an enterprise grants 10,000 stock options to a senior executive, conditional upon the executive remaining in the employment of the enterprise until the end

of year 3. The exercise price is ₹ 40. However, the exercise price drops to ₹ 30 if the earnings of the enterprise increase by at least an average of 10 per cent per year over the three-year period.

On the grant date, the enterprise estimates that the fair value of the stock options, with an exercise price of ₹ 30, is ₹ 16 per option. If the exercise price is ₹ 40, the enterprise estimates that the stock options have a fair value of ₹ 12 per option. During year 1, the earnings of the enterprise increased by 12 per cent, and the enterprise expects that earnings will continue to increase at this rate over the next two years. The enterprise, therefore, expects that the earnings target will be achieved, and hence the stock options will have an exercise price of ₹ 30. During year 2, the earnings of the enterprise increased by 13 per cent, and the enterprise continues to expect that the earnings target will be achieved.

During year 3, the earnings of the enterprise increased by only 3 per cent, and therefore the earnings target was not achieved. The executive completes three years' service, and therefore satisfies the service condition. Because the earnings target was not achieved, the 10,000 vested stock options have an exercise price of ₹ 40.

Calculate the amount to be charged to Profit and Loss Account every year on account of compensation expenses.

Buy Back of Securities

6. The following was the balance sheet of Mukta Ltd. as on 31st March, 2016

<i>Equity & liability</i>	<i>₹ (in lakhs)</i>	<i>Assets</i>	<i>₹(in lakhs)</i>
Authorised Capital:		Fixed Assets	1,12,000
Equity shares of ₹ 10 each	<u>80,000</u>	Investments	24,000
Issued Capital		Cash at Bank	13,200
Equity Shares of ₹10 each Fully Paid Up	64,000	Trade Receivables	66,000
10% Redeemable Preference Shares of 10 each, Fully Paid Up	20,000		
Reserves & Surplus:			
Capital Redemption Reserve	8,000		
Securities Premium	6,400		
General Reserve	48,000		
Profit & Loss Account	2,400		
9% Debentures	40,000		
Trade Payables	<u>26,400</u>		
	<u>2,15,200</u>		<u>2,15,200</u>

On 1st April, 2016 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 ₹25,200 Lakhs and raised a Bank Loan amounting to ₹16,000 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 extents allowed by law.

Underwriting of securities

7. Aman Ltd. issued to public 16,000 10% Debentures of ₹ 100 each at a discount of 2% payable as to ₹ 50 on application and the balance on allotment. The issue was underwritten by Mr. X (Underwriters) for a commission of 1% of nominal value of debentures underwriting. The whole of the issue was subscribed to by the members of the public. The company paid underwriting commission in the form of its 10% Debentures of ₹ 100 each issued at par. Pass journal entries for the above mentioned transactions and draw the balance sheet of the Aman Ltd.

Redemption of Debentures

8. On 1st January, 2006 Raman Ltd. allotted 20,000 9% Debentures of ₹100 each at par, the total amount having been received along with applications.
 - (i) On 1st January, 2008 the Company purchased in the open market 2,000 of its own debentures @ ₹ 101 each and cancelled them immediately.
 - (ii) On 1st January, 2011 the company redeemed at par debentures for ₹6,00,000 by draw of a lot.
 - (iii) On 1st January, 2012 the company purchased debentures of the face value of ₹4,00,000 for 3,95,600 in the open market, held them as investments for one year and then cancelled them.
 - (iv) Finally, as per resolution of the board of directors, the remaining debentures were redeemed at a premium of 2% on 1st January, 2016 when Securities Premium Account in the company's ledger showed a balance of ₹60,000.

Pass journal entries for the above mentioned transactions ignoring debenture redemption reserve, debenture - interest and interest on own' debentures.

Amalgamation of Companies

9. P Ltd. and Q Ltd. decided to amalgamate as on 01.04.2016 Their summarized Balance Sheets as on 31.03.2016 were as follows: (₹in '000)

Particulars	P Ltd.	Q Ltd.
Source of Funds:		
Equity share capital (₹10 each)	300	280

9% preference share Capital (₹100 each)	60	40
Investment allowance Reserve	10	4
Profit and Loss Account	8	12
10 % Debentures	100	60
Trade Payables	50	30
Tax provision	14	8
Equity Dividend Proposed	<u>60</u>	<u>56</u>
Total	<u>602</u>	<u>490</u>
Application of Funds:		
Building	120	100
Plant and Machinery	160	140
Investments	80	50
Trade receivables	90	70
Inventories	72	80
Cash and Bank	<u>80</u>	<u>50</u>
Total	<u>602</u>	<u>490</u>

From the following information, you are required to prepare the Balance Sheet as on 01.04.2016 of a new company, R Ltd., which was formed to take over the business of both the companies and took over all the assets and liabilities:

- (i) 50 % Debenture are to be converted into Equity Shares of the New Company.
- (ii) Investments are non- current in nature.
- (iii) Fixed Assets of P Ltd. were valued at 10% above cost and that of Q Ltd. at 5% above cost.
- (iv) 10 % of trade receivables were doubtful for both the companies. Inventories to be carried at cost.
- (v) Preference shareholders were discharged by issuing equal number of 9% preference shares at par.
- (vi) Equity shareholders of both the transferor companies are to be discharged by issuing Equity shares of ₹10 each of the new company at a premium of ₹ 5 per share.

Give your answer on the basis that amalgamation is in the nature of purchase.

Internal Reconstruction of a Company

10. The Balance Sheet of M/s. Lion Limited as on 31-03-2016 is given below:

<i>Particulars</i>	<i>Note No.</i>	<i>Amount (₹ in lakh)</i>
<u>Equity & Liabilities</u>		
<u>Shareholders' Funds</u>		
Shares' Capital	1	1,400
Reserves & Surplus	2	(522)
<u>Non-Current Liabilities</u>		
Long term Borrowings	3	700
<u>Current Liabilities</u>		
Trade Payables	4	102
Other Liabilities	5	24
Total		1704
<u>Assets</u>		
<u>Non-Current Assets</u>		
<u>Fixed Assets</u>		
Tangible Assets	6	750
<u>Current Assets</u>		
Current Investments	7	200
Inventories	8	300
Trade Receivables	9	450
Cash & Cash Equivalents	10	4
Total		1704

Notes to Accounts:

	₹ in Lakhs
(1) Share Capital	
Authorised :	
200 lakh shares of ₹ 10 each	2,000
8 lakh, 8% Preference Shares of ₹ 100 each	<u>800</u>
	<u>2,800</u>
Issued, Subscribed and paid up:	

100 lakh Equity Shares of ₹ 10 each, full paid up	1,000
4 lakh 8% Preference Shares of ₹ 100 each, fully paid up	<u>400</u>
Total	<u>1400</u>
(2) Reserves and Surplus	
Debit balance of Profit & Loss A/c	(522)
(3) Long Term Borrowings	
6% Debentures (Secured by Freehold Property)	400
Directors' Loan	<u>300</u>
	<u>700</u>
(4) Trade Payables	
Trade payables for Goods	102
(5) Other Current Liabilities	
Interest Accrued and Due on 6% Debentures	24
(6) Tangible Assets	
Freehold Property	550
Plant & Machinery	<u>200</u>
	<u>750</u>
(7) Current Investment	
Investment in Equity Instruments	200
(8) Inventories	
Finished Goods	300
(9) Trade Receivables	
Trade receivables for Goods	450
(10) Cash and Cash Equivalents	
Balance with Bank	4

The Board of Directors of the company decided upon the following scheme of reconstruction with the consent of respective shareholders:

- (1) Preference Shares are to be written down to ₹ 80 each and Equity Shares to ₹ 2 each.
- (2) Preference Shares Dividend in arrears for 3 years to be waived by 2/3rd and for balance 1/3rd, Equity Shares of ₹ 2 each to be allotted.

- (3) Debenture holders agreed to take one Freehold Property at its book value of ₹300 lakh in part payment of their holding. Balance Debentures to remain as liability of the company.
- (4) Interest accrued and due on Debentures to be paid in cash.
- (5) Remaining Freehold Property to be valued at ₹400 lakh.
- (6) All investments sold out for ₹250 lakh.
- (7) 70% of Directors' loan to be waived and for the balance, Equity Shares of ₹ 2 each to be allowed.
- (8) 40% of Trade receivables and 80% of Inventories to be written off.
- (9) Company's contractual commitments amounting to ₹600 lakh have been settled by paying 5% penalty of contract value.

You are required to:

- (a) Pass Journal Entries for all the transactions related to internal reconstruction;
- (b) Prepare Reconstruction Account; and
- (c) Prepare notes on Share Capital and Tangible Assets to Balance Sheet, immediately after the implementation of scheme of internal reconstruction.

Liquidation of Company

11. Given below is the Balance Sheet of OM Limited as on 31.3.2016:

<i>Liabilities</i>	₹	<i>Assets</i>	₹
Share Capital:		Fixed Assets:	
14%, 1,60,000 cumulative preference shares of ₹100 each fully paid up	16,00,000	Land	1,60,000
32,000 equity shares of ₹100 each, ₹60 per share paid up	19,20,000	Buildings	6,40,000
Reserves and Surplus	NIL	Plant and Machinery	21,60,000
Secured Loans:		Patents	1,60,000
14% debentures	9,20,000	Investments	NIL
(Having a floating charge on all assets)		Current Assets:	
Interest accrued on above debentures	1,28,800	Inventory at cost	4,00,000
(Also having a floating charge as above)		Sundry debtors	9,20,000
		Cash at bank	2,40,000
		Profit and Loss A/c	9,60,000

Loan on mortgage of land and building	6,00,000		
Unsecured Loan	NIL		
Current liabilities			
Trade payables	4,71,200		
	56,40,000		56,40,000

On 31.3.2016 the company went into voluntary liquidation. The dividend on 14% preference shares was in arrears for one year. Sundry creditors include preferential creditors amounting to ₹1,20,000.

The assets realized the following sums:

Land ₹3,20,000; Buildings ₹8,00,000; Plant and machinery ₹20,00,000; Patent ₹2,00,000; Inventory ₹6,40,000; Sundry debtors ₹8,00,000.

The expenses of liquidation amounted to ₹1,17,736. The liquidator is entitled to a commission of 2% on all assets realized (except cash at bank) and 2% on amounts among unsecured creditors other than preferential creditors. All payments were made on 30th June, 2016. Interest on mortgage loan shall be ignored at the time of payment.

Prepare the liquidator's final statement of account.

Financial Statements of Insurance Companies

12. From the following information as on 31st March, 2016 of Xeta Insurance Co. Ltd. engaged in fire insurance business, prepare the Revenue Account, reserving 40% of the net premiums for unexpired risks and an additional reserve of ₹7,00,000:

Particulars	Amount ₹
Reserve for unexpired risk on 31st March, 2015	15,00,000
Additional reserve on 31st March, 2015	3,00,000
Claims paid	19,20,000
Estimated liability in respect of outstanding claims on 31st March, 2015	1,95,000
Estimated liability in respect of outstanding claims on 31st March, 2016	2,70,000
Expenses of management (including ₹ 90,000 in connection with claims)	8,40,000
Re-insurance premium paid	2,25,000
Re-insurance recoveries	60,000
Premiums	33,60,000
Interest and dividend (gross before TDS)	1,50,000

Profit on sale of investments	30,000
Commission	3,50,000

Banking companies

13. The following is an extract from the Trial Balance of Jeevan Bank Ltd. as at 31st March, 2016:

Rebate on bills discounted as on 1-4- 2015	1,36,518 (Cr.)
Discount received	3,40,312 (Cr.)

Analysis of the bills discounted reveals as follows:

Amount (₹)	Due date
5,60,000	June 1, 2016
17,44,000	June 8, 2016
11,28,000	June 21, 2016
16,24,000	July 1, 2016
12,00,000	July 5, 2016

You are required to find out the amount of discount to be credited to Profit and Loss account for the year ending 31st March, 2016 and pass Journal Entries. The rate of discount may be taken at 10% per annum.

Departmental Accounts

14. Rama Limited is a retail organisation with several departments. Goods supplied to each department are debited to a Memorandum Departmental Stock Account at cost, plus fixed percentage (mark-up) to give the normal selling price. The mark up is credited to a Memorandum Departmental "Mark-up Account". Any reduction in selling prices (mark-down) will require adjustment in the stock account and in mark-up account. The mark up for Department A for the last three years has been 40%. Figures relevant to Department A for the ended 31st March, 2016 were as follows:

Stock 1st April, 2015 at cost, ₹ 2,40,000, Purchases at cost ₹ 5,40,000, Sales ₹ 9,60,000

It is further ascertained that:

- Goods purchased in the period were marked down by ₹ 4,200 from a cost of ₹ 48,000. Marked-down stock costing ₹12,000 remained unsold on 31st March 2016.
- Stock shortages at the year end, which had cost ₹3,600 were to be written off.
- Stock at 1st April 2015 including goods costing ₹24,600 had been sold during the year and has been mark down in the selling price by ₹2,220. The remaining stock had been sold during the year.

- (d) The departmental closing stock is to be valued at cost subject to adjustments for mark-up and mark-down.

Required: Prepare (i) Departmental Trading Account (ii) Memorandum Stock Account (iii) Memorandum Mark-up Account for the year 2015- 2016.

Branch Accounting

15. L Ltd. has its head office at Mumbai and two branches at Pune and Goa. The branches purchase goods independently. The Pune branch makes a profit of 33-1/3% on cost which the Goa branch makes a profit of 20% on sales. Goods are also supplied by one branch to another at the respective sales price. From the following particulars, prepare the Trading and Profit and Loss Account of each of the branches and find out the profit or loss made by each of them after taking into account the reserve for unrealised profits:

Particulars	Pune Branch ₹	Goa Branch ₹
Opening Stock	40,000	30,000
Purchases (Including Inter Branch transfers)	2,00,000	2,50,000
Sales	2,80,000	2,95,625
Chargeable Expenses	15,000	27,500
Closing Stock	30,000	43,500
Office and Adm. Expenses	13,250	7,000
Selling and Distribution Expenses	15,000	10,000

Information:

- (i) Opening stock at Pune Branch includes goods of ₹ 10,000 taken from Goa Branch, (ii) Opening stock at Goa Branch includes goods of ₹ 17,000 taken from Pune Branch at cost to receiving branch, (iii) The Pune Branch sales includes transfer of goods to Goa Branch at selling price ₹ 20,000 (iv) The sales of Goa Branch include transfer of goods to Pune Branch at selling price ₹ 15,000. (v) Closing stock at Pune Branch includes goods received from Goa Branch ₹ 5,000. (iv) Closing stock at Goa Branch includes goods of ₹ 4,000 received from Pune Branch.

Foreign branch

16. M/s Heera & Co. has head office at U.S.A. and branch in Patna(India). Patna branch is an integral foreign operation of Heera & Co.

Patna branch furnishes you with its trial balance as on 31st March, 2016 and the additional information given thereafter:

	Dr.	Cr.
	(Rupees in thousands)	
Stock on 1 st April, 2015	300	

Purchases and Sales	800	1,200
Sundry Debtors & Creditors	400	300
Bills of Exchange	120	240
Wages & Salaries	560	-
Rent, Rates & Taxes	360	-
Sundry Charges	160	-
Plant	240	-
Bank Balance	420	-
New York Office A/c	<u>-</u>	<u>1,620</u>
	<u>3,360</u>	<u>3,360</u>

Information:

- (a) Plant was acquired from a remittance of US \$ 6,000 received from USA head office and paid to the suppliers. Depreciate Plant at 60% for the year.
- (b) Unsold stock of Patna branch was worth ₹ 4,20,000 on 31st March, 2016.
- (c) The rates of exchange may be taken as follows:
 - On 01.04.2015 @ ₹ 55 per US \$
 - On 31.03.2016 @ ₹ 60 per US \$
 - Average exchange rate for the year @ ₹58 per US \$
 - Conversion in \$ shall be made up to two decimal accuracy.

You are asked to prepare in US dollars the revenue statement for the year ended 31st March, 2016 and the balance sheet as on that date of Patna branch as would appear in the books of USA head office of Heera & Co. You are informed that Patna branch account showed a debit balance of US \$ 29845.35 on 31.3.2016 in USA books and there were no items pending reconciliation.

Problems based on Accounting Standards

AS 4 Contingencies and Events Accruing after Balance Sheet Date

17. (a) X Oil Ltd. closed the books of accounts on March 31, 2016 for which financial statement was finalized by the Board of Directors on September 04, 2016. During the month of December 2015, company undertook the project of laying a pipeline across the country and during May 2016 engineers realized that due to unexpected heavy rain, the total cost of the project will be inflated by ₹ 50 lakhs. How this should be provided for in the balance sheet of 2015-16 in accordance to AS 4?

AS 5 Net Profit or Loss for the Period, Prior Period Items and Changes in Accounting Policies

- (b) The company finds that the inventory sheets of 31.3.2016 did not include two pages containing details of inventory worth ₹14.5 lakhs. State, how you will deal with the following matters in the accounts of Pure Ltd. for the year ended 31st March, 2017.

AS 11 The Effects of Changes in Foreign Exchange Rates

18. (a) Omega Ltd. purchased fixed assets costing ₹3,000 lakhs on 1.4.2016 and the same was fully financed by foreign currency loan (U.S. Dollars) payable in three annual equal instalments. Exchange rates were 1 Dollar = ₹ 40.00 and ₹ 42.50 as on 1.4.2016 and 31.3.2017 respectively. First instalment was paid on 31.12.2016.

You are required to state, how these transactions would be accounted for.

AS 12 Accounting for Government Grants

- (b) P Limited belongs to the engineering industry. The Chief Accountant has prepared the draft accounts for the year ended 31.03.2016. You are required to advise the company on the following item from the viewpoint of finalisation of accounts, taking note of the mandatory accounting standards:

The company purchased on 01.04.2015 special purpose machinery for ₹25 lakhs. It received a Central Government Grant for 20% of the price. The machine has an effective life of 10 years.

AS 16 Borrowing Costs

19. (a) Rainbow Limited borrowed an amount of ₹ 150 crores on 1.4.2016 for construction of boiler plant @ 11% p.a. The plant is expected to be completed in 4 years. Since the weighted average cost of capital is 13% p.a., the accountant of Rainbow Ltd. capitalized ₹ 19.50 crores for the accounting period ending on 31.3.2017. Due to surplus fund out of ₹ 150 crores, income of ₹ 3.50 crores was earned and credited to profit and loss account. Comment on the above treatment of accountant with reference to relevant accounting standard.

AS 19 Leases

- (b) Sun Limited wishes to obtain a machine costing ₹30 lakhs by way of lease. The effective life of the machine is 14 years, but the company requires it only for the first 5 years. It enters into an agreement with Star Ltd., for a lease rental for ₹3 lakhs p.a. payable in arrears and the implicit rate of interest is 15%. The chief accountant of Suraj Limited is not sure about the treatment of these lease rentals and seeks your advise. (use annuity factor at @ 15% for 3 years as 3.36)

AS 20 Earnings Per Share

20. (a) Calculate Weighted Number of Shares.

Date	Particulars	No. of Shares	Face Value	Paid up Value
1 st April	Balance at beginning of year	1,800	₹ 10	₹ 10
31 st Jan.	Issue of Shares	600	₹ 10	₹ 5

AS 26 Intangible Assets

- (b) A Pharma Company spent ₹33 lakhs during the accounting year ended 31st March, 2016 on a research project to develop a drug to treat "AIDS". Experts are of the view that it may take four years to establish whether the drug will be effective or not and even if found effective it may take two to three more years to produce the medicine, which can be marketed. The company wants to treat the expenditure as deferred revenue expenditure. Comment.

AS 29 Provisions, Contingent Liabilities and Contingent Assets

- (c) Alpha Ltd. has entered into a sale contract of ₹ 7 crores with Gamma Ltd. during 2015-16 financial year. The profit on this transaction is ₹ 1 crore. The delivery of goods to take place during the first month of 2016-17 financial year. In case of failure of Alpha Ltd. to deliver within the schedule, a compensation of ₹2 crores is to be paid to Gamma Ltd. Alpha Ltd. planned to manufacture the goods during the last month of 2015-16 financial year. As on balance sheet date (31.3.2016), the goods were not manufactured and it was unlikely that Alpha Ltd. will be in a position to meet the contractual obligation. You are required to advise Alpha Ltd. on requirement of provision for contingency in the financial statements for the year ended 31st March, 2016, in line with provisions of AS 29?

SUGGESTED ANSWERS**1. Realisation Account**

	₹	₹		₹	₹
To Assets:			By liabilities		
Plant & Machinery A/c		7,97,850	Sundry Creditors A/c		4,25,250
Furniture A/c		48,487	Joint Life Policy Reserve A/c		1,99,125
Stock A/c		1,77,525	Cash A/c:		
Sundry Debtors A/c		4,00,500	Joint Life Policy		1,74,375

Joint Life Policy A/c Commission Receivable		1,99,125	Commission Receivable		1,05,413
To L's Capital A/c: Dissolution Expenses		13,500	By L's Capital A/c: Plant and Machinery	6,75,000	
To Cash A/c: Bill dishonoured		23,062	Furniture, Stocks	<u>1,35,000</u>	8,10,000
To Partner's Capital Accounts: (Profit on realisation)			By M 's Capital A/c: Furniture and stocks		1,35,000
L	41,851				
M	27,900				
N	<u>13,950</u>	<u>83,701</u>			
	-	<u>18,49,163</u>			<u>18,49,163</u>

Partners' Capital Accounts

	L	M	N		L	M	N
	₹	₹	₹		₹	₹	₹
To Realisation A/c:				By Balance b/d	3,15,000	1,68,750	90,000
Plant and Machinery	6,75,000	-	-	By Bank Overdraft A/c	4,54,837	-	
Furniture, Stocks	1,35,000	1,35,000		By Loan from Mrs. L A/c	1,12,500	-	
To Cash A/c	1,27,688	61,650	1,03,950	By Realisation A/c:			
(Balancing figure)				Dissolution Expenses	13,500	-	
				Profit on realisation	41,851	27,900	13,950
	<u>9,37,688</u>	<u>1,96,650</u>	<u>1,03,950</u>		<u>9,37,688</u>	<u>1,96,650</u>	<u>1,03,950</u>

Cash Account

To Balance b/d	36,562	By Realisation A/c:	
To Realisation A/c:		Bill dishonoured	23,062
Joint Life Policy Commission	1,74,375	By Partners' Capital Accounts:	
Receivable A/c	1,05,413	L	1,27,688

		M	61,650
		N	1,03,950
	3,16,350		3,16,350

Note: No entry is required regarding assignment of sundry debtors to sundry creditors in full satisfaction of their claims.

2. (i) **Adjustment for raising and writing off of goodwill**

	Raised in old profit sharing ratio		Total	Written off in new ratio	Difference
	Bhalla & Co.	Chand & Co.			
	3:2	5:3			
	₹	₹	₹	₹	₹
Maan	2,70,000	---	2,70,000 Cr.	2,76,000 Dr.	6,000 Dr.
Hello	1,80,000	1,50,000	3,30,000 Cr.	3,45,000 Dr.	15,000 Dr.
Proud	---	90,000	90,000 Cr.	69,000 Dr.	21,000 Cr.
	<u>4,50,000</u>	<u>2,40,000</u>	<u>6,90,000</u>	<u>6,90,000</u>	<u>Nil</u>

(ii) **Balance Sheet of Chand Bhalla & Co. (New firm) as on 31.3.2016**

Liabilities	₹	Assets	₹
Capital Accounts:		Vehicle	4,44,000
Maan	10,32,000	Machinery	6,00,000
Hello	12,90,000	Building	12,00,000
Proud	2,58,000	Stock	4,20,000
Current Accounts:		Debtors	7,86,000
Maan	1,32,000	Cash & Bank	4,20,000
Proud	1,08,000		
Creditors	<u>10,50,000</u>		
	<u>38,70,000</u>		<u>38,70,000</u>

Working Notes:

1. **Balance of Capital Accounts at the time of amalgamation of firms**

	Maan's Capital ₹	Hello's Capital ₹
Bhalla & Co. Profit and loss sharing ratio 3:2		
Balance as per Balance Sheet	9,00,000	6,00,000

Add: Reserves	1,80,000	1,20,000
Revaluation profit (Building)	1,80,000	1,20,000
Less: Revaluation loss (Machinery)	(72,000)	(48,000)
Provision for doubtful debt	<u>(18,000)</u>	<u>(12,000)</u>
	<u>11,70,000</u>	<u>7,80,000</u>
	<i>Hello's Capital</i>	<i>Proud's Capital</i>
Chand & Co. Profit and loss sharing ratio 5:3	₹	₹
Balance as per Balance sheet	4,50,000	3,00,000
Add: Reserves	1,50,000	90,000
Less: Revaluation (vehicle)	(60,000)	(36,000)
Provision for doubtful debts	<u>(15,000)</u>	<u>(9,000)</u>
	<u>5,25,000</u>	<u>3,45,000</u>

2. **Balance of Capital Accounts in the balance sheet of the new firm as on 31.3.2016**

	<i>Maan</i> ₹	<i>Hello</i> ₹	<i>Proud</i> ₹
Balance b/d: Bhalla & Co.	11,70,000	7,80,000	--
Chand & Co.	<u>--</u>	<u>5,25,000</u>	<u>3,45,000</u>
	11,70,000	13,05,000	3,45,000
Adjustment for goodwill	<u>(6,000)</u>	<u>(15,000)</u>	<u>21,000</u>
	11,64,000	12,90,000	3,66,000
Total capital ₹25,80,000 (Hello's capital* i.e. ₹12,90,000 x 2) to be contributed in 4:5:1 ratio.	<u>10,32,000</u>	<u>12,90,000</u>	<u>2,58,000</u>
Transfer to Current Account	<u>1,32,000</u>	<u>---</u>	<u>1,08,000</u>

3. **Books of Arun and Varun**
Realisation Account

	₹	₹		₹
To Sundry debtors		1,20,000	By Sundry creditors	96,000

* Hello's Capital ₹ 12,90,000 being one-half of the total capital of the firm.

To Bills receivable		20,000	By Loan creditors	80,000
To Stock in trade		72,000	By Bank overdraft	32,000
To Patents		16,000	By Purchasing Company	4,20,000
To Plant and Machinery		32,000	(W.N. 2)	
To Land and Building		1,20,000		
To Capital A/c (Profit)				
Arun	1,24,000			
Varun	<u>1,24,000</u>	<u>2,48,000</u>		
		6,28,000		<u>6,28,000</u>

Partners' Capital Accounts

	Arun	Varun		Arun	Varun
	₹	₹		₹	₹
To Shares in Purchasing Co.	2,10,000	2,10,000	By Balance b/d	80,000	80,000
			By Reserves	6,000	6,000
			By Realization A/c	<u>1,24,000</u>	<u>1,24,000</u>
	<u>2,10,000</u>	<u>2,10,000</u>		<u>2,10,000</u>	<u>2,10,000</u>

Working Notes

1. Goodwill = $(60,000 + 72,000 + 84,000 + 12,000^*)/3 \times 2 \text{ Years} = 1,52,000$

* Profit transferred to reserve @ ₹4,000 for 3 years.

2.

Purchase Consideration

	₹	₹
Assets taken over:		
Goodwill (W.N.1)		1,52,000
Land and Buildings		2,00,000
Plant and Machinery		48,000
Sundry Debtors		1,20,000
Bills Receivable		20,000
Stock in trade		72,000
Patents		<u>16,000</u>
		6,28,000
Less: Liabilities taken over:		

Creditors	96,000	
Loan Creditors	80,000	
Bank Overdraft	<u>32,000</u>	<u>2,08,000</u>
Purchase Consideration		<u>4,20,000</u>

4. Under section 27 (3) of the LLP Act, 2008 an obligation of an LLP arising out of a contract or otherwise, shall be solely the obligation of the LLP;
- ◆ The Liabilities of an LLP shall be met out of the properties of the LLP;
 - ◆ Under section 28 (1) a partner is not personally liable, directly or indirectly, for an obligation referred to in Section 27 (3) above, solely by reason of being a partner in the LLP;
 - ◆ Section 27 (1) states that an LLP is not bound by anything done by a partner in dealing with a person, if:
 - The partner does not have the authority to act on behalf of the LLP in doing a particular act; and
 - The other person knows that the partner has no authority or does not know or believe him to be a partner in the LLP
 - ◆ Under section 30 (1) the liability of the LLP and the partners perpetrating fraudulent dealings shall be unlimited for all or any of the debts or other liabilities of the LLP.
5. Since the exercise price varies depending on the outcome of a performance condition which is not a market condition the effect of that performance condition (i.e. the possibility that the exercise price might be ₹40 and the possibility that the exercise price might be ₹30) is not taken into account when estimating the fair value of the stock options at the grant date. Instead, the enterprise estimates the fair value of the stock options at the grant date under each scenario and revises the transaction amount to reflect the outcome of that performance condition at the end of every year based on the information available at that point of time.

Calculation of compensation expenses to be charged every year

Year	Calculation	Compensation expenses for the period (₹)	Cumulative compensation expense (₹)
1	10,000 options × ₹ 16 × 1/3	53,333	53,333
2	(10,000 options × ₹ 16 × 2/3) – ₹ 53,333	53,334	1,06,667
3	(10,000 options × ₹ 12 × 3/3) – ₹ 1,06,667	13,333	1,20,000

6.

Journal entries
In the books of Mukta 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)	25,200	24,000 1,200
2	10% Redeemable Preference Share Capital A/c Dr. Premium payable on Redemption of Preference Shares A/c Dr. To Preference Shareholders A/c (Being amount payable on redemption of Preference shares, at a Premium of 10%)	20,000 2,000	22,000
3	Securities Premium A/c Dr. To Premium payable on Redemption of Preference Shares A/c (Being Securities Premium utilised to provide Premium on Redemption of Preference Shares)	2,000	2,000
4	Equity Share Capital A/c Dr. Premium payable on Buyback A/c Dr. To Equity Share buy back A/c (Being the amount due on buy-back)	16,000 16,000	32,000
5	Securities Premium A/c (6,400 – 2,000) Dr. General Reserve A/c (balancing figure) Dr. To Premium payable on Buyback A/c (Being premium on buyback provided first out of Securities Premium and the balance out of General Reserves.)	4,400 11,600	16,000
6	Bank A/c Dr. To Bank Loan A/c (Being Loan taken from Bank to finance Buyback)	16,000	16,000

7	Preference Shareholders A/c Equity Shares buy back A/c To Bank A/c (Being payment made to Preference Shareholders and Equity Shareholders)	Dr. Dr.	22,000 32,000	54,000
8	General Reserve Account To Capital Redemption Reserve Account (Being amount transferred to Capital Redemption Reserve Account to the extent of face value of preference shares redeemed and equity Shares bought back) (20,000 + 16,000)	Dr.	36,000	36,000

7.

Journal

		Dr.	Cr.
Bank A/c To 10 % Debenture Application Account (Being receipt of application money on 16,000 10% Debentures @ ₹ 50 per debenture)	Dr.	8,00,000	8,00,000
10 % Debenture Applications Account 10% Debenture Allotment Account Discount on issue of Debentures Account To 10% Debentures Account (Being allotment of 16,000 10% Debentures of ₹100 each at a discount of ₹ 2 per debenture)	Dr. Dr.	8,00,000 7,68,000 32,000	16,00,000
Underwriting Commission on Issue of Debenture Account To Mr. X Underwriters A/c (Being underwriters @ 1% on ₹16,00,000, the nominal value of debentures underwritten)	Dr.	16,000	16,000
Mr. X Underwriters A/c To 10% Debentures Account (Being Allotment of 160 10% Debentures of ₹ 100 each at par to Mr. X Underwriters by way of payment of underwriting commission due to them)	Dr.	16,000	16,000
Bank A/c To 10 % Debenture Allotment Account	Dr.	7,68,000	7,68,000

(Being receipt of allotment money on 16,000 10% Debentures @ ₹ 48 per debenture)			
--	--	--	--

Balance Sheet of Aman Ltd. as on

	Note No.	₹
I Equity and Liabilities		
Shareholder's funds		Nil
Reserve and surplus		
Non current liabilities		
Long term borrowings		<u>16,16,000</u>
		<u>16,16,000</u>
II Assets		
Current assets		
Cash and cash equivalents (balance at bank)		15,68,000
Other Non- current Assets	1	<u>48,000</u>
		<u>16,16,000</u>

Notes:

	₹	₹
1 Other Non- current Assets		
Underwriting Commission on Issue of Debentures		32,000
Discount on Issue of Debentures		<u>16,000</u>
		<u>48,000</u>

Working Notes:

Dr.	Cash Book (Bank Columns Only)		Cr.
	₹		₹
To 10 % Debentures Allotment Account	8,00,000	By Balance c/d	15,68,000
To 10% Debenture Allotment Account	<u>7,68,000</u>		
	<u>15,68,000</u>		<u>15,68,000</u>
To Balance b/d	15,68,000		

12 % Debentures Account

To	Balance c/d	16,16,000	By	10% Debenture Applications Account	8,00,000
			By	10% Debenture Allotment Account	7,68,000
			By	Discount on issue of Debenture Account	32,000
			By	Mr. X (Underwriters)	<u>16,000</u>
		<u>16,16,000</u>			<u>16,16,000</u>

8. Journal

		(₹) Dr.	(₹) Cr.
2006 Jan 1	Bank Dr. To 9% Debenture Applications & Allotment Account (Being application money on 20,000 debentures @ ₹ 100 per debenture received)	20,00,000	20,00,000
	9% Debentures Applications & Allotment Account Dr. To 9% Debentures Account (Being allotment of 20,000 9% Debentures of ₹100 each at par)	10,00,000	20,00,000
(i) 2008 Jan. 1	9% Debenture Account Dr. Loss on Redemption of Debentures Account Dr. To Bank (Being redemption of 2,000 9% Debentures of ₹100 each by purchase in the open market @ ₹101 each)	2,00,000 2,000	2,02,000
" "	Profit & Loss Account/Securities Premium Account Dr. To Loss on Redemption of Debentures Account (Being loss on redemption of debentures being written off by transfer to Profit and Loss Account or Securities Premium Account)	2,000	2,000
(ii) 2011 Jan. 1	9% Debentures Account Dr. To Sundry Debentureholders (Being Amount payable to debentureholders on redemption debentures for ₹6,00,000 at par by draw of a lot)	6,00,000	6,00,000
" "	Sundry Debentureholders Dr. To Bank (Being Payment made to sundry debentureholders for redeeming debentures of ₹6,00,000 at par)	6,00,000	6,00,000

(iii) 2012Jan. 1	Own Debentures To Bank (Being purchase of own debentures of the face value of ₹4,00,000 for ₹3,95,600)	Dr.	3,95,600	3,95,600
2013 "	9% Debentures To Own Debentures To Profit on Cancellation of Own Debentures Account (Being Cancellation of own debentures of the face value of ₹4,00,000 purchased last year for ₹3,95,600)	Dr.	4,00,000	3,95,600 4,400
" "	Profit on Cancellation of Own Debentures Account To Capital Reserve Account (Being transfer of profit on cancellation of own debentures to capital reserve)	Dr.	4,400	4,400
(iv) 2016Jan.	9% Debentures Account Premium on Redemption of Debentures Account To Sundry Debentureholders (Being amount payable to holders of debentures of the face value of ₹ 8,00,000 on redemption at a premium of 2% as per resolution of the board of directors)	Dr. Dr.	8,00,000 16,000	8,16,000
" "	Sundry Debentureholders To Bank Account (Being payment to sundry debentureholders)	Dr.	8,16,000	8,16,000
" "	Securities Premium Account To Premium on Redemption of Debentures Account (Being utilisation of a part of the balance in Securities Premium Account to write off premium paid on redemption of debentures)	Dr.	16,000	16,000

9.

M/s R Ltd.

Balance Sheet as at 1.4.2016

	Particulars	Notes	₹ in'000
	Equity and Liabilities		
1	Shareholders' funds		
a	Share capital	1	6,55,980
b	Reserves and Surplus	2	2,77,990
2	Non-current liabilities		
a	Long-term borrowings	3	80,000

3	Current liabilities		
a	Trade Payables	4	80,000
b	Short term provision	5	<u>22,000</u>
	Total		<u>11,15,970</u>
	Assets		
1	Non-current assets		
a	Fixed assets		
	Tangible assets	6	5,60,000
b	Non-current investments	7	1,30,000
2	Current assets		
a	Inventory	8	1,52,000
b	Trade receivables	9	1,44,000
c	Cash and cash equivalents	10	1,29,970
	Total		<u>11,15,970</u>

Notes to accounts

		₹in'000
1.	Share Capital	
	Equity share capital	
	55,598 Equity shares of ₹10 each, fully paid up (W.N.2)	5,55,980
	Preference share capital	
	9% Preference share capital (Share of ₹100 each) (W.N.2)	1,00,000
		<u>6,55,980</u>
2.	Reserves and Surplus	
	Securities premium (W.N.2)	2,77,990
	Investment allowance reserve (₹10,000+ ₹4,000)	14,000
	Amalgamation adjustment reserve	(14,000)
		<u>2,77,990</u>
3.	Long-term borrowings	
	Secured	
	10% Debentures (50% of ₹1,60,000)	80,000

4.	Trade Payables (₹50,000+ ₹30,000)	80,000
5.	Short term provisions	
	Provision for tax (₹14,000+ ₹8,000)	22,000
6.	Tangible assets	
	Building (₹1,32,000+₹1,05,000)	2,37,000
	Plant and machinery (₹1,76,000+₹1,47,000)	<u>3,23,000</u>
		<u>5,60,000</u>
7.	Non – current Investments (₹80,000+ ₹50,000)	1,30,000
8.	Inventory	
	Stock (₹ 72,000+ ₹ 80,000)	1,52,000
9.	Trade receivables	
	Trade receivables (90% of (₹90,000+ ₹70,000))	1,44,000
10.	Cash and cash equivalents	
	Cash and Bank (₹ 80,000+ ₹ 50,000 – ₹ 30)	1,29,970

Working Notes:**1. Calculation of value of equity shares issued to transferor companies**

		<i>P Ltd.</i>		<i>Q Ltd.</i>
		(₹)		(₹)
Assets taken over:				
Building		1,32,000		1,05,000
Plant and machinery		1,76,000		1,47,000
Investments		80,000		50,000
Inventories		72,000		80,000
Trade receivables		81,000		63,000
Cash & Bank		<u>80,000</u>		<u>50,000</u>
		6,21,000		4,95,000
Less: Liabilities:				
10% Debentures	1,00,000		60,000	
Trade payables	50,000		30,000	
Tax Provision	<u>14,000</u>	<u>1,64,000</u>	<u>8,000</u>	<u>98,000</u>
		4,57,000		3,97,000

Less: Preference Share Capital		<u>60,000</u>		<u>40,000</u>
		<u>3,97,000</u>		<u>3,57,000</u>

2. Number of shares issued to equity shareholders, debenture holders and preference shareholders

	P Ltd.	Q Ltd.	Total
Equity shares issued @ ₹15 per share (including ₹5 premium) ₹3,97,000/15	26,466 shares ¹		
₹3,57,000/15		23,800 shares	50,266 shares
Equity share capital @ ₹10	₹2,64,660	₹2,38,000	₹5,02,660
Securities premium @ ₹5	<u>₹1,32,330</u>	<u>₹1,19,000</u>	<u>₹2,51,330</u>
	<u>₹3,96,990</u>	<u>₹3,57,000</u>	<u>₹7,53,990</u>
50% of Debentures are converted into equity shares @ ₹15 per share			
1,00,000/2 = 50,000/15	3,332 shares ²		
60,000/2 = 30,000/15		2,000 shares	5,332 shares
Equity share capital @ ₹10	₹33,320	₹20,000	₹53,320

Security premium @ ₹5	<u>₹16,660</u>	<u>₹10,000</u>	<u>₹26,660</u>
	<u>₹49,980</u>	<u>₹30,000</u>	<u>₹79,980</u>
9% Preference share capital issued	₹60,000	₹40,000	₹1,00,000

10. (a) Journal Entries in the books of M/s. Lion Ltd.

	Particulars	Debit (₹ in lakhs)	Credit (₹ in lakhs)
(i)	8% Preference share capital A/c (₹100 each) Dr.	400	

¹ Cash paid for fraction of shares = ₹ 3,97,000 less ₹ 3,96,990 = ₹10

² Cash paid for fraction of shares = ₹ 50,000 less ₹ 49,980 = ₹20

	To 8% Preference share capital A/c (₹ 80 each)			320
	To Capital Reduction A/c (Being the preference shares of ₹100 each reduced to ₹80 each as per the approved scheme)			80
(ii)	Equity share capital A/c (₹10 each) Dr.	1,000		
	To Equity share capital A/c (₹ 2 each)			200
	To Capital Reduction A/c (Being the equity shares of ₹10 each reduced to ₹2 each)			800
(iii)	Capital Reduction A/c Dr.	32		
	To Equity share capital A/c (₹2 each) (Being 1/3 rd arrears of preference share dividend of 3 years to be satisfied by issue of 8 lakhs equity shares of ₹2 each)			32
(iv)	6% Debentures A/c Dr.	300		
	To Freehold property A/c (Being claim of Debenture holders settled in part by transfer of freehold property)			300
(v)	Accrued debenture interest A/c Dr.	24		
	To Bank A/c (Being accrued debenture interest paid)			24
(vi)	Freehold property A/c Dr.	150		
	To Capital Reduction A/c (Being appreciation in the value of freehold property)			150
(vii)	Bank A/c Dr.	250		
	To Investments A/c			200
	To Capital Reduction A/c (Being investment sold at profit)			50
(viii)	Director's loan A/c Dr.	300		
	To Equity share capital A/c (₹ 2 each)			90
	To Capital Reduction A/c			210

	(Being director's loan waived by 70% and balance being discharged by issue of 45 lakhs equity shares of ₹2 each)		
(ix)	Capital Reduction A/c Dr. 972		
	To Profit and loss A/c		522
	To Trade receivables A/c (450x 40%)		180
	To Inventories-in-trade A/c (300x 80%)		240
	To Bank A/c (600 x 5%)		30
	(Being certain value of various assets, penalty on cancellation of contract, profit and loss account debit balance written off through Capital Reduction Account)		
(x)	Capital Reduction A/c 286		
	To Capital reserve A/c		286
	(Being balance transferred to capital reserve account as per the scheme)		

(b) Capital Reduction Account

Dr.		Cr.	
		(₹ in lakhs)	(₹ in lakhs)
To Equity Share Capital	32	By Preference Share Capital	80
To Trade receivables	180	By Equity Share Capital	800
To Finished Goods	240	By Freehold Property	150
To Profit & Loss A/c	522	By Bank	50
To Bank A/c	30	By Director's Loan	210
To Capital Reserve	<u>286</u>		
	<u>1,290</u>		<u>1,290</u>

(c) Notes to Balance Sheet

	(₹ in lakhs)	(₹ in lakhs)
1. <u>Share Capital</u>		
<u>Authorised:</u>		
200 lakhs Equity shares of ₹ 2 each		400

	8 lakhs 8% Preference shares of ₹ 80 each		<u>640</u>
			<u>1,040</u>
	<u>Issued:</u>		
	161 lakhs equity shares of ₹2 each		322
	4 lakhs Preference Shares of ₹80 each		<u>320</u>
			<u>642</u>
2.	<u>Tangible Assets</u>		
	Freehold Property	550	
	Less: Utilized to pay Debenture holders	<u>(300)</u>	
		250	
	Add: Appreciation	<u>150</u>	400
	Plant and Machinery		<u>200</u>
			<u>600</u>

11.

OM Ltd.

Liquidator's Final Statement of Account

<i>Receipts</i>	<i>Value Realised</i>		<i>Payments</i> ₹	<i>Payments</i> ₹
<i>Assets Realised:</i>				
Cash at Bank	2,40,000	Liquidator's Remuneration (W.N. 1)		1,02,224
Sundry Debtors	8,00,000	Liquidation Expenses		1,17,736
Inventory	6,40,000	Debentureholders:		
Plant and Machinery	20,00,000	14% Debentures	9,20,000	
Patent	2,00,000	Interest Accrued (W.N. 2)	<u>1,61,000</u>	10,81,000
Surplus from Securities (W.N. 3)	5,20,000	Creditors:		
		Preferential	1,20,000	
		Unsecured	<u>3,51,200</u>	4,71,200
		Preference Shareholders:		
		Preference Share Capital	16,00,000	
		Arrears of Dividend	<u>2,24,000</u>	18,24,000

		Equity Shareholders (W.N.4) :	
		₹25.12 per share on 32,000 shares	<u>8,03,840</u>
	<u>44,00,000</u>		<u>44,00,000</u>

Working Notes:

		₹
1	Liquidator's remuneration:	
	2% on assets realised (2% of ₹47,60,000)	95,200
	2% on payments to unsecured creditors (2% on ₹3,51,200)	<u>7,024</u>
		<u>1,02,224</u>
2	Interest accrued on 14% Debentures:	
	Interest accrued as on 31.3.2016	1,28,800
	Interest accrued upto the date of payment i.e. 30.6.2016	<u>32,200</u>
		<u>1,61,000</u>
3	Surplus from Securities:	
	Amount realised from Land and Buildings (₹3,20,000 + ₹8,00,000)	11,20,000
	Less: Mortgage Loan	<u>(6,00,000)</u>
		<u>5,20,000</u>
4	Amount payable to Equity Shareholders:	
	Equity share capital (paid up)	19,20,000
	Less: Amount available for equity shareholders	<u>(8,03,840)</u>
	Loss to be borne by equity shareholders	<u>11,16,160</u>
	Loss per equity share (₹11,16,160/32,000)	34.88
	Amount payable to equity shareholders for each equity share (60-34.88)	25.12

12.

FORM B– RA

Name of the Insurer: Xeta Insurance Company Limited

Registration No. and Date of registration with IRDA:

Revenue Account for the year ended 31st March, 2016

Particulars	Schedule	Amount (₹)
Premium earned (net)	1	29,81,000
Profit on sale of investment		30,000
Others		–
Interest and dividend (gross)		1,50,000
Total (A)		31,61,000
Claims incurred (Net)	2	20,25,000
Commission	3	3,50,000
Operating expenses related to insurance	4	7,50,000
Total (B)		31,25,000
Operating profit from insurance business (A) – (B)		36,000

Schedule –1 Premium earned (net)

	₹
Premium received	33,60,000
Less: Premium on reinsurance ceded	<u>(2,25,000)</u>
Net Premium	31,35,000
Less: Adjustment for change in Reserve for Unexpired risk (as per W.N.)	<u>(1,54,000)</u>
Total premium earned	<u>29,81,000</u>

Schedule -2 Claims incurred (net)

	₹
Claims paid	19,20,000
Add: Expenses regarding claims	90,000
	20,10,000
Less: Re-insurance recoveries	<u>(60,000)</u>
	19,50,000
Add: Claims outstanding as on 31 st March, 2016	2,70,000
	<u>22,20,000</u>

Less: Claims outstanding as on 31 st March, 2015	(1,95,000)
	20,25,000

Schedule -3 Commission

	₹
Commission paid	3,50,000

Schedule-4 Operating expenses related to Insurance Business

	₹
Expenses of management (₹4,20,000 – ₹45,000)	3,75,000

Working Note:**Calculation for change in Reserve for Unexpired risk:**

		₹
Reserve for Unexpired Risk as on 31 st March, 2016	12,54,000	
Additional Reserve as on 31 st March, 2016	<u>7,00,000</u>	19,54,000
Less: Reserve for Unexpired Risk as on 31 st March, 2015	15,00,000	
Additional Reserve as on 31 st March, 2015	<u>3,00,000</u>	<u>(18,00,000)</u>
		1,54,000

13. The amount of rebate on bills discounted as on 31st March, 2016 the period which has not been expired upto that day will be calculated as follows:

Discount on ₹5,60,000 for 62 days @ 10%	9,512
Discount on ₹17,44,000 for 69 days @ 10%	32,969
Discount on ₹11,28,000 for 82 days @ 10%	25,341
Discount on ₹16,24,000 for 92 days @ 10%	40,934
Discount on ₹12,00,000 for 96 days @ 10%	<u>31,562</u>
Total	<u>1,40,318</u>

Note: The due date of the bills discounted is included in the number of days above.

The amount of discount to be credited to the profit and loss account will be:

	₹
Transfer from rebate on bills discounted as on 31.03. 2015	1,36,518
Add: Discount received during the year	<u>3,40,312</u>
	4,76,830

Less: Rebate on bills discounted as on 31.03. 2016 (as above)	(1,40,318)
	<u>3,36,512</u>

Journal Entries

	₹	₹
Rebate on bills discounted A/c Dr. To Discount on bills A/c (Transfer of opening unexpired discount on 31.03. 2015)	1,36,518	1,36,518
Discount on bills A/c Dr. To Rebate on bills discounted A/c (Unexpired discount on 31.03. 2016 taken into account)	1,40,318	1,40,318
Discount on Bills A/c Dr. To P & L A/c (Discount earned in the year, transferred to P&L A/c)	3,36,512	3,36,512

**14. Departmental Trading Account
for the year ending on 31st March, 2016**

Particulars	₹	Particulars	₹
To Opening stock	2,40,000	By Sales	9,60,000
To Purchases	5,40,000	By Shortage	3,600
To Gross Profit c/d	2,70,450	By Closing stock	86,850
		(₹ 1,20,540 – ₹33,690)	
	10,50,450		10,50,450

Memorandum Departmental Stock Account (At Selling Price)

Particulars	₹	Particulars	₹
To Balance b/d (₹2,40,000 + ₹96,000)	3,36,000	By Profit & Loss A/c (Cost of Shortage)	3,600
To Purchases	5,40,000	By Memorandum Departmental Mark-up A/c (Loading on Shortage)	1,440
To Memorandum Departmental Mark-up	2,16,000	By Mark-up A/c (Mark Down in Current Purchases)	4,200

A/c (Mark-up on Purchases)		By Debtors A/c (Sales)	9,60,000
		By Memorandum Departmental Mark-up A/c (Mark-Down on Opening Stock)	2,220
		By Balance c/d	<u>1,20,540</u>
	<u>10,92,000</u>		<u>10,92,000</u>

Memorandum Departmental Mark up Account

	₹		₹
To Memorandum Departmental Stock A/c (₹3,600 x 40/100)	1,440	By Balance b/d (₹3,36,000 x 40/140)	96,000
To Memorandum Departmental Stock A/c	4,200	By Memorandum Departmental Stock A/c (₹ 5,40,000 x 40/100)	2,16,000
To Memorandum Departmental Stock A/c	2,220		
To Gross Profit transferred to Profit & Loss A/c	2,70,450		
To Balance c/d (₹ 1,20,540 + ₹ 1,050)* x 40/140 – (₹ 1,050)	33,690		
	<u>3,12,000</u>		<u>3,12,000</u>

*[₹4200 x 12,000/48,000 = 1,050]

Working Notes:

(i)	Calculation of Cost of sales	₹
A	Sales as per Books	9,60,000
B	Add: Mark-down in opening stock (given)	2,220
C	Add: Mark down in sales out of current purchases (₹4,200 x 36,000/48,000)	3,150
D	Value of sales if there was no mark down (A+B+C)	9,65,370
E	Less: Gross profit (40/140 of ₹9,65,370) subject to Mark down (₹ 2,220 + ₹ 3,150)	2,75,820
F	Cost of sales (D-E)	<u>6,89,550</u>

(ii)		Calculation of Closing Stock	₹
	A	Opening stock	2,40,000
		Add: Purchases	5,40,000
		Less Cost of sales	6,89,550
	D	Less: Shortage	3,600
	E	Closing Stock (A+B-C-D)	86,850

15. **Pune Branch Trading and Profit and Loss Account**

Particulars		₹	Particulars		₹
To	Opening Stock (including ₹10,000 from Goa Branch)	40,000	By	Sales (including ₹20,000 to Goa Branch)	2,80,000
To	Purchases	2,00,000	By	Closing Stock (including ₹5,000 from Goa Branch)	30,000
To	Chargeable Expenses	15,000			
To	Gross Profit c/d (before making adjustment for unrealised profit)	55,000			
		3,10,000			3,10,000
To	Stock Reserve (for unrealised profit in Closing Stock lying at Goa Branch). (₹4,000 x 25/100)	1,000	By	Gross Profit b/d	55,000
To	Office & Adm. Expenses	13,250	By	Stock Reserve (for unrealised profit in Opening Stock lying at Goa Branch) (₹ 17,000 x 25/100)	4,250
To	Selling & Distribution Expenses	15,000			
To	Net Profit	<u>30,000</u>			
		59,250			<u>59,250</u>

Goa Branch Trading and Profit and Loss Account

For the year ending on

<i>Particulars</i>	₹	<i>Particulars</i>	₹
To Opening Stock (including ₹17,000 from Pune Branch)	30,000	By Sales (including ₹15,000 to Pune Branch)	2,95,625
To Purchases	2,50,000	By Closing Stock (including ₹ 4,000 from Goa Branch)	43,500
To Chargeable Expenses	27,500		
To Gross Profit c/d (before making adjustment for unrealised profit)	<u>31,625</u>		
	<u>3,39,125</u>		<u>3,39,125</u>
To Stock Reserve (for unrealised profit on Closing Stock lying at Pune Branch). (₹5,000 x 20/100)	1,000	By Gross Profit b/d	31,625
To Office & Adm. Expenses	7,000	By Stock Reserve (for unrealised profit on Opening Stock at Pune Branch) (₹10,000 x 20/100)	2,000
To Selling & Distribution Expenses	10,000		
To Net Profit	<u>15,625</u>		
	33,625		33,625

16.

M/s Heera & Co.

Patna Branch Trial Balance in (US \$)

as on 31st March, 2016

	<i>Conversion rate per US \$ (₹)</i>	<i>Dr. US \$</i>	<i>Cr. US \$</i>
Stock on 1.4.15	55	5,454.55	—

Purchases and sales	58	13,793.10	20,689.66
Sundry debtors and creditors	60	6,666.67	5,000.00
Bills of exchange	60	2,000.00	4,000.00
Wages and salaries	58	9,655.17	–
Rent, rates and taxes	58	6,206.90	–
Sundry charges	58	2,758.62	–
Plant	–	6,000.00	–
Bank balance	60	7,000.00	–
USA office A/c	–	–	29,845.35
		59,535.01	59,535.01

**Trading and Profit & Loss Account
for the year ended 31st March, 2016**

	US \$		US \$
To Opening Stock	5,454.55	By Sales	20,689.66
To Purchases	13,793.10	By Closing stock	7,000.00
To Wages and salaries	9,655.17	(₹ 4,20,000/60)	
		By Gross Loss c/d	1,213.16
	28,902.82		28,902.82
To Gross Loss b/d	1,213.16	By Net Loss	13,778.68
To Rent, rates and taxes	6,206.90		
To Sundry charges	2,758.62		
To Depreciation on Plant (US \$ 6,000 × 0.6)	3,600.00		
	13,778.68		13,778.68

**Balance Sheet of Patna Branch
as on 31st March, 2016**

<i>Liabilities</i>		US \$	<i>Assets</i>	US \$	US \$
USA Office A/c	29,845.35		Plant	6,000.00	
Less: Net Loss	<u>(13,778.68)</u>	16,066.67	Less: Depreciation	<u>(3,600.00)</u>	2,400.00
Sundry creditors		5,000.00	Closing stock		7,000.00
Bills payable		4,000.00	Sundry debtors		6,666.67

			Bills receivable		2,000.00
			Bank balance		7,000.00
		25,066.67			25,066.67

17. (a) This event occurred after March 31, 2016 but before September 04, 2016 is an event occurring after the balance sheet date. But this event is not affecting financial position on the date of balance sheet therefore it should be disclosed in the directors' report.
- (b) Paragraph 4 of Accounting Standard 5 on Net Profit or Loss for the Period, Prior Period Items and Changes in Accounting Policies, defines Prior Period items as "income or expenses which arise in the current period as a result of errors or omissions in the preparation of the financial statements of one or more prior periods".
- Rectification of error in inventory valuation is a prior period item vide Para 4 of AS 5. ₹14.5 lakhs must be added to the opening inventory of 1.4.2016. It is also necessary to show ₹ 14.5 lakhs as a prior period adjustment in the Profit and loss Account below the line. Separate disclosure of this item as a prior period item is required as per Para 15 of AS 5.
18. (a) As per para 13 of AS 11 (Revised 2003) 'The Effects of Changes in Foreign Exchange Rates', exchange differences arising on the settlement of monetary items or on reporting an enterprise's monetary items at rates different from those at which they were initially recorded during the period, or reported in previous financial statements, should be recognized as income or expenses in the period in which they arise. Thus exchange differences arising on repayment of liabilities incurred for the purpose of acquiring fixed assets are recognized as income or expense.

Calculation of Exchange Difference:

$$\text{Foreign currency loan} = \frac{\text{₹ 3,000 lakhs}}{\text{₹ 40}} = 75 \text{ lakhs US Dollars}$$

$$\text{Exchange difference} = 75 \text{ lakhs US Dollars} \times (42.50 - 40.00) = \text{₹}187.50 \text{ lakhs}$$

(including exchange loss on payment of first instalment)

Therefore, entire loss due to exchange differences amounting ₹ 187.50 lakhs should be charged to profit and loss account for the year.

Note: The above answer has been given on the basis that the company has not exercised the option of capitalization available under para 46 of AS 11. The answer will change if the company exercises the option of capitalization.

- (b) AS 12 'Accounting for Government Grants' regards two methods of presentation, of grants related to specific fixed assets, in financial statements as acceptable alternatives. Under the first method, the grant of ₹ 5,00,000 can be shown as a deduction from the gross book value of the machinery in arriving at its book value. The grant is thus recognised in the profit and loss statement over the useful life of a depreciable asset by way of a reduced depreciation charge.

Under the second method, it can be treated as deferred income which should be recognised in the profit and loss statement over the useful life of 10 years in the proportions in which depreciation on machinery will be charged. The deferred income pending its apportionment to profit and loss account should be disclosed in the balance sheet with a suitable description e.g., 'Deferred government grants' to be shown after 'Reserves and Surplus' but before 'Secured Loans'.

The following should also be disclosed:

- (i) the accounting policy adopted for government grants, including the methods of presentation in the financial statements;
 - (ii) the nature and extent of government grants recognised in the financial statement of ₹ 5 lakhs is required to be credited to the profit and loss statement of the current year.
19. (a) Para 10 of AS 16 'Borrowing Costs' states "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." The capitalisation rate should be the weighted average of the borrowing costs applicable to the borrowings of the enterprise that are outstanding during the period, other than borrowings made specifically for the purpose of obtaining a qualifying asset. Hence, in the above case, treatment of accountant of Rainbow Ltd. is incorrect. The amount of borrowing costs capitalized for the financial year 2016-2017 should be calculated as follows:

	₹ in crores
Actual interest for 2016-2017 (11% of ₹ 150 crores)	16.50
Less: Income on temporary investment from specific borrowings	(3.50)
Borrowing costs to be capitalized during year 2016-2017	13.00

- (b) As per AS 19 'leases', a lease will be classified as finance lease if at the inception of the lease, the present value of minimum lease payment* amounts to at least substantially all of the fair value of leased asset. In the given case, the implicit rate of interest is given at 15%. The present value of minimum lease payments at 15% using PV- Annuity Factor can be computed as:

Annuity Factor (Year 1 to Year 5)	3.36 (approx.)
Present Value of minimum lease payments (₹3 lakhs each year)	₹10.08 lakhs (approx.)

Thus present value of minimum lease payments is ₹10.08 lakhs and the fair value of the machine is ₹ 30 lakhs. In a finance lease, lease term should be for the major part of the economic life of the asset even if title is not transferred. However, in the given case, the effective useful life of the machine is 14 years while the lease is only for five years. Therefore, lease agreement is an operating lease. Lease payments under an operating lease should be recognized as an expense in the statement of profit and loss on a straight line basis over the lease term unless another systematic basis is more representative of the time pattern of the user's benefit.

20. (a) Assuming that partly paid shares are entitled to participate in the dividend to the extent of amount paid, number of partly paid equity shares would be taken as 300 for the purpose of calculation of earnings per share.

Computation of weighted average would be as follows:

$$(1,800 \times 12/12) + (300 \times 2/12) = 1,850 \text{ shares.}$$

In case of a bonus issue or a share split, equity shares are issued to existing shareholders for no additional consideration. Therefore, the number of equity shares outstanding is increased without an increase in resources. The number of equity shares outstanding before the event is adjusted for the proportionate change in the number of equity shares outstanding as if the event had occurred at the beginning of the earliest period reported.

- (b) As per para 41 of AS 26 'Intangible Assets', no intangible asset arising from research (or from the research phase of an internal project) should be recognized. Expenditure on research (or on the research phase of an internal project) should be recognized as an expense when it is incurred. Thus the company cannot treat the expenditure

* In calculating the present value of the of minimum lease payments, the discount rate is the interest rate implicit in the lease.

as deferred revenue expenditure. The entire amount of ₹33 lakhs spent on research project should be charged as an expense in the year ended 31st March, 2016.

- (c) AS 29 “Provisions, Contingent Liabilities and Contingent Assets” provides that when an enterprise has a present obligation, as a result of past events, that probably requires an outflow of resources and a reliable estimate can be made of the amount of obligation, a provision should be recognized. Alpha Ltd. has the obligation to deliver the goods within the scheduled time as per the contract. It is probable that Alpha Ltd. will fail to deliver the goods within the schedule and it is also possible to estimate the amount of compensation. Therefore, Alpha Ltd. should provide for the contingency amounting ₹ 2 crores as per AS 29.

PAPER – 6: AUDITING AND ASSURANCE

PART – I : ACADEMIC UPDATE

(Legislative Amendments / Notifications / Circulars / Rules / Guidelines issued by Regulating Authority)

1. Duty to report on frauds

I. Reporting to the Central Government- 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 of fraud involving such amount or amounts as may be prescribed, is being or has been committed in the company by its officers or employees, the auditor shall report the matter to the Central Government within such time and in such manner as may be prescribed.

In this regard, Rule 13 of the Companies (Audit and Auditors) Rules, 2014 has been prescribed. Sub-rule (1) of the said rule states that if an auditor of a company, in the course of the performance of his duties as statutory auditor, has reason to believe that an offence of fraud, which involves or is expected to involve individually an amount of ₹ 1 crore or above, is being or has been committed against the company by its officers or employees, the auditor shall report the matter to the Central Government.

The manner of reporting the matter to the Central Government is as follows:

- (a) the auditor shall report the matter to the Board or the Audit Committee, as the case may be, immediately but not later than 2 days of his knowledge of the fraud, seeking their reply or observations within 45 days;
- (b) 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 along with his comments (on such reply or observations of the Board or the Audit Committee) to the Central Government within 15 days from the date of receipt of such reply or observations;
- (c) in case the auditor fails to get any reply or observations from the Board or the Audit Committee within the stipulated period of 45 days, he shall forward his report to the Central Government along with a note containing the details of his report that was earlier forwarded to the Board or the Audit Committee for which he has not received any reply or observations;
- (d) the report shall be sent to the Secretary, Ministry of Corporate Affairs in a sealed cover by Registered Post with Acknowledgement Due or by Speed Post followed by an e-mail in confirmation of the same;
- (e) the report shall be on the letter-head of the auditor containing postal address, e-mail

address and contact telephone number or mobile number and be signed by the auditor with his seal and shall indicate his Membership Number; and

- (f) the report shall be in the form of a statement as specified in Form ADT-4.

II. Reporting to the Audit Committee or Board - Sub-section (12) of section 143 of the Companies Act, 2013 further prescribes that in case of a fraud involving lesser than the specified amount [i.e. less than ₹ 1 crore], the auditor shall report the matter to the audit committee constituted under section 177 or to the Board in other cases within such time and in such manner as may be prescribed.

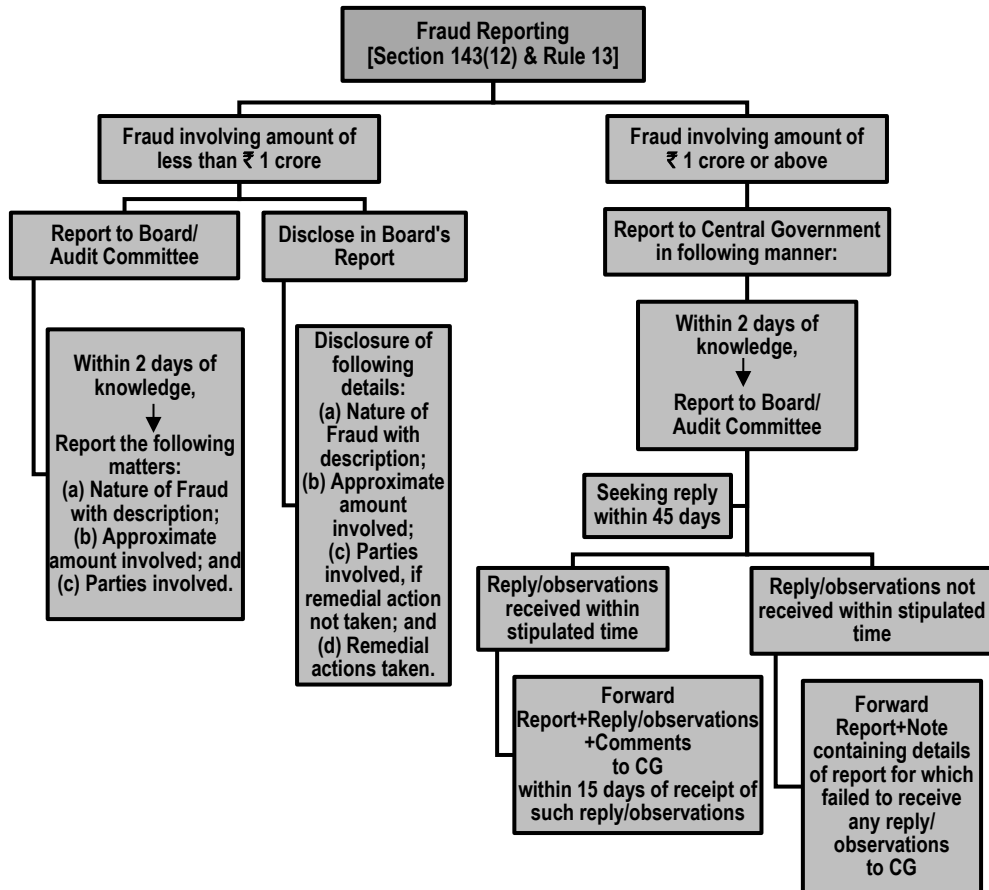
In this regard, sub-rule (3) of Rule 13 of the Companies (Audit and Auditors) Rules, 2014 states that in case of a fraud involving lesser than the amount specified in sub-rule (1) [i.e. less than ₹ 1 crore], the auditor shall report the matter to Audit Committee constituted under section 177 or to the Board immediately but not later than 2 days of his knowledge of the fraud and he shall report the matter specifying the following:

- (a) Nature of Fraud with description;
- (b) Approximate amount involved; and
- (c) Parties involved.

III. Disclosure in the Board's Report: Sub-section (12) of section 143 of the Companies Act, 2013 furthermore prescribes that the companies, whose auditors have reported frauds under this sub-section (12) to the audit committee or the Board, but not reported to the Central Government, shall disclose the details about such frauds in the Board's report in such manner as may be prescribed.

In this regard, sub-rule (4) of Rule 13 of the Companies (Audit and Auditors) Rules, 2014 states that the auditor is also required to disclose in the Board's Report the following details of each of the fraud reported to the Audit Committee or the Board under sub-rule (3) during the year:

- (a) Nature of Fraud with description;
- (b) Approximate Amount involved;
- (c) Parties involved, if remedial action not taken; and
- (d) Remedial actions taken.



2. Ceiling on Number of Company Audits

As per section 141(3)(g) of the Companies Act, 2013, a person shall not be eligible for appointment as an auditor if he is in full time employment elsewhere or a person or a partner of a firm holding appointment as its auditor, if such person or partner is at the date of such appointment or reappointment holding appointment as auditor of more than twenty companies, other than one person companies, dormant companies, small companies and private companies having paid-up share capital less than ₹ 100 crore.

3. Standard on Auditing (SA) 610 "Using the work of Internal Auditors"

This SA deals with the external auditor's responsibilities if using the work of internal auditors. This includes (a) using the work of the internal audit function in obtaining audit evidence and (b) using internal auditors to provide direct assistance under the direction, supervision and review of the external auditor.

Furthermore, the requirements in this SA relating to direct assistance do not apply if the external auditor does not plan to use internal auditors to provide direct assistance.

This SA is effective for audits of financial statements for periods beginning on or after April 1, 2016.

For Complete SA 610 refer below mentioned link:

<http://resource.cdn.icai.org/42207aasb31911a.pdf>

4. Guidance Note on Reporting on Fraud under section 143(12) of the Companies Act, 2013

This guidance note deals with section 143(12) of the Companies Act, 2013 which states that “Notwithstanding anything contained in this section, if an auditor of a company, in the course of the performance of his duties as auditor, has reason to believe that an offence of fraud involving such amount or amounts as may be prescribed, is being or has been committed in the company by its officers or employees, the auditor shall report the matter to the Central Government within such time and in such manner as may be prescribed:

It is also provided that in case of fraud involving lesser than the specified amount, the auditor shall report the matter to the audit committee constituted under section 177 or to the Board in other cases within such time and in such manner as may be prescribed: It also provide guidance that the companies, whose auditors have reported frauds under this sub-section to the audit committee or the Board but not reported to the Central Government, shall disclose the details about such frauds in the Board’s report in such manner as may be prescribed.” Student may refer Handbook on Auditing Pronouncements for more details.

For Complete Guidance Note refer below mentioned link:

<http://resource.cdn.icai.org/41297aasb-gn-fraud-revised.pdf>

5. Reporting under Companies (Auditor’s Report) Order, 2016 [CARO, 2016]

In exercise of the powers conferred by sub-section (11) of section 143 of the Companies Act, 2013 (18 of 2013) and in supersession of the Companies (Auditor's Report) Order, 2015 published in the Gazette of India, Extraordinary, Part II, Section 3, Sub-section (ii), vide number S.O. 990 (E), dated the 10th April, 2015, except as respects things done or omitted to be done before such supersession, the Central Government, after consultation with the, committee constituted under proviso to sub-section (11) of section 143 of the Companies Act, 2013 hereby makes the following Order dated 29th March, 2016, namely:—

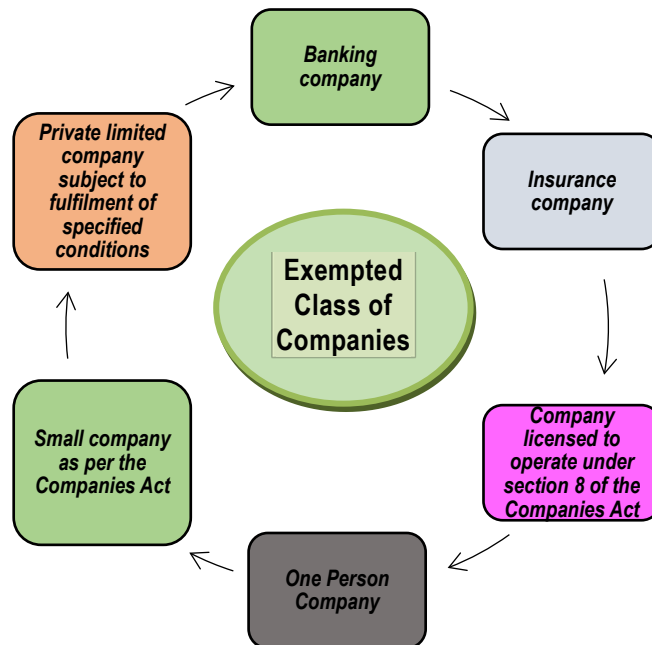
I. Short title, application and commencement-

- (1) This Order may be called the Companies (Auditor's Report) Order, 2016.
- (2) **Applicability of the Order:** The CARO, 2016 is an additional reporting requirement Order. The order applies to every company including a foreign company as defined in clause (42) of section 2 of the Companies Act, 2013 [hereinafter referred to as the Companies Act],

However, the Order specifically exempts the following class of companies-

- (i) a banking company as defined in clause (c) of section 5 of the Banking Regulation Act, 1949 (10 of 1949);
- (ii) an insurance company as defined under the Insurance Act, 1938 (4 of 1938);
- (iii) a company licensed to operate under section 8 of the Companies Act;
- (iv) a One Person Company as defined under clause (62) of section 2 of the Companies Act and a small company as defined under clause (85) of section 2 of the Companies Act; and
- (v) a private limited company, not being a subsidiary or holding company of a public company, having a paid up capital and reserves and surplus not more than rupees one crore as on the balance sheet date and which does not have total borrowings exceeding rupees one crore from any bank or financial institution at any point of time during the financial year and which does not have a total revenue as disclosed in Scheduled III to the Companies Act, 2013 (including revenue from discontinuing operations) exceeding rupees ten crore during the financial year as per the financial statements.

Exempted Class of Companies



- II. Auditor's report to contain matters specified in paragraphs 3 and 4.** - Every report made by the auditor under section 143 of the Companies Act, 2013 on the accounts of every company audited by him, to which this Order applies, for the financial years commencing on or after 1st April, 2015, shall in addition, contain the matters specified in paragraphs 3 and 4, as may be applicable:

It may be noted that the Order shall not apply to the auditor's report on consolidated financial statements.

- III. Matters to be included in the auditor's report.** - The auditor's report on the accounts of a company to which this Order applies shall include a statement on the following matters, namely:-

- (i) (a) whether the company is maintaining proper records showing full particulars, including quantitative details and situation of fixed assets;
- (b) whether these fixed assets have been physically verified by the management at reasonable intervals; whether any material discrepancies were noticed on such verification and if so, whether the same have been properly dealt with in the books of account;
- (c) whether the title deeds of immovable properties are held in the name of the company. If not, provide the details thereof;
- (ii) whether physical verification of inventory has been conducted at reasonable intervals by the management and whether any material discrepancies were noticed and if so, whether they have been properly dealt with in the books of account;
- (iii) whether the company has granted any loans, secured or unsecured to companies, firms, Limited Liability Partnerships or other parties covered in the register maintained under section 189 of the Companies Act, 2013. If so,
 - (a) whether the terms and conditions of the grant of such loans are not prejudicial to the company's interest;
 - (b) whether the schedule of repayment of principal and payment of interest has been stipulated and whether the repayments or receipts are regular;
 - (c) if the amount is overdue, state the total amount overdue for more than ninety days, and whether reasonable steps have been taken by the company for recovery of the principal and interest;
- (iv) in respect of loans, investments, guarantees, and security whether provisions of section 185 and 186 of the Companies Act, 2013 have been complied with. If not, provide the details thereof.
- (v) in case, the company has accepted deposits, whether the directives issued by the Reserve Bank of India and the provisions of sections 73 to 76 or any other

relevant provisions of the Companies Act, 2013 and the rules framed there under, where applicable, have been complied with? If not, the nature of such contraventions be stated; If an order has been passed by Company Law Board or National Company Law Tribunal or Reserve Bank of India or any court or any other tribunal, whether the same has been complied with or not?

- (vi) whether maintenance of cost records has been specified by the Central Government under section 148(1) of the Companies Act, 2013 and whether such accounts and records have been so made and maintained.
- (vii) (a) whether the company is regular in depositing undisputed statutory dues including provident fund, employees' state insurance, income-tax, sales-tax, service tax, duty of customs, duty of excise, value added tax, cess and any other statutory dues to the appropriate authorities and if not, the extent of the arrears of outstanding statutory dues as on the last day of the financial year concerned for a period of more than six months from the date they became payable, shall be indicated;
(b) where dues of income tax or sales tax or service tax or duty of customs or duty of excise or value added tax have not been deposited on account of any dispute, then the amounts involved and the forum where dispute is pending shall be mentioned. (A mere representation to the concerned Department shall not be treated as a dispute).
- (viii) whether the company has defaulted in repayment of loans or borrowing to a financial institution, bank, Government or dues to debenture holders? If yes, the period and the amount of default to be reported (in case of defaults to banks, financial institutions, and Government, lender wise details to be provided).
- (ix) whether moneys raised by way of initial public offer or further public offer (including debt instruments) and term loans were applied for the purposes for which those are raised. If not, the details together with delays or default and subsequent rectification, if any, as may be applicable, be reported;
- (x) whether any fraud by the company or any fraud on the Company by its officers or employees has been noticed or reported during the year; If yes, the nature and the amount involved is to be indicated;
- (xi) whether managerial remuneration has been paid or provided in accordance with the requisite approvals mandated by the provisions of section 197 read with Schedule V to the Companies Act? If not, state the amount involved and steps taken by the company for securing refund of the same;
- (xii) whether the Nidhi Company has complied with the Net Owned Funds to Deposits in the ratio of 1: 20 to meet out the liability and whether the Nidhi Company is maintaining ten per cent unencumbered term deposits as specified in the Nidhi Rules, 2014 to meet out the liability;

- (xiii) whether all transactions with the related parties are in compliance with sections 177 and 188 of Companies Act, 2013 where applicable and the details have been disclosed in the Financial Statements etc., as required by the applicable accounting standards;
- (xiv) whether the company has made any preferential allotment or private placement of shares or fully or partly convertible debentures during the year under review and if so, as to whether the requirement of section 42 of the Companies Act, 2013 have been complied with and the amount raised have been used for the purposes for which the funds were raised. If not, provide the details in respect of the amount involved and nature of non-compliance;
- (xv) whether the company has entered into any non-cash transactions with directors or persons connected with him and if so, whether the provisions of section 192 of Companies Act, 2013 have been complied with;
- (xvi) whether the company is required to be registered under section 45-IA of the Reserve Bank of India Act, 1934 and if so, whether the registration has been obtained.

IV. Reasons to be stated for unfavourable or qualified answers -

- (1) Where, in the auditor's report, the answer to any of the questions referred to in paragraph 3 is unfavourable or qualified, the auditor's report shall also state the basis for such unfavourable or qualified answer, as the case may be.
- (2) Where the auditor is unable to express any opinion on any specified matter, his report shall indicate such fact together with the reasons as to why it is not possible for him to give his opinion on the same.

6. Amendment in Companies (Cost Records and Audit) Rules, 2014

(I) Maintenance of Cost Records: Rule 3 of the Companies (Cost Records and Audit) Rules, 2014 provides the classes of companies, engaged in the production of goods or providing services, having an overall turnover from all its products and services of ₹ 35 crore or more during the immediately preceding financial year, 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, but exclude a company classified as a Micro enterprise or a Small enterprise including as per the turnover criteria provided under Micro, Small and Medium Enterprises Development Act, 2006.

The said rule has divided the list of companies into regulated sectors (Part A) and non-regulated sectors (Part B).

Additionally, as per clause (vi) to Paragraph 3 of the CARO, 2016, where maintenance of cost records has been specified by the Government under section 148(1) of the Companies Act, 2013, the auditor has to report whether such accounts and records have been made and maintained.

(II) Appointment of Cost Auditor: 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. However, before such appointment is made, the written consent of the cost auditor to such appointment and a certificate from him or it shall be obtained.

The certificate to be obtained from the cost auditor shall certify that the-

- (a) the individual or the firm, as the case may be, is eligible for appointment and is not disqualified for appointment under the Companies Act, 2013, the Cost and Works Accountants Act, 1959 and the rules or regulations made thereunder;
- (b) the individual or the firm, as the case may be, satisfies the criteria provided in section 141 of the Companies Act, 2013 so far as may be applicable;
- (c) the proposed appointment is within the limits laid down by or under the authority of the Companies Act, 2013; and
- (d) the list of proceedings against the cost auditor or audit firm or any partner of the audit firm pending with respect to professional matters of conduct, as disclosed in the certificate, is true and correct.

(III) Removal of Cost Auditor: The cost auditor may be removed from his office before the expiry of his term, through a board resolution after giving a reasonable opportunity of being heard to the cost auditor and recording the reasons for such removal in writing.

It may be noted that the Form CRA-2 to be filed with the Central Government for intimating appointment of another cost auditor shall enclose the relevant Board Resolution to the effect.

It may further be noted that the above provisions shall not prejudice the right of the cost auditor to resign from such office of the company.

(IV) Submission of Cost Audit Report to the Central Government: 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 the Central Government with such report along with full information and explanation on every reservation or qualification contained therein, in Form CRA-4 in Extensible Business Reporting Language (XBRL) format in the manner as specified in the Companies (Filing of Documents and Forms in Extensible Business Reporting language) Rules, 2015 along with fees specified in the Companies (Registration Offices and Fees) Rules, 2014.

(V) 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 75% of its total revenue; or
- (ii) which is operating from a special economic zone.

- (iii) which is engaged in generation of electricity for captive consumption through Captive Generating Plant.

7. Direction by Tribunal in case auditor acted in a fraudulent manner

As per sub-section (5) of the section 140, the Tribunal either *suo motu* or on an application made to it by the Central Government or by any person concerned, if it is satisfied that the auditor of a company has, whether directly or indirectly, acted in a fraudulent manner or abetted or colluded in any fraud by, or in relation to, the company or its directors or officers, it may, by order, direct the company to change its auditors.

However, if the application is made by the Central Government and the Tribunal is satisfied that any change of the auditor is required, it shall within fifteen days of receipt of such application, make an order that he shall not function as an auditor and the Central Government may appoint another auditor in his place.

It may be noted that an auditor, whether individual or firm, against whom final order has been passed by the Tribunal under this section shall not be eligible to be appointed as an auditor of any company for a period of five years from the date of passing of the order and the auditor shall also be liable for action under section 447.

It is hereby clarified that the case of a firm, the liability shall be of the firm and that of every partner or partners who acted in a fraudulent manner or abetted or colluded in any fraud by, or in relation to, the company or its director or officers.

8. Curtailing right of the auditor regarding circulation of copy of representation in the case of appointment of Auditor other than retiring Auditor under section 140(4) of the Companies Act, 2013

If the Tribunal is satisfied on an application either of the company or of any other aggrieved person that the rights conferred by section 140(4) of the Companies Act, 2013 are being abused by the auditor, then, the copy of the representation may not be sent and the representation need not be read out at the meeting.

9. Re-opening of accounts on Court's or Tribunal's Orders

Section 130 of the Companies Act, 2013 states that a company shall not re-open its books of account and not recast its financial statements, unless an application in this regard is made by the Central Government, the Income-tax authorities, the Securities and Exchange Board, any other statutory regulatory body or authority or any person concerned and an order is made by a court of competent jurisdiction or the Tribunal to the effect that—

- (i) the relevant earlier accounts were prepared in a fraudulent manner; or
- (ii) the affairs of the company were mismanaged during the relevant period, casting a doubt on the reliability of financial statements.

However, a notice shall be given by the Court or Tribunal in this regard and shall take into consideration the representations, if any.

10. Voluntary revision of financial statements or Board's report

Section 131 of the Companies Act, 2013 states that if it appears to the directors of a company that—

- (a) the financial statement of the company; or
- (b) the report of the Board,

do not comply with the provisions of section 129 (Financial statement) or section 134 (Financial statement, Board's report, etc.) they may prepare revised financial statement or a revised report in respect of any of the three preceding financial years after obtaining approval of the Tribunal on an application made by the company in such form and manner as may be prescribed and a copy of the order passed by the Tribunal shall be filed with the Registrar.

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

1. State with reason (in short) whether the following statements are true or false:
 - (i) The basic objective of audit does not change with reference to nature, size or form of an entity.
 - (ii) Teeming and lading is one of the techniques of inflating cash payments.
 - (iii) There is direct relationship between materiality and the degree of audit risk.
 - (iv) As per SA 230 on "Audit Documentation", the working papers are not the property of the auditor.
 - (v) Control risk is the susceptibility of an account balance or class of transactions to misstatement that could be material either individually or, when aggregated with misstatements in other balances or classes, assuming that there were no related internal controls.
 - (vi) As per section 138 of the Companies Act, 2013 private companies are not required to appoint internal auditor.
 - (vii) The term "internal audit" 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".
 - (viii) A Chartered Accountant holding securities of S Ltd. having face value of ₹ 950 is qualified for appointment as an auditor of S Ltd.
 - (ix) Manner of rotation of auditor will not be applicable to company A, which is having paid up share capital of ₹ 15 crores and having public borrowing from nationalized bank of ₹ 50 crore, because it is a Private Limited Company.

- (x) If an LLP (Limited Liability Partnership Firm) is appointed as an auditor of a company, every partner of a firm shall be authorized to act as an auditor.

Nature of Auditing

2. (a) “Self-revealing Errors are such errors the existence of which becomes apparent in the process of compilation of accounts”. Explain giving examples.
(b) Mention any four information which assists the auditor in accepting and continuing of relationship with the client as per SA 220.
3. (a) State the significant difficulties encountered during audit with reference to SA-260 (communication with those charged with governance).
(b) “Fraud in the form of misappropriation of goods is still more difficult to detect.” Explain.
4. (a) The auditor may exercise his judgement to identify which risks are significant risks. Explain the above in context of SA-315.
(b) “The purpose of an audit is to enhance the degree of confidence of intended users in the financial statements”. Explain stating the objectives of audit as per SA 200.

Basic Concepts in Auditing

5. (a) “Inquiry is used extensively throughout the audit in addition to other audit procedures”. Explain.
(b) What is meant by external confirmation? Mention four situations where external confirmation may be useful for auditors.
6. (a) “The Companies Act, 2013 has enacted specific provisions to give concrete shape to concept of Auditor’s Independence”. Explain stating the relevant provisions.
(b) “Even when information to be used as audit evidence is obtained from sources external to the entity, circumstances may exist that could affect its reliability”. Explain. Also state generalisations about the reliability of audit evidence.
7. (a) “The nature and timing of the audit procedures to be used may be affected by the fact that some of the accounting data and other information may be available only in electronic form or only at certain points or periods in time”. Explain.
(b) Discuss the matters the auditor may consider in determining the extent of tests of controls.

Preparation for an Audit

8. (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) Explain the factors an auditor would consider in establishing the overall audit strategy.

9. "All the disadvantages of audit program may be eliminated by imaginative supervision of the work carried on by the assistants." Explain stating the advantages and disadvantages of an audit program.

Internal Control

10. (a) "A satisfactory control environment is not an absolute deterrent to fraud although it may help reduce the risk of fraud." Explain.
(b) Discuss what is included in risk assessment procedures to obtain audit evidence about the design and implementation of relevant controls.
11. (a) "Examination in Depth" implies examination of a few selected transactions from the beginning to the end through the entire flow of the transaction. Explain.
(b) "When auditor delegates work to assistants or uses work performed by other auditors or experts, the auditor should have sufficient knowledge of Computerised Information Systems". Discuss.

Vouching & Verification of Assets and Liabilities

12. (a) How will you verify the "Borrowing from Banks".
(b) "Vouching which has traditionally been the backbone of auditing does not merely involve checking arithmetical accuracy but goes much beyond and aims to check the genuineness as well as validity of transactions contained in accounting records". Explain.
13. How will you vouch and/or verify the following:
(a) Sale proceeds of Scrap Material.
(b) Trade Marks and Copyrights.
(c) Machinery acquired under Hire-purchase system.
(d) Work-in-progress.
14. "The management has obtained a certificate from an actuary regarding provision of gratuity payable to employees". Comment as an auditor.

The Company Audit

15. Discuss the following:
(a) Ceiling on number of audits in a company to be accepted by an auditor.
(b) Filling of a casual vacancy of auditor in respect of a company audit.
16. (a) Discuss the matters to be included in the auditor's report regarding fixed assets and inventories as per CARO, 2016.
(b) "If an auditor of a company has reason to believe that an offence of fraud is being or has been committed in the company by its officers or employees, the auditor shall

report the matter to the Central Government”. Explain. Also state the manner of reporting the same.

17. (a) “The auditor’s report shall also state the observations or comments of the auditors on financial transactions or matters which have any adverse effect on the functioning of the company.” Discuss with relevance to Companies Act, 2013.
- (b) “A company may keep books of account or other relevant papers in electronic mode”. Explain.
18. (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.

Special Audits

19. (a) An audit of Expenditure is one of the major components of Government Audit. In the context of ‘Government Expenditure Audit’, write in brief, what do you understand by:
- (i) Audit against Rules and Orders
 - (ii) Audit of Sanctions
 - (iii) Audit against Provision of Funds
 - (iv) Propriety Audit
 - (v) Performance Audit.
- (b) Explain in detail the duties of Comptroller and Auditor General of India.
20. What are the special steps involved in conducting the audit of an Educational Institution?

SUGGESTED ANSWERS

1. (i) **Correct:** An audit is an independent examination of financial information of any entity, whether profit oriented or not, and irrespective of its size or legal form, when such an examination is conducted with a view to expressing an opinion thereon. It is clear that the basic objective of auditing, i.e., expression of opinion on financial statements does not change with reference to nature, size or form of an entity.
- (ii) **Incorrect:** Teeming and Lading is one of the techniques of suppressing cash receipts and not of inflating cash payments. Money received from one customer is misappropriated and the account is adjusted with the subsequent receipt from another customer and so on.
- (iii) **Incorrect:** There is an inverse relationship between materiality and the degree of audit risk. The higher the materiality level, the lower the audit risk and vice versa. For example, the risk that a particular account balance or class of transactions could be

misstated by an extremely large amount might be very low but the risk that it could be misstated by an extremely small amount might be very high.

- (iv) **Incorrect:** As per SA 230 on "Audit Documentation" the working papers are the property of the auditor and the auditor has right to retain them. He may at his discretion can make available working papers to his client. The auditor should retain them long enough to meet the needs of his practice and legal or professional requirement.
- (v) **Incorrect:** Inherent risk is the susceptibility of an account balance or class of transactions to misstatement that could be material either individually or, when aggregated with misstatements in other balances or classes, assuming that there were no related internal controls.
- (vi) **Incorrect:** Section 138 of the Companies Act, 2013 requires every private company to appoint an internal auditor having turnover of ₹ 200 crore or more during the preceding financial year; or outstanding loans or borrowings from banks or public financial institutions exceeding ₹ 100 crore or more at any point of time during the preceding financial year.
- (vii) **Incorrect:** 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".
- (viii) **Incorrect:** As per the provisions of the Companies Act, 2013, a person is disqualified to be appointed as an auditor of a company if he is holding any security of or interest in the company.

As the chartered accountant is holding securities of S Ltd. having face value of ₹ 950, he is not eligible for appointment as an auditor of S Ltd.

- (ix) **Incorrect:** According to section 139 of the Companies Act, 2013, the provisions related to rotation of auditor are applicable to all private limited companies having paid up share capital of ₹ 20 crore or more; and all companies having paid up share capital of below threshold limit mentioned above, but having public borrowings from financial institutions, banks or public deposits of ₹ 50 crore or more.

Although company A is a private limited company yet it is having public borrowings from nationalized bank of ₹ 50 crores, therefore it would be governed by provisions of rotation of auditor.

- (x) **Incorrect:** As per section 141(2) of the Companies Act, 2013, where a firm including a limited liability partnership (LLP) is appointed as an auditor of a company, only the partners who are Chartered Accountants shall be authorised to act and sign on behalf of the firm.

2. (a) **Self-revealing Errors:** These are such errors the existence of which becomes apparent in the process of compilation of accounts.

A few illustrations of such errors are given hereunder, showing how they become apparent-

(i)	Omission to post a part of a journal entry to the ledger.	Trial balance is thrown out of agreement.
(ii)	Wrong totaling of the Purchase Register.	Control Account (e.g., the Sundry Creditors Account) balances and the aggregate of the balances in the personal ledger will disagree.
(iii)	A failure to record in the cash book amounts paid into or withdrawn from the bank.	Bank reconciliation statement will show up error.
(iv)	A mistake in recording amount received from X in the account of Y.	Statements of account of parties will reveal mistake.

From the above, it is clear that certain apparent errors balance almost automatically by double entry accounting procedure and by following established practices that lie within the accounting system but not being generally considered to be a part of it, like bank reconciliation or sending monthly statements of account for confirmation.

- (b) **Information which assist the Auditor in accepting and continuing of relationship with Client:** As per SA 220, "Quality Control for an Audit of Financial Statements" the auditor should obtain information considered necessary in the circumstances before accepting an engagement with a new client, when deciding whether to continue an existing engagement and when considering acceptance of a new engagement with an existing client. The following information would assist the auditor in accepting and continuing of relationship with the client:

- (i) The integrity of the principal owners, key management and those charged with governance of the entity;
- (ii) Whether the engagement team is competent to perform the audit engagement and has the necessary capabilities, including time and resources;
- (iii) Whether the firm and the engagement team can comply with relevant ethical requirements; and
- (iv) Significant matters that have arisen during the current or previous audit engagement, and their implications for continuing the relationship.

3. (a) **Significant Difficulties Encountered During the Audit:** As per SA 260 "Communication with Those Charged with Governance", significant difficulties encountered during the audit may include such matters as:

- ◆ Significant delays in management providing required information.
- ◆ An unnecessarily brief time within which to complete the audit.
- ◆ Extensive unexpected effort required to obtain sufficient appropriate audit evidence.
- ◆ The unavailability of expected information.
- ◆ Restrictions imposed on the auditor by management.
- ◆ Management's unwillingness to make or extend its assessment of the entity's ability to continue as a going concern when requested.

(b) **Misappropriation of Goods:** Fraud in the form of *misappropriation of goods* is still more difficult to detect; for this management has to rely on various measures. Apart from the various requirements of record keeping about the physical quantities and their periodic checks, there must be rules and procedures for allowing persons inside the area where goods are kept. In addition there should be external security arrangements to see that no goods are taken out without proper authority. Goods can be anything in the premises; it may be machinery. It may even be the daily necessities of the office like stationery. The goods may be removed by subordinate employees or even by persons quite higher up in the management. Auditors can detect this by undertaking a thorough and strenuous checking of records followed by physical verification process. Also, by resorting to intelligent ratio analysis, auditors may be able to form an idea whether such fraud exists. For example, the gross profit ratio adjusted for any recorded change during the year, reveals whether the value of inventory is reasonable with reference to the amount of the sale. Similarly, the input-output ratio of production in terms of physical quantity may reveal whether output is normal with reference to the quantity consumed for production.

4. (a) **Identification of Significant Risks:** SA 315 "Identifying and Assessing the Risk of Material Misstatement through understanding the Entity and its Environment" defines 'significant risk' as an identified and assessed risk of material misstatement that, in the auditor's judgment, requires special audit consideration.

As part of the risk assessment, the auditor shall determine whether any of the risks identified are, in the auditor's judgment, a significant risk. In exercising this judgment, the auditor shall exclude the effects of identified controls related to the risk.

In exercising judgment as to which risks are significant risks, the auditor shall consider at least the following-

- (i) Whether the risk is a risk of fraud;
- (ii) Whether the risk is related to recent significant economic, accounting or other developments like changes in regulatory environment etc. and therefore requires specific attention;

- (iii) The complexity of transactions;
 - (iv) Whether the risk involves significant transactions with related parties;
 - (v) The degree of subjectivity in the measurement of financial information related to the risk, especially those measurements involving a wide range of measurement uncertainty; and
 - (vi) Whether the risk involves significant transactions that are outside the normal course of business for the entity or that otherwise appear to be unusual.
- (b) **As per SA-200 “Overall Objectives of the Independent Auditor”, in conducting an audit of financial statements, the overall objectives of the auditor are:**
- (1) To obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, thereby enabling the auditor to express an opinion on whether the financial statements are prepared, in all material respects, in accordance with an applicable financial reporting framework; and
 - (2) To report on the financial statements, and communicate as required by the SAs, in accordance with the auditor’s findings.

The purpose of an audit is to enhance the degree of confidence of intended users in the financial statements. This is achieved by the expression of an opinion by the auditor on whether the financial statements are prepared, in all material respects, in accordance with an applicable financial reporting framework. In the case of most general purpose frameworks, that opinion is on whether the financial statements are presented fairly, in all material respects, or give a true and fair view in accordance with the framework. An audit conducted in accordance with SAs and relevant ethical requirements enables the auditor to form that opinion.

5. (a) **Inquiry – Audit Procedure to obtain Audit Evidence:** Inquiry consists of seeking information of knowledgeable persons, both financial and non- financial, within the entity or outside the entity. Inquiry is used extensively throughout the audit in addition to other audit procedures. Inquiries may range from formal written inquiries to informal oral inquiries. Evaluating responses to inquiries is an integral part of the inquiry process.

Responses to inquiries may provide the auditor with information not previously possessed or with corroborative audit evidence. Alternatively, responses might provide information that differs significantly from other information that the auditor has obtained, for example, information regarding the possibility of management override of controls. In some cases, responses to inquiries provide a basis for the auditor to modify or perform additional audit procedures.

Although corroboration of evidence obtained through inquiry is often of particular importance, in the case of inquiries about management intent, the information

available to support management's intent may be limited. In these cases, understanding management's past history of carrying out its stated intentions, management's stated reasons for choosing a particular course of action, and management's ability to pursue a specific course of action may provide relevant information to corroborate the evidence obtained through inquiry. In respect of some matters, the auditor may consider it necessary to obtain written representations from management and, where appropriate, those charged with governance to confirm responses to oral inquiries.

- (b) **External Confirmation:** As per SA 505 "External Confirmations", external confirmation is an audit evidence obtained as a direct written response to the auditor from a third party (the confirming party), in paper form, or by electronic or other medium.

The auditor should determine whether the use of external confirmation is necessary to obtain sufficient appropriate audit evidence to support certain financial statement assertions. Following are examples of situations where external confirmations may be useful-

- (i) Bank balances and other information from bankers
- (ii) Account receivables balances
- (iii) Inventory held by third parties
- (iv) Account payable balances.

6. (a) **The Companies Act, 2013, has enacted specific provisions to give concrete shape to this vital concept of Auditor's Independence:**

- (i) The provisions disqualifying certain types of persons from undertaking audit of limited companies.
- (ii) Provisions relating to ceiling on the number of audits that can be undertaken by a chartered accountant.
- (iii) Provisions requiring special resolution for appointing auditors in certain cases.
- (iv) Other provisions on appointment, re-appointment and removal of auditors, are designed with sufficient independence to carry out the audit in the larger interest of shareholders and other users.
- (v) Power to qualify his report is yet another weapon in the armoury of the auditor to protect his independence.
- (vi) Provisions relating rotation of auditor/audit firm.

- (b) **Reliability of Audit Evidence:** SA 500 on "Audit Evidence" provides that the reliability of information to be used as audit evidence, and therefore of the audit evidence itself, is influenced by its source and its nature, and the circumstances under which it is obtained, including the controls over its preparation and maintenance

where relevant. Therefore, generalisations about the reliability of various kinds of audit evidence are subject to important exceptions. Even when information to be used as audit evidence is obtained from sources external to the entity, circumstances may exist that could affect its reliability. For example, information obtained from an independent external source may not be reliable if the source is not knowledgeable, or a management's expert may lack objectivity. While recognising that exceptions may exist, the following generalisations about the reliability of audit evidence may be useful:

- (1) The reliability of audit evidence is increased when it is obtained from independent sources outside the entity.
 - (2) The reliability of audit evidence that is generated internally is increased when the related controls, including those over its preparation and maintenance, imposed by the entity are effective.
 - (3) Audit evidence obtained directly by the auditor (for example, observation of the application of a control) is more reliable than audit evidence obtained indirectly or by inference (for example, inquiry about the application of a control).
 - (4) Audit evidence in documentary form, whether paper, electronic, or other medium, is more reliable than evidence obtained orally (for example, a contemporaneously written record of a meeting is more reliable than a subsequent oral representation of the matters discussed).
 - (5) Audit evidence provided by original documents is more reliable than audit evidence provided by photocopies or facsimiles, or documents that have been filmed, digitized or otherwise transformed into electronic form, the reliability of which may depend on the controls over their preparation and maintenance.
7. (a) **Nature and Timing of the Audit Procedures:** The nature and timing of the audit procedures to be used may be affected by the fact that some of the accounting data and other information may be available only in electronic form or only at certain points or periods in time. For example, source documents, such as purchase orders and invoices, may exist only in electronic form when an entity uses electronic commerce, or may be discarded after scanning when an entity uses image processing systems to facilitate storage and reference.
- Certain electronic information may not be retrievable after a specified period of time, for example, if files are changed and if backup files do not exist. Accordingly, the auditor may find it necessary as a result of an entity's data retention policies to request retention of some information for the auditor's review or to perform audit procedures at a time when the information is available.
- (b) **Matters the auditor may consider in determining the extent of tests of controls:** When more persuasive audit evidence is needed regarding the effectiveness of a control, it may be appropriate to increase the extent of testing of the control as well

as the degree of reliance on controls. Matters the auditor may consider in determining the extent of tests of controls include the following:

- The frequency of the performance of the control by the entity during the period.
- The length of time during the audit period that the auditor is relying on the operating effectiveness of the control.
- The expected rate of deviation from a control.
- The relevance and reliability of the audit evidence to be obtained regarding the operating effectiveness of the control at the assertion level.

8. (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) In establishing the overall audit strategy, the auditor shall:

- (i) Identify the characteristics of the engagement that define its scope;
- (ii) Ascertain the reporting objectives of the engagement to plan the timing of the audit and the nature of the communications required;
- (iii) Consider the factors that, in the auditor's professional judgment, are significant in directing the engagement team's efforts;
- (iv) Consider the results of preliminary engagement activities and, where applicable, whether knowledge gained on other engagements performed by the engagement partner for the entity is relevant; and
- (v) Ascertain the nature, timing and extent of resources necessary to perform the engagement.

9. (a) Advantages and Disadvantages of the use of an Audit Programme

The advantages of an audit programme are:

- (i) It provides the assistant carrying out the audit with total and clear set of instructions of the work generally to be done.
- (ii) It is essential, particularly for major audits, to provide a total perspective of the work to be performed.
- (iii) Selection of assistants for the jobs on the basis of capability becomes easier when the work is rationally planned, defined and segregated.
- (iv) Without a written and pre-determined programme, work is necessarily to be carried out on the basis of some 'mental' plan. In such a situation there is always a danger of ignoring or overlooking certain books and records. Under a properly framed programme, the danger is significantly less and the audit can proceed systematically.
- (v) The assistants, by putting their signature on programme, accept the responsibility for the work carried out by them individually and, if necessary, the work done may be traced back to the assistant.
- (vi) The principal can control the progress of the various audits in hand by examination of audit programmes initiated by the assistants deputed to the jobs for completed work.
- (vii) It serves as a guide for audits to be carried out in the succeeding year.
- (viii) A properly drawn up audit programme serves as evidence in the event of any

charge of negligence being brought against the auditor. It may be of considerable value in establishing that he exercised reasonable skill and care that was expected of professional auditor.

Some disadvantages are also there in the use of audit programmes but most of these can be removed by taking some concrete steps. The disadvantages are:

- (i) The work may become mechanical and particular parts of the programme may be carried out without any understanding of the object of such parts in the whole audit scheme.
- (ii) The programme often tends to become rigid and inflexible following set grooves; the business may change in its operation of conduct, but the old programme may still be carried on. Changes in staff or internal control may render precaution necessary at points different from those originally decided upon.
- (iii) Inefficient assistants may take shelter behind the programme i.e. defend deficiencies in their work on the ground that no instruction in the matter is contained therein.
- (iv) A hard and fast audit programme may kill the initiative of efficient and enterprising assistants.

All these disadvantages may be eliminated by imaginative supervision of the work carried on by the assistants; the auditor must have a receptive attitude as regards the assistants; the assistants should be encouraged to observe matters objectively and bring significant matters to the notice of supervisor/principal.

10. (a) **Satisfactory Control Environment - not an absolute deterrent to fraud:** The existence of a satisfactory control environment can be a positive factor when the auditor assesses the risks of material misstatement. However, although it may help reduce the risk of fraud, a satisfactory control environment is not an absolute deterrent to fraud. Conversely, deficiencies in the control environment may undermine the effectiveness of controls, in particular in relation to fraud. For example, management's failure to commit sufficient resources to address IT security risks may adversely affect internal control by allowing improper changes to be made to computer programs or to data, or unauthorized transactions to be processed. As explained in SA 330 "The Auditor's Responses to Assessed Risks", the control environment also influences the nature, timing, and extent of the auditor's further procedures.

The control environment in itself does not prevent, or detect and correct, a material misstatement. It may, however, influence the auditor's evaluation of the effectiveness of other controls (for example, the monitoring of controls and the operation of specific control activities) and thereby, the auditor's assessment of the risks of material misstatement.

(b) **Risk assessment procedures to obtain audit evidence about the design and implementation of relevant controls may include-**

- ◆ Inquiring of entity personnel.
- ◆ Observing the application of specific controls.
- ◆ Inspecting documents and reports.
- ◆ Tracing transactions through the information system relevant to financial reporting.

11. (a) **Examination in Depth:** It implies examination of a few selected transactions from the beginning to the end through the entire flow of the transaction, i.e., from initiation to the completion of the transaction by receipt of payment of cash and delivery or receipt of the goods. This examination consists of studying the recording of transactions at the various stages through which they have passed. At each stage, relevant records and authorities are examined; it is also judged whether the person who has exercised the authority in relation to the transactions is fit to do so in terms of the prescribed procedure. For example, if payment to a creditor is to be verified “in depth”, it would be necessary to examine the following documents:

- (i) The invoice and statement of account received from the supplier.
- (ii) The entry in the inventory record showing that the goods were received.
- (iii) The Goods Received Note and Inspection Certificate showing that the goods on receipt were verified and inspected.
- (iv) The copy of the original order and authority showing that the goods in fact were ordered by an authority which was competent to do so.

It is to be emphasised that, so far as the management is concerned, the internal control should have willing acceptance at the hands of the employees and there should exist proper mechanism for such motivation.

(b) **Work Performed by Others:** The auditor is never able to delegate his responsibility for forming important audit conclusions or for forming and expressing his opinion on the financial information. Accordingly, when he delegates work to assistants or uses work performed by other auditors or experts, the auditor should have sufficient knowledge of CIS to direct, supervise and review the work of assistants with CIS skills or to obtain reasonable assurance that the work performed by other auditors or experts with CIS skills is adequate for his purpose, as applicable.

12. (a) **Borrowing from Banks:** Borrowing from banks may be either in the form of overdraft limits or term loans. In each case, the borrowings should be verified as follows-

- (i) Reconcile the balances in the overdraft or loan account with that shown in the pass book(s) and confirm the last mentioned balance by obtaining a certificate from the bank showing the balance in the accounts as at the end of the year.

- (ii) Obtain a certificate from the bank showing particulars of securities deposited with the bank as security for the loans or of the charge created on an asset or assets of the concern and confirm that the same has been correctly disclosed and duly registered with Registrar of Companies and recorded in the Register of charges.
 - (iii) Verify the authority under which the loan or draft has been raised. In the case of a company, only the Board of Directors is authorised to raise a loan or borrow from a bank.
 - (iv) Confirm, in the case of a company, that the restraint contained in Section 180 of the Companies Act, 2013 as regards the maximum amount of loan that the company can raise has not been contravened.
 - (v) Ascertain the purpose for which loan has been raised and the manner in which it has been utilised and that this has not prejudicially affected the entity.
- (b) **Vouching- Backbone of Auditing:** Vouching is a substantive audit procedure which aims at verifying the genuineness and validity of a transaction contained in the accounting records. It involves examination of documentary evidence to support the genuineness of transaction. Thus the object of vouching is not merely to ascertain that money has been paid away; but the auditor aims to obtain reasonable assurance in respect of following assertions in regard to transactions recorded in the books of account that –
- (i) a transaction is recorded in the proper account and revenue or expense is properly allocated to the accounting period;
 - (ii) a transaction pertains to entity and took place during the relevant period;
 - (iii) all transactions which have actually occurred have been recorded;
 - (iv) all transactions were properly authorised; and
 - (v) transactions have been classified and disclosed in accordance with recognised accounting policies and practices.

Thus, it is through vouching that the auditor comes to know the genuineness of transactions recorded in the client's books of account wherefrom the financial statements are drawn up.

Apart from genuineness, vouching also helps the auditor to know the regularity and validity of the transaction in the context of the client's business, nature of the organisation and organisational rules.

Thus, the auditor's basic duty is to examine the accounts, not merely to see its arithmetical accuracy but also to see its substantial accuracy and then to make a report thereon.

This substantial accuracy of the accounts and emerging financial statements can be known principally by examination of vouchers which are the primary documents relating to the transactions. If the primary document is wrong or irregular, the whole accounting statement would, in turn, become wrong and irregular. Precisely auditor's role is to see whether or not the financial statements are wrong or irregular, and for this, vouching is simply imperative. Thus, vouching which has traditionally been the backbone of auditing does not merely involve checking arithmetical accuracy but goes much beyond and aims to check the genuineness as well as validity of transactions contained in accounting records.

13 (a) Sale Proceeds of Scrap Material:

- (i) Review the internal control on scrap materials, as regards its generation, storage and disposal and see whether it was properly followed at every stage.
- (ii) Ascertain whether the organisation is maintaining reasonable records for the sale and disposal of scrap materials.
- (iii) Review the production and cost records for determination of the extent of scrap materials that may arise in a given period.
- (iv) Compare the income from the sale of scrap materials with the corresponding figures of the preceding three years.
- (v) Check the rates at which different types of scrap materials have been sold and compare the same with the rates that prevailed in the preceding year.
- (vi) See that scrap materials sold have been billed and check the calculations on the invoices.
- (vii) Ensure that there exists a proper procedure to identify the scrap material and good quality material is not mixed up with it.
- (viii) Make an overall assessment of the value of the realisation from the sale of scrap materials as to its reasonableness.

(b) Trade Marks and Copyrights:

- (i) Obtain schedule of Trade Marks and Copyrights duly signed by the responsible officer and scrutinise the same and confirm that all of them are shown in the Balance Sheet.
- (ii) Examine the written agreement in case of assignment of Copyrights and Assignment Deed in case of transfer of trade marks. Also ensure that trade marks and copyrights have been duly registered.
- (iii) Verify existence of copyright by reference to contract between the author & the entity and note down the terms of payment of royalty.
- (iv) See that the value has been determined properly and the costs incurred for the purpose of obtaining the trade marks and copyrights have been capitalised.

- (v) Ascertain that the legal life of the trade marks and copyrights have not expired.
 - (vi) Ensure that amount paid for both the intangible assets is properly amortised having regard to appropriate legal and commercial considerations, as per the principles enunciated under AS 26 on Intangible Assets.
- (c) Machinery Acquired Under Hire-Purchase System:**
- (i) Examine the Board's Minute Book approving the purchase on hire-purchase terms.
 - (ii) Examine the hire-purchase agreement carefully and note the description of the machinery, cost of the machinery, hire purchase charges, and terms of payment and rate of purchase.
 - (iii) Assets acquired under Hire Purchase System should be recorded at the full cash value with corresponding liability of the same amount. In case cash value is not readily available, it should be calculated presuming an appropriate rate of interest.
 - (iv) Hire purchased assets are shown in the balance sheet with an appropriate narration to indicate that the enterprise does not have full ownership thereof. The interest payable along with each installments, whether separately or included therein should be debited to the interest account and not to the asset account.
- (d) Work-in-Progress:** The audit procedures regarding work-in-progress are similar to those used for raw materials and finished goods. However, the auditor has to carefully assess the stage of completion of the work-in-progress for assessing the appropriateness of its valuation. For this purpose, the auditor may examine the production/costing records (i.e., cost sheets), hold discussions with the personnel concerned, and obtain expert opinion, where necessary. The auditor may advise his client that where possible the work-in-progress should be reduced to the minimum before the closing date. Cost sheets of work-in-progress should be verified as follows-
- (i) Ascertain that the cost sheets are duly attested by the works engineer and works manager.
 - (ii) Test the correctness of the cost as disclosed by the cost records by verification of quantities and cost of materials, wages and other charges included in the cost sheets by reference to the records maintained in respect thereof.
 - (iii) Compare the unit cost or job cost as shown by the cost sheet with the standard cost or the estimated cost expected.
 - (iv) Ensure that the allocation of overhead expenses had been made on a rational basis.
 - (v) Compare the cost sheet in detail with that of the previous year. If they vary

materially, investigate the cause thereof.

- (vi) Ensure that the Work-in-Progress as at Balance Sheet date has been appropriately disclosed in Balance Sheet as per the requirements of Part I of Schedule III of the Companies Act, 2013.

14. Certificate from a Management's Expert: The computation of gratuity liability payable to employees is dependent upon several factors such as age of the employee, expected span of service in the organisation, life expectancy of the employee, prevailing economic environment, etc. Thus, it gives rise to uncertainty in the determination of provisions of liabilities. Under such circumstances, the management is required to make an assessment and estimate the amount of provision. In view of this, the management may engage an expert in the field to assist them in arriving at fair estimation of the liability. Therefore, it is an accepted auditing practice to use the work of a management's expert. SA 500 on "Audit Evidence" also states that the preparation of an entity's financial statements may require expertise in a field other than accounting or auditing, such as actuarial calculations, valuations, or engineering data. The entity may employ or engage experts in these fields to obtain the needed expertise to prepare the financial statements. It further requires the auditor to evaluate the competence, capabilities and objectivity of that expert; obtain an understanding of the work of that expert; and evaluate the appropriateness of that expert's work as audit evidence for the relevant assertion, to conclude whether or not to rely upon such a certificate obtained by the management from the actuary. Therefore, the auditor must follow the requirements of SA 500 before relying upon the certificate obtained by the management from the actuary.

15. (a) Ceiling on Number of Company Audits: As per section 141(3)(g) of the Companies Act, 2013, a person shall not be eligible for appointment as an auditor if he is in full time employment elsewhere or a person or a partner of a firm holding appointment as its auditor, if such person or partner is at the date of such appointment or reappointment holding appointment as auditor of more than twenty companies, other than one person companies, dormant companies, small companies and private companies having paid-up share capital less than ₹ 100 crore.

In the case of a firm of auditors, it has been further provided that 'specified number of companies' shall be construed as the number of companies specified for every partner of the firm who is not in full time employment elsewhere.

This limit of 20 company audits is per person. In the case of an audit firm having 3 partners, the overall ceiling will be $3 \times 20 = 60$ company audits. Sometimes, a chartered accountant is a partner in a number of auditing firms. In such a case, all the firms in which he is partner or proprietor will be together entitled to 20 company audits on his account. Subject to the overall ceiling of company audits, how they allocate the 20 audits between themselves is their affairs.

(b) Filling of a Casual Vacancy: As per Section 139(8) of the Companies Act, 2013, any casual vacancy in the office of an auditor shall-

- (i) 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 30 days.

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 3 months of the recommendation of the Board and he shall hold the office till the conclusion of the next annual general meeting;

- (ii) In the case of a company whose accounts are subject to audit by an auditor appointed by the Comptroller and Auditor-General of India, be filled by the Comptroller and Auditor-General of India within 30 days.

It may be noted that in case the Comptroller and Auditor-General of India does not fill the vacancy within the said period the Board of Directors shall fill the vacancy within next 30 days.

16. (a) Matters to be included in the auditor's report- fixed assets and inventories (CARO, 2016) - The auditor's report on the accounts of a company to which this Order applies shall include a statement on the following matters, namely:-

- (i) (a) whether the company is maintaining proper records showing full particulars, including quantitative details and situation of fixed assets;
- (b) whether these fixed assets have been physically verified by the management at reasonable intervals; whether any material discrepancies were noticed on such verification and if so, whether the same have been properly dealt with in the books of account;
- (c) whether the title deeds of immovable properties are held in the name of the company. If not, provide the details thereof;
- (ii) whether physical verification of inventory has been conducted at reasonable intervals by the management and whether any material discrepancies were noticed and if so, whether they have been properly dealt with in the books of account;

(b) Reporting to the Central Government- 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 of fraud involving such amount or amounts as may be prescribed, is being or has been committed in the company by its officers or employees, the auditor shall report the matter to the Central Government within such time and in such manner as may be prescribed.

In this regard, Rule 13 of the Companies (Audit and Auditors) Rules, 2014 has been prescribed. Sub-rule (1) of the said rule states that if an auditor of a company, in the

course of the performance of his duties as statutory auditor, has reason to believe that an offence of fraud, which involves or is expected to involve individually an amount of ₹ 1 crore or above, is being or has been committed against the company by its officers or employees, the auditor shall report the matter to the Central Government.

The manner of reporting the matter to the Central Government is as follows:

- (i) the auditor shall report the matter to the Board or the Audit Committee, as the case may be, immediately but not later than 2 days of his knowledge of the fraud, seeking their reply or observations within 45 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 along with his comments (on such reply or observations of the Board or the Audit Committee) to the Central Government within 15 days from the date 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 45 days, he shall forward his report to the Central Government along with a note containing the details of his report that was earlier forwarded to the Board or the Audit Committee for which he has not received any reply or observations;
- (iv) the report shall be sent to the Secretary, Ministry of Corporate Affairs in a sealed cover by Registered Post with Acknowledgement Due or by Speed Post followed by an e-mail in confirmation of the same;

17. (a) Reporting under Section 143(3)(f) of the Act:

Section 143(3)(f) of the Act states that -

“The auditor’s report shall also state the observations or comments of the auditors on financial transactions or matters which have any adverse effect on the functioning of the company;”

Clause (f) requires the auditor to report "the observations or comments of the auditors on financial transactions or matters which have any adverse effect on the functioning of the company". An auditor’s report may contain matters leading to modifications to the auditor’s opinion or emphasis of matter in the auditor’s report on the financial statements. Such matters may be related to issues which may have an adverse effect on the functioning of the company. The words “observations” or “comments” as appearing in clause (f) of section 143(3) are construed to have the same meaning as referring to “emphasis of matter paragraphs, situations leading to modification in the auditor’s report. Accordingly, the auditor should have made an “observation” or “comment” in the auditor’s report in order to determine the need to report under clause (f) of section 143(3). Therefore, only such "observations" or "comments" of the auditors on financial transactions or matters that have been made by the auditor in

the auditor's report which have an adverse effect on the functioning of the company are required to be reported under this clause. For the sake of clarity, it may be noted that neither the auditor's observations nor the comments made by him have any adverse effect on the functioning of a company. These observations or comments made by the auditor might contain matters which might have an adverse effect on the functioning of a company.

- (b) **Electronic form of Books of accounts:** Second proviso to section 128(1) read with the Companies (Accounts) Rules, 2014 allows a company to keep its books of account or other relevant papers in electronic mode.

However, the books of account and other relevant books and papers maintained in electronic mode shall comply with the following conditions:

- (i) the books of account and other relevant books and papers shall remain accessible in India so as to be usable for subsequent reference.
- (ii) the books of account and other relevant books and papers shall be retained completely in the format in which they were originally generated, sent or received, or in a format which shall present accurately the information generated, sent or received and the information contained in the electronic records shall remain complete and unaltered.
- (iii) the information received from branch offices shall not be altered and shall be kept in a manner where it shall depict what was originally received from the branches.
- (iv) the information in the electronic record of the document shall be capable of being displayed in a legible form.
- (v) there shall be a proper system for storage, retrieval, display or printout of the electronic records as the audit committee, if any, or the board may deem appropriate and such records shall not be disposed of or rendered unusable, unless permitted by law.
- (vi) the back-up of the books of account and other books and papers of the company maintained in electronic mode, including at a place outside India, if any, shall be kept in servers physically located in India on a periodic basis.

The company is required to intimate to the Registrar on an annual basis at the time of filing of financial statement, the following-

- (i) The name of the service provider;
- (ii) The internet protocol address of service provider;
- (iii) The location of the service provider (wherever applicable);
- (iv) Where the books of account and other books and papers are maintained on cloud, such address as provided by the service provider.

18. (a) **Director's Responsibility Statement:** According to section 134(3)(c) of the Companies Act, 2013, the report of board of directors on annual accounts shall also include a 'Director's Responsibility Statement'. However, the provisions related to Director's Responsibility Statement are provided under section 134(5) of the Companies Act, 2013 which requires to state that-

- (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;
- (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.

Here, 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; and

- (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 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.

19. (a) **Government Expenditure Audit:** Audit of government expenditure is one of the major components of government audit conducted by the office of C&AG. The basic standards set for audit of expenditure are to ensure that there is provision of funds authorised by competent authority fixing the limits within which expenditure can be incurred. Briefly, these standards are explained below:
- (i) **Audit against Rules & Orders:** The auditor has to see that the expenditure incurred conforms to the relevant provisions of the statutory enactment and is in accordance with the financial rules and regulations framed by the competent authority.
 - (ii) **Audit of Sanctions:** The auditor has to ensure that each item of expenditure is covered by a sanction, either general or special, accorded by the competent authority, authorising such expenditure.
 - (iii) **Audit against Provision of Funds:** It contemplates that there is a provision of funds out of which expenditure can be incurred and the amount of such expenditure does not exceed the appropriations made.
 - (iv) **Propriety Audit:** It is required to be seen that the expenditure is incurred with due regard to broad and general principles of financial propriety. The auditor aims to bring out cases of improper, avoidable, or in fructuous expenditure even though the expenditure has been incurred in conformity with the existing rules and regulations. Audit aims to secure a reasonably high standard of public financial morality by looking into the wisdom, faithfulness and economy of transactions.
 - (v) **Performance Audit:** This involves that the various programmes, schemes and projects where large financial expenditure has been incurred are being run economically and are yielding results expected of them. Efficiency-cum-performance audit, wherever used, is an objective examination of the financial and operational performance of an organisation, programme, authority or function and is oriented towards identifying opportunities for greater economy, and effectiveness.
- (b) **Duties of C&AG:** The Comptroller & Auditor General's (Duties, Powers and Conditions of Service) Act, 1971 lays down duties of the C&AG as under-
- (i) **Compile and submit Accounts of Union and States -** The C&AG shall be responsible for compiling the accounts of the Union and of each State from the initial and subsidiary accounts rendered to the audit and accounts offices under his control by treasuries, offices or departments responsible for the keeping of such account.
 - (ii) **General Provisions Relating to Audit -** It shall be the duty of the C&AG –
 - (a) to audit and report on all expenditure from the Consolidated Fund of India and of each State and of each Union Territory having a Legislative

Assembly and to ascertain whether the moneys shown in the accounts as having been disbursed were legally available for and applicable to the service or purpose to which they have been applied or charged and whether the expenditure conforms to the authority which governs it;

- (b) to audit and report all transactions of the Union and of the States relating to Contingency Funds and Public Accounts;
 - (c) to audit and report on all trading, manufacturing profit and loss accounts and balance-sheets and other subsidiary accounts kept in any department of the Union or of a State.
- (iii) **Audit of Receipts and Expenditure** - Where any body or authority is substantially financed by grants or loans from the Consolidated Fund of India or of any State or of any Union Territory having a Legislative Assembly, the Comptroller and Auditor General shall, subject to the provisions of any law for the time being in force applicable to the body or authority, as the case may be, audit all receipts and expenditure of that body or authority and to report on the receipts and expenditure audited by him.
- (iv) **Audit of Grants or Loans** - Where any grant or loan is given for any specific purpose from the Consolidated Fund of India or of any State or of any Union Territory having a Legislative Assembly to any authority or body, not being a foreign State or international organisation, the Comptroller and Auditor General shall scrutinise the procedures by which the sanctioning authority satisfies itself as to the fulfillment of the conditions subject to which such grants or loans were given and shall for this purpose have right of access, after giving reasonable previous notice, to the books and accounts of that authority or body.
- (v) **Audit of Receipts of Union or States** - It shall be the duty of the Comptroller and Auditor General to audit all receipts which are payable into the Consolidated Fund of India and of each State and of each Union Territory having a Legislative Assembly and to satisfy himself that the rules and procedures in that behalf are designed to secure an effective check on the assessment, collection and proper allocation of revenue and are being duly observed and to make this purpose such examination of the accounts as he thinks fit and report thereon.
- (vi) **Audit of Accounts of Stores and Inventory** - The Comptroller and Auditor General shall have authority to audit and report on the accounts of stores and inventory kept in any office or department of the Union or of a State.
- (vii) **Audit of Government Companies and Corporations** - The duties and powers of the Comptroller and Auditor General in relation to the audit of the accounts of government companies shall be performed and exercised by him in accordance with the provisions of the Companies Act, 2013. 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.

20. The Special Steps Involved in the Audit of an Educational Institution are the following:

- (i) Examine the Trust Deed, or Regulations in the case of school or college and note all the provisions affecting accounts. In the case of a university, refer to the Act of Legislature and the Regulations framed thereunder.
- (ii) Read through the minutes of the meetings of the Managing Committee or Governing Body, noting resolutions affecting accounts to see that these have been duly complied with, specially the decisions as regards the operation of bank accounts and sanctioning of expenditure.
- (iii) Check names entered in the Students' Fee Register for each month or term, with the respective class registers, showing names of students on rolls and test amount of fees charged; and verify that there operates a system of internal check which ensures that demands against the students are properly raised.
- (iv) Check fees received by comparing counterfoils of receipts granted with entries in the cash book and tracing the collections in the Fee Register to confirm that the revenue from this source has been duly accounted for.
- (v) Total up the various columns of the Fees Register for each month or term to ascertain that fees paid in advance have been carried forward and the arrears that are irrecoverable have been written off under the sanction of an appropriate authority.
- (vi) Check admission fees with admission slips signed by the head of the institution and confirm that the amount had been credited to a Capital Fund, unless the Managing Committee has taken a decision to the contrary.
- (vii) See that free studentship and concessions have been granted by a person authorised to do so, having regard to the prescribed Rules.
- (viii) Confirm that fines for late payment or absence, etc., have either been collected or remitted under proper authority.
- (ix) Confirm that hostel dues were recovered before students' accounts were closed and their deposits of caution money refunded.
- (x) Verify rental income from landed property with the rent rolls, etc.

- (xi) Vouch income from endowments and legacies, as well as interest and dividends from investment; also inspect the securities in respect of investments held.
- (xii) Verify any Government or local authority grant with the relevant papers of grant. If any expense has been disallowed for purposes of grant, ascertain the reasons and compliance thereof.
- (xiii) Report any old heavy arrears on account of fees, dormitory rents, etc, to the Managing Committee.
- (xiv) Confirm that caution money and other deposits paid by students on admission have been shown as liability in the balance sheet and not transferred to revenue.
- (xv) See that the investments representing endowment funds for prizes are kept separate and any income in excess of the prizes has been accumulated and invested along with the corpus.
- (xvi) Verify that the Provident Fund money of the staff has been invested in appropriate securities.
- (xvii) Vouch donations, if any, with the list published with the annual report. If some donations were meant for any specific purpose, see that the money was utilised for the purpose.
- (xviii) Vouch all capital expenditure in the usual way and verify the same with the sanction for the Committee as contained in the minute book.
- (xix) Vouch in the usual manner all establishment expenses and enquire into any unduly heavy expenditure under any head.
- (xx) See that increase in the salaries of the staff have been sanctioned and minuted by the Committee.
- (xxi) Ascertain that the system ordering inspection on receipt and issue of provisions, foodstuffs, clothing and other equipment is efficient and all bills are duly authorised and passed before payment.
- (xxii) Verify the inventories of furniture, stationery, clothing, provision and all equipment, etc. These should be checked by reference to Inventory Register and values applied to various items should be test checked.
- (xxiii) Confirm that the refund of taxes deducted from the income from investment (interest on securities, etc.) has been claimed and recovered since the institutions are generally exempted from the payment of income-tax.
- (xxiv) Verify the annual statements of accounts and while doing so see that separate statements of account have been prepared as regards Poor Boys Fund, Games Fund, Hostel and Provident Fund of Staff, etc.

PAPER – 7: INFORMATION TECHNOLOGY AND STRATEGIC MANAGEMENT

SECTION – A: INFORMATION TECHNOLOGY

QUESTIONS

1. Define the following terms briefly:
 - (i) Business Process Reengineering (BPR) Team
 - (ii) Business Strategy
 - (iii) Audit Software Usage
 - (iv) Web Servers
 - (v) Public Data Network
 - (vi) Micro Waves
 - (vii) Middleware
 - (viii) Pre-requisites of ACID Test for any TPS
 - (ix) Travel Management Systems
 - (x) Plastic Cards
2. Differentiate between the following:
 - (i) Logical Data Flow Diagram and Physical Data Flow Diagram
 - (ii) Organizational Business Processes and Operational Business Processes
 - (iii) Fixed and Variable Length Instructions
 - (iv) Community Cloud and Hybrid Cloud
 - (v) Serial Transmission and Parallel Transmission
 - (vi) External Threats and Internal Threats
 - (vii) Explicit Knowledge and Tacit Knowledge
 - (viii) Strategic Level Systems and Management Level Systems
 - (ix) Online Processing and Real-time Processing
 - (x) Programming Management Controls and Quality Assurance Management Controls
3. Write short note on the following:
 - (i) Order to Cash Process Flow
 - (ii) Value Chain Automation
 - (iii) Micro Architecture
 - (iv) Virtual Memory
 - (v) Public Data Network
 - (vi) Internet's TCP/IP

- (vii) Benefits of Customer Relationship Management (CRM)
- (viii) Artificial Intelligence
- (ix) Business Applications
- (x) Application areas of Grid Computing

Accounting Information Systems

4. What do you understand by Accounting Information System? Discuss some of its functions, in brief.

Flowchart

5. A XYZ bank has 500 employees. The salary paid to each employee is sum of his Basic Pay (BP), Dearness Allowance (DA) and House Rent Allowance (HRA). For computing House Rent Allowance, bank classified his employees into three classes A, B and C. The HRA for each class is computed at the rate of 30 percent, 20 percent and 10 percent of the BP respectively. The DA is computed at a flat rate of 60 percent of the Basic Pay. Draw a flow chart to determine the percentage of employee falling in each of the following salary slabs:
- (i) Above ₹ 30,000
 - (ii) ₹ 15,001 to ₹ 30,000
 - (iii) ₹ 8,001 to ₹ 15,000
 - (iv) Less than or equal to ₹ 8,000.

Relational Database Model

6. Describe Relational Database Model with example.

Business Process Automation

7. Discuss in brief the steps that are involved in implementing Business Process Automation (BPA).

Mobile Computing

8. Discuss various business applications of Mobile Computing.

Digital Data Transmission

9. What do you understand by the term 'Transmission Techniques'? Discuss its types in detail.

Business Information System (BIS)

10. "Information is said to be the currency of the present business environment and rightfully it can be said that we are living in an 'Information Age". Explain the statement.

Office Automation Systems (OAS)

11. Discuss majorly used Office Automation applications.

Decision Support Systems (DSS)

12. What is Decision Support System (DSS)? Discuss the planning languages used in DSS.

OSI Model in Telecommunication

13. Discuss Open Systems Interconnection (OSI) Model, in detail.

Applications based on Nature of Application

14. Discuss Business applications based on Nature of Application.

Client-Server Technology

15. Differentiate between Fat Client and Thin Client.

SUGGESTED ANSWERS

1. (i) **Business Process Reengineering (BPR) Team:** A BPR team is responsible to take the BPR project forward and make key decisions and recommendations. The BPR team includes active representatives from top management, business process owners, technical experts and users. The teams are of manageable size (say 10 members) to ensure well-coordinated, effective and efficient completion of the entire BPR process.
- (ii) **Business Strategy:** At the highest level, the strategy of the company is specified, which describes its long-term concepts to develop a sustainable competitive advantage in the market. An example of a business strategy is cost leadership for products in a certain domain. Business Strategy determines goals to determine Operational and Organizational Business Processes to implement Business Processes.
- (iii) **Audit Software Usage:** These procedures include the use of generalized audit software to survey the contents of data files, the use of specialized software to assess the contents of operating system parameter files and flow-charting techniques for documenting the automated applications.
- (iv) **Web Servers:** Web servers are computers that deliver web pages. Every web server has an IP address and possibly a domain name. For example, if we enter the URL <http://www.icaai.org> in our browser, this sends a request to the Web server whose domain name is icaai.org. The server then fetches the home page named and sends it to our browser. Any computer can be turned into a Web server by installing server software and connecting the machine to the Internet.

- (v) **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.
- (vi) **Micro Waves:** Micro Waves are radio waves with wavelengths ranging from one meter to as short as one millimeter, or equivalently, with frequencies between 300 MHz (0.3 GHz) and 300 GHz. These are used for communication, radar systems, radio astronomy, navigation and spectroscopy.
- (vii) **Middleware:** The network system implemented within the client/server technology is commonly called by the computer industry as Middleware. Middleware is all the distributed software needed to allow clients and servers to interact. General Middleware allows for communication, directory services, queuing, distributed file sharing, and printing.
- (viii) **Pre-requisites of ACID TEST for any TPS are as follows:**
- **Atomicity:** This means that a transaction is either completed in full or not at all. TPS systems ensure that transactions take place in their entirety. For example, if funds are transferred from one account to another, this only counts as a bona-fide transaction if both the withdrawal and deposit take place. If one account is debited and the other is not credited, it does not qualify as a transaction.
 - **Consistency:** TPS systems exist within a set of operating rules (or integrity constraints). If an integrity constraint states that all transactions in a database must have a positive value, any transaction with a negative value would be refused.
 - **Isolation:** Transactions must appear to take place in seclusion. For example, when a fund transfer is made between two accounts the debiting of one and the crediting of another must appear to take place simultaneously. The funds cannot be credited to an account before they are debited from another.
 - **Durability:** Once transactions are completed they cannot be undone. To ensure that this is the case even if the TPS suffers failure, a log will be created to document all completed transactions.
- These four conditions ensure that TPS systems carry out their transactions in a methodical, standardized and reliable manner.
- (ix) **Travel Management Systems:** Many business processes specific to Travel Management industry are automated, including ticket booking for air, bus, train, hotel, etc. It has features such as streamlined foreign travel approval process, configurable to match enterprise's foreign travel program, build-in and manage travel policy compliance, 'safe return' process for people tracking, traveller portal for up to date

information, secure traveller profile information, online retrieval of e-tickets, reservations, visas & inoculation records, management of entry visas & medical requirements, front, mid and back office tools on a single, and web based platform.

- (x) **Plastic Cards:** Plastic Cards are used to store information required in an authentication process. These cards that are used to identify a user need to go through procedural controls like application for a card, preparation of the card, issue of the card, use of the card and return of the card or card termination phases.
2. (i) **Logical Data Flow Diagram:** A Logical Data Flow Diagram (DFD) focuses on the business and how the business operates. It describes the business events that take place and the data required and produced by each event. The logical model reflects the business.

Physical Data Flow Diagram: A Physical Data Flow Diagram (DFD) shows how the system will be implemented. The physical model depicts the system.

- (ii) **Organizational Business Processes:** Organizational Business Processes are high-level processes that are typically specified in textual form by their inputs, their outputs, their expected results and their dependencies on other organizational business processes. These business processes act as supplier or consumer processes. To manage incoming raw materials provided by a set of suppliers is an example of an organizational business process. While organizational business processes characterize coarse-grained business functionality, there are multiple operational business processes that contribute to one organizational business process.

Operational Business Processes: In Operational Business Processes, the activities and their relationships are specified, but implementation aspects of the business process are disregarded. Operational business processes are specified by business process models. These are the basis for developing implemented business processes.

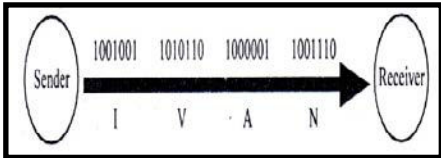
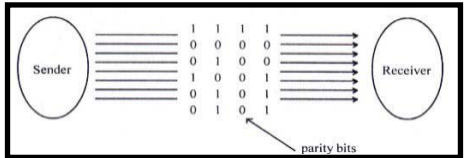
- (iii) **Fixed Length Instructions:** Instructions are translated to machine code. In some architecture, all machine code instructions are of the same length i.e. fixed length. Fixed length instructions are commonly used with RISC processors. Since each instruction occupies the same amount of space, every instruction must be long enough to specify a memory operand, even if the instruction does not use one. Hence, memory space is wasted by this form of instruction. The advantage of fixed length instructions is that they make the job of fetching and decoding instructions easier and more efficient, which means that they can be executed in less time than the corresponding variable length instructions.

Variable Length Instructions: Variable length instructions are commonly used on CISC machines. The advantage of using variable length instructions is that each instruction can use exactly the amount of space it requires, so that variable length instructions reduce the amount of memory space required for a program.

(iv) **Community Cloud:** This is the sharing of computing infrastructure in between organizations of the same community. For example, all Government organizations within India may share computing infrastructure on the cloud to manage data. The risk is that data may be stored with the data of competitors.

Hybrid Cloud: It is a composition of two or more clouds (Private, Community or Public). It is maintained by both internal and external providers. It must maintain its unique identity, but is 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.

(v) Difference between Serial Transmission and Parallel Transmission are as follows:

Serial Transmission	Parallel Transmission
In this, the data bits are transmitted serially one after another.	In this, the data bits are transmitted simultaneously.
Data is transmitted over a single wire.	Data is transmitted over eight different wires.
It is a cheaper mode of transferring data.	It is relatively expensive mode of transferring data.
It is useful for long distance data transmissions.	Not practical for long distance communications as it uses parallel paths, so cross talk may occur.
It is relatively slower.	It is relatively faster.
	

(vi) **External Threats** - These threats originate from individuals or organizations working outside an organization, which does not have authorized access to organization’s computer systems or network. They usually work their way into a network from the Internet or dialup access servers.

Internal Threats - Typically, these threats originate from individuals who have authorized access to the network. These users either have an account on a server or physical access to the network. An internal threat may come from a discontented former or current employee or contractor. It has been seen that majority of security incidents originate from internal threats.

(vii) **Explicit Knowledge:** Explicit knowledge is that which can be formalized easily and therefore is easily available across the organization. Explicit knowledge is articulated,

and represented as spoken words, written material and compiled data. This type of knowledge is codified, easy to document, transfer and reproduce. For example – Online tutorials, Policy and procedural manuals.

Tacit Knowledge: Tacit knowledge, on the other hand, resides in a few often-in just one person and hasn't been captured by the organization or made available to others. Tacit knowledge is unarticulated and represented as intuition, perspective, beliefs, and values that individuals form based on their experiences. It is personal, experimental and context-specific. It is difficult to document and communicate the tacit knowledge. For example – hand-on skills, special know-how, employee experiences.

- (viii) **Strategic - Level Systems:** These systems are for strategic managers to track and deal with strategic issues, assisting 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.

Management - Level Systems: These systems are used for the monitoring, controlling, decision-making, and administrative activities of middle management. Some of these systems deal with predictions or "what if..." type questions. e.g. "What would happen to our profits if the completion of the new production plant was delayed by 6 months?" Tracking current progress in accord with plans is another major function of systems at this level.

- (ix) **Online Processing:** In this, data is processed immediately while it is entered, the user usually only must wait a short time for a response. Games, word processing, and booking systems are examples of Online Processing. Interactive or online processing requires a user to supply an input. Interactive or online processing enables the user to input data and get the results of the processing of that data immediately.

Real-time Processing: Real time processing is a subset of interactive or online processing. Input is continuously, automatically acquired from sensors, for example, which is processed immediately to respond to the input in as little time as possible. After the system is finished responding, it reads the next set of input data immediately to process that. This system doesn't need a user to control it, it works automatically. Whenever there is a rapid reaction required due to some sort of change, real time processing can act without the need of a user or long processing time beforehand. Real time processing is used in warning systems on aircraft, alarm systems in hazardous zones, burglar alarms etc.

- (x) **Programming Management Controls:** Program development and implementation is a major phase within the systems development life cycle. The primary objectives of this phase are to produce or acquire and to implement high-quality programs. The program development life cycle comprises six major phases – Planning; Design; Control; Coding; Testing and Operation and Maintenance with Control phase running

in parallel for all the other phases. The purpose of the Control phase during software development or acquisition is to monitor progress against plan and to ensure software released for production use is authentic, accurate and complete.

Quality Assurance Management Controls: It is responsible for ensuring information systems development; implementation, operation, and maintenance conform to established quality standards. Organizations are increasingly producing safety-critical systems and users are becoming more demanding in terms of the quality of the software they employ to undertake their work. Organizations are undertaking more ambitious information systems projects that require more stringent quality requirements and are becoming more concerned about their liabilities if they produce and sell defective software.

3. (i) **Order to Cash (OTC/O2C or Sales) Process Flow:** This covers all the business processes relating to fulfilling customer requests for goods or services. It involves transactional flow of data from the initial point of documenting a customer order to the final point of collecting the cash. The typical life cycle of a sales transaction may include the following transactions:
- **Customer Order:** A purchase order is received from a customer specifying the type, quantity and agreed prices for products.
 - **Recording:** Availability of the items is checked and customer order is booked.
 - **Pick release:** The items are moved from the warehouse to the staging area.
 - **Shipping:** The items are loaded onto the carrier for transport to the customer.
 - **Invoice:** Invoice of the transaction is generated and sent to the customer.
 - **Receipt:** Money is received from the customer against the invoices.
 - **Reconciliation:** The bank reconciliation of all the receipts is performed.
- (ii) **Value Chain Automation:** This refers to separate activities which are necessary to strengthen an organization's strategies and are linked together both inside and outside the organization. It is defined as a chain of activities that a firm operating in a specific industry performs to deliver a valuable product or service for the market.

The idea of the Value Chain is based on the process view of organizations, the idea of seeing a manufacturing (or service) organization as a system, made up of subsystems each with inputs, transformation processes and outputs. Six business functions of the value chain are Research and development; Design of products, services, or processes; Production; Marketing and sales; Distribution and Customer service.

- (iii) **Micro Architecture:** Also known as Computer Organization, it is a lower level detailed description of the system that is sufficient for completely describing the operation of all parts of the computing system, and how they are inter-connected and inter-operate to implement the Information Systems Architecture (ISA). This describes the data paths, data processing elements and data storage elements, and describes how they should implement Information System Architecture. The Micro architecture be how the ISA does and what it does. It's how everything is ultimately organized on the chip or processor.
- (iv) **Virtual Memory:** Virtual Memory is in fact not a separate device but an imaginary memory area supported by some operating systems (for example, Windows) in conjunction with the hardware. If a computer lacks the Random-Access Memory (RAM) needed to run a program or operation, Windows uses virtual memory to compensate. Virtual memory combines computer's RAM with temporary space on the hard disk. When RAM runs low, virtual memory moves data from RAM to a space called a paging file. Moving data to and from the paging file frees up RAM to complete its work. Thus, Virtual memory is an allocation of hard disk space to help RAM.
- (v) **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.
- (vi) **Internet's TCP/IP:** The Internet uses a system of telecommunications protocols widely known as Internet's protocol suite called as Transmission Control Protocol /Internet Protocol (TCP/IP). TCP/IP consists of five levels of protocols that can be related to the seven layers of the OSI architecture. It is used by the Internet and by all Intranets and extranets. Many companies and other organizations are also converting their client/server networks to TCP/IP.

Five levels of TCP/IP include the following:

- Application or process layer
 - Host-to-Host Transport layer
 - Internet Protocol (IP)
 - Network Interface
 - Physical layer
- (vii) **Benefits of Customer Relationship Management (CRM):** CRM establishes the benefits of generating customer loyalty, raising a market intelligence enterprise, and an integrated relationship. Preserving existing customers and providing enhanced

services to accomplish the loyalty is expressed as CRM. The underlying standard that business exists is their customers. Developing connection and affiliation with customer and supervising it professionally and effectively so that it is advantageous to both the customer and the business is a noteworthy objective. CRM applications smoothen the progress to capture, consolidate, analysis, and enterprise-wide dissemination of data from existing and potential customers. CRM can be considered as an amalgamation of people, process and systems rather than just IT application.

(viii) Artificial Intelligence (AI): Artificial Intelligence is a research field that studies how to comprehend the intelligent human behaviours on a computer. The decisive objective of AI is to make a computer that can discover, sketch, and crack problems in parallel. Some of the commercial applications of AI are as follows:

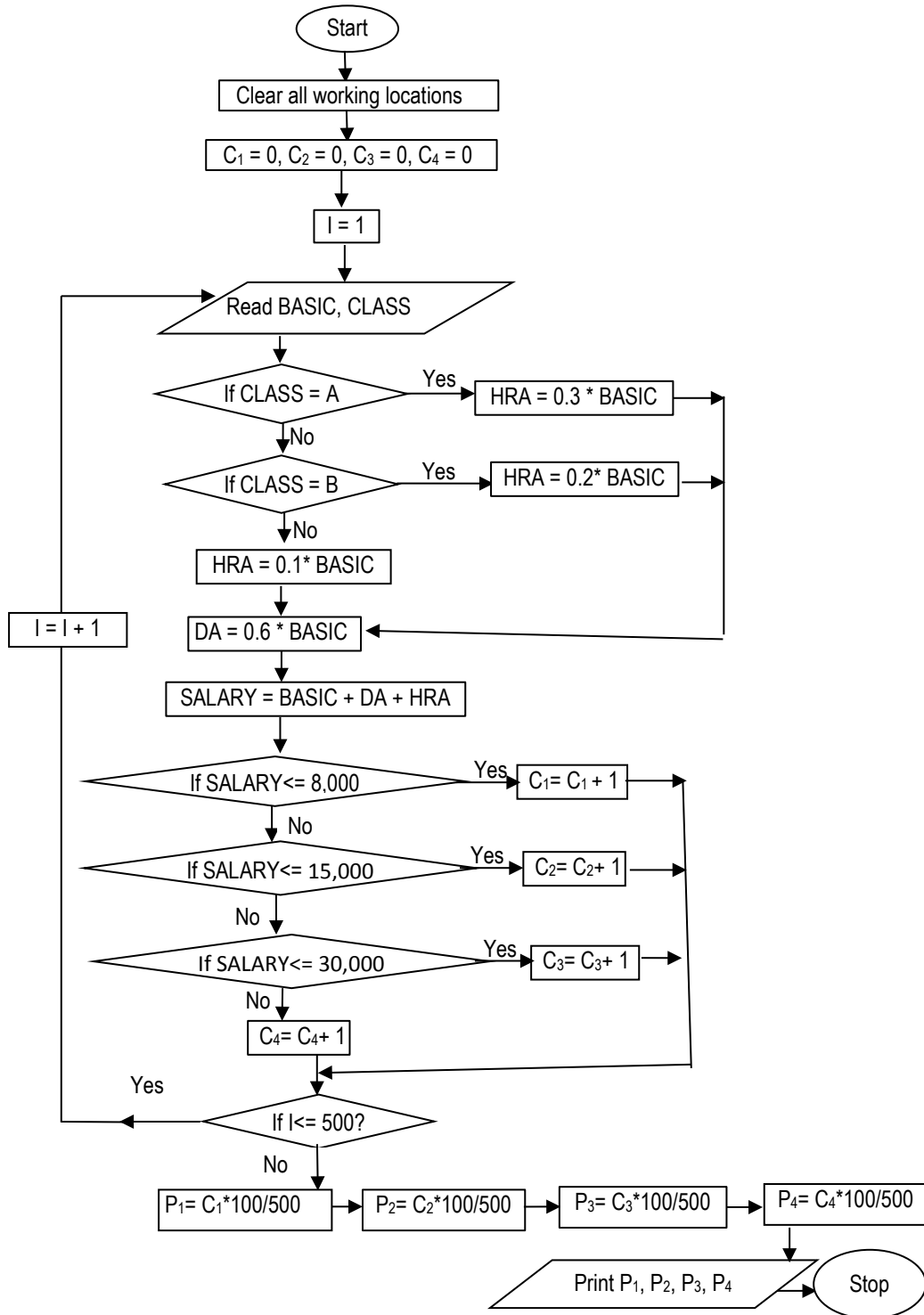
- **Decision Support:** Intelligent human–computer interface (HCI) systems can understand spoken language and gestures, and facilitate problem solving by supporting organization wide collaborations to solve problems.
- **Information Retrieval:** Natural language technology helps retrieve any sort of online information, from text to pictures, videos, maps, and audio clips, in response to English questions. Database mining for marketing trend analysis, financial forecasting, and maintenance cost reduction, and more.
- **Virtual Reality:** X-ray–like vision enabled by enhanced-reality visualization that allows brain surgeons to “see through” intervening tissue to operate, monitor, and evaluate disease progression.
- **Robotics:** Machine-vision inspections systems for gauging, guiding, identifying, and inspecting products and providing competitive advantage in manufacturing. Cutting-edge robotics systems, from micro-robots and hands and legs.

(ix) Business Applications: Business Application is defined as a computer program used to fulfil a person’s need for regular occupation or commercial activity. This means that business applications are software or set of software used by business people. Business applications can be classified based on various usages they are put to as well as user’s understanding of the application – Nature of Processing, Source of Application, Size and Complexity of business and Nature of application.

(x) Application Areas of Grid Computing are as follows:

- Civil engineers collaborate to design, execute, & analyse shake table experiments.
- An insurance company mines data from partner hospitals for fraud detection.
- An application service provider offloads excess load to a compute cycle provider.

- An enterprise configures internal & external resources to support e-Business workload.
 - Large-scale science and engineering are done through the interaction of people, heterogeneous computing resources, information systems and instruments, all of which are geographically and organizationally dispersed.
4. **Accounting Information System:** An Accounting Information System (AIS) is defined as a system of collection, storage and processing of financial and accounting data that is used by decision makers. It is generally a computer-based method for tracking accounting activity in conjunction with information technology resources. There are three basic functions of AIS and are as follows:
- (i) **Collect and store data:** Collect and store data about organization's business activities and transactions by capturing transaction data from source documents and posting data from journals to ledgers. Source documents are special forms used to capture transaction data such as sales order, sales invoice, order processing, purchase order, etc.
 - (ii) **Record transaction:** Record transactions data into journals. These journals present a chronological record of what occurred and provide management with information useful for decision making. These documents are in the form of reports like financial statements, managerial reports, etc.
 - (iii) **Safeguard organisational assets:** These provide adequate controls to ensure that data is recorded and processed accurately by safeguarding organizational assets (data and systems). The two important methods for accomplishing this objective are by providing adequate documentation of all business activities and an effective segregation of duties. Documentation allows management to verify that assigned responsibilities were completed correctly. Segregation of duties refers to dividing responsibility for different portions of a transaction among several people.
5. Abbreviations used are as follows:
- P₁: Percentage of employees falling in salary slab (salary ≤ 8,000);
P₂: Percentage of employees falling in salary slab (8,001 ≤ salary ≤ 15,000)
P₃: Percentage of employees falling in salary slab (15,001 ≤ salary ≤ 30,000)
P₄: Percentage of employees falling in salary slab (salary > 30,000)
I: Count of number of employees
C₁: Count of employees falling in salary slab (salary ≤ 8,000);
C₂: Count of employees falling in salary slab (8,001 ≤ salary ≤ 15,000)
C₃: Count of employees falling in salary slab (15,001 ≤ salary ≤ 30,000)
C₄: Count of employees falling in salary slab (salary > 30,000)
The required flowchart is given below:



6. **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. Three key terms are used extensively in relational database models: **Relations, Attributes, and Domain.**

- **Relation:** A Relation is a table with columns and rows;
- **Attributes:** The named column of the relation is called Attribute; and
- **Domain:** The Domain is defined as the set of values the attributes can take.

All relations (and, thus, tables) in a relational database must 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.

A relational database contains multiple tables, with at least similar value occurring in two different records (belonging to the same table or to different tables) that implies a relationship among those two records. Tables can also have a designated single attribute or a set of attributes that can act as a "key", which can be used to uniquely identify each record in the table.

A key that can be used to uniquely identify a row in a table is called a Primary Key. Keys are commonly used to join or combine data from two or more tables.

7. The steps involved in implementing Business Process Automation (BPA) are as follows:

Step 1: Define why we plan to implement a BPA: The primary purpose for which an enterprise implements automation may vary from enterprise to enterprise. A list of generic reasons for going for BPA may include Errors in manual processes leading to higher costs; Payment processes not streamlined; Paying for goods and services not received; Poor debtor management leading to high invoice aging and poor cash flow; Lengthy or incomplete new employee or new account on-boarding; Unable to recruit and train new employees, but where employees; Lack of management understanding of business processes; and Poor customer service.

Step 2: Understand the rules / regulation under which enterprise needs to comply with: One most important steps in automating any business process is to understand the rules of engagement, which include following the rules, adhering to regulations and following document retention requirements. This governance is established by a combination of internal corporate policies, external industry regulations and local, state, and central laws.

Step 3: Document the process, we wish to automate: At this step, all the documents that are currently being used need to be documented. The aspects that need to be kept in mind while documenting the present process could be:

- ◆ What documents need to be captured?;

- ◆ Where do they come from?;
- ◆ What format are they in: Paper, FAX, email, PDF etc.?;
- ◆ Who is involved in processing of the documents?;
- ◆ What is the impact of regulations on processing of these documents?;
- ◆ Can there be a better way to do the same job?; and
- ◆ How are exceptions in the process handled?

Step 4: Define the objectives/goals to be achieved by implementing BPA: Once the above steps have been completed, entity needs to determine the key objectives of the process improvement activities. When determining goals, remember that goals need to be **SMART - Specific:** Clearly defined; **Measurable:** Easily quantifiable in monetary terms; **Attainable:** Achievable through best efforts; **Relevant:** Entity must need these, and **Timely:** Achieved within a given time frame.

Step 5: Engage the business process consultant: This is again a critical step to achieve BPA. To decide as to which company/ consultant to partner with, depends upon the following:

- ◆ Objectivity of consultant in understanding/evaluating entity situation.
- ◆ Does the consultant have experience with entity business process?
- ◆ Is the consultant experienced in resolving critical business issues?
- ◆ Whether the consultant can recommend and implementing a combination of hardware, software and services as appropriate to meeting enterprise BPA requirements?
- ◆ Does the consultant have the required expertise to clearly articulate the business value of every aspect of the proposed solution?

Step 6: Calculate the RoI for project: The right stakeholders need to be engaged and involved to ensure that the benefits of BPA are clearly communicated and implementation becomes successful. Hence, the required business process owners must be convinced to justify the benefits of BPA and get approval from senior management.

Step 7: Developing the BPA: Once the requirements have been document, ROI has been computed and top management approval to go ahead has been received, the consultant develops the requisite BPA. The developed BPA needs to meet the objectives for which the same is being developed.

Step 8: Testing the BPA: Once developed, it is important to test the new process to determine how well it works and identify where additional “exception processing” steps need to be included. The process of testing is an iterative process, the objective being to remove all problems during this phase.

Testing allows room for improvements prior to the official launch of the new process, increases user adoption and decreases resistance to change.

8. Some of the business Applications of Mobile Computing are as follows:
- There is increase in workforce productivity as mobile device enables employees to work from anywhere, anytime by accessing and updating information as required. For example: employees can read/respond to emails using laptops, PDAs or smart phones from office, residence and even when on the move.
 - Customer service can be improved by responding to customer queries on site or off site. For example: customer complaints can be accessed and responded by accessing past/latest information of client as required.
 - Incident management can be improved by resolving problems faster without limitation of time as the concerned employees can attend to these regardless of their location.
 - Enterprises can focus on providing customers and employees using mobile devices and provide the latest information. This enables employees, customers, and businesses to be available to one another as per their choice. For example: billing can be done by employees using hand held devices at customer site and the information updated online and deliveries to customers can be speeded up.
 - Enterprises can dynamically modify and update their offerings and offer new products and services altogether. For example: enterprises can implement telecommuting with flexible working hours and locations allowing for cost savings and better efficiency.
 - Mobile computing gives users the freedom to roam, with access to data and services at any time and in any place. Most of the high-end ERP and business software applications for SMEs have in-built capabilities of mobile computing enabling users to access data.
9. **Transmission Techniques:** A communication network consists of a collection of devices (or nodes) that wish to communicate and interconnect together. The primary objective in any communication network is simply moving information from one source to one or more destination nodes. Based on the techniques used to transfer data, communication networks can be categorized into Broadcast and Switched networks.
- **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.

10. “Information is said to be the currency of the present business environment and rightfully it can be said that we are living in the ‘Information Age’”.

Information is a significant resource to an organization as it represents the organization’s tangible and intangible resources and all transactions relating to those resources. Information influences the way an organization operates. The right information, if it is transported to the right person, in the right fashion, and at the right time, can progress and guarantee organizational effectiveness and competence. The Business Information System is the mechanism used to manage and control the information resource.

An Information System is an integrated process of components for collecting, storing, processing, and communicating information. Any specific Information System aims to support operations, management and decision making. Information Systems (IS) refers to the interface of People, Processes, and Technology. People are considered as a Frontline Employees, executives and managers that need technology to process the information in fast and accurate manner. The role of information systems in the organization is shifting to support business processes rather than individual functions. The focus is outwards to customers, rather than inwards to procedures.

Information Technology is an exceptionally imperative and acquiescent resource offered to organizations. As information systems have facilitated supplementary varied human activities, they have put forth a thoughtful power over civilization. These systems have impacted the pace of growth of day-to-day activities, expanded the scope of service offerings and empowered enterprises to reach out to customers across the world without the limitations of time and space. People require information for many reasons and in varied ways. For example, we probably seek information for entertainment and enlightenment by viewing television, watching movies, browsing the Internet, listening to the radio, and reading newspapers, magazines, and books. In business, however, people and organizations seek and use information specifically to make sound decisions and to solve problems - two closely related practices that form the foundation of every successful company.

11. Office Automation Applications are as follows:

- **Word Processing:** Use of a computer to perform automatically many of the tasks necessary to prepare typed or printed documents.
- **Electronic mail:** Use of a computer network that allows users to send, store and retrieve messages using terminals and storage devices.
- **Voice Mail:** Requires computers with an ability to store audio messages digitally and convert them back upon retrieval.
- **Electronic Calendaring:** Use of a networked computer to store and retrieve a manager’s appointment calendar. Allows other managers’ calendars to be accessed and facilitates scheduling.
- **Video Conferencing:** Use of television equipment to link geographically dispersed conference participants.

- **Desktop Video Conferencing:** Video and audio equipment are attached to each workstation in the network enabling the two-way communication of picture and way communication of picture and sound.
 - **FAX:** Uses special equipment that can read a document at one end of a communication channel and make a copy at the other end.
 - **Imaging:** Uses Optical Character Recognition (OCR) to convert data on paper to a digital format for storage in a secondary storage device.
 - **Desktop Publishing:** Uses a computer to prepare output that is very close in quality to that produced by a typesetter.
12. **Decision Support System:** A Decision Support System (DSS) is a computer-based information system that supports business or organizational decision-making activities. DSSs serve the management, operations, and planning levels of an organization (usually mid and higher management) and help to make decisions, which may be rapidly changing and not easily specified in advance. DSS can be either fully computerized, human or a combination of both.
- Two types of planning languages that are commonly used in DSS are: **General-purpose planning languages** and **Special-purpose planning languages**. These are discussed below:
- ◆ **General-purpose planning languages** allow users to perform many routine tasks, for example; retrieving various data from a database or performing statistical analyses. The languages in most electronic spreadsheets are good examples of general-purpose planning languages. These languages enable user to tackle a broad range of budgeting, forecasting, and other worksheet-oriented problems.
 - ◆ **Special-purpose planning languages** are more limited in what they can do, but they usually do certain jobs better than the general-purpose planning languages. Some statistical languages, such as SAS and SPSS, are examples of special purpose planning languages.
13. Seven layers of Open Systems Interconnection (OSI) Model include the following:
- **Layer 7 or Application Layer:** The application layer of OSI layer architecture is closest to the end user, which means that both the OSI application layer and the user interact directly with the software application. This layer 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.
 - **Layer 6 or Presentation Layer:** This layer at times referred as Syntax Layer also, is usually a part of an operating system, that converts incoming and outgoing data from one presentation format to another. 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. The OSI model made this layer responsible for "graceful close" of sessions also.

- **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 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 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. It defines the relationship between a device and a physical medium.
14. Some business applications based on 'Nature of Application' are as follows:
- ◆ **Accounting Applications:** Accounting applications such as TALLY, SAP and Oracle Financials are used by business entities for day-to-day transactions of accounting and generating financial information such as balance sheet, profit and loss account and cash flow statements. These are classified as accounting applications.
 - ◆ **Office Management Software:** These applications help entities to manage their office requirements like word processors (MS Word), electronic spreadsheets (MS Excel), presentation software (PowerPoint), file sharing systems, etc. The purpose is to automate the day-to-day office work and administration.
 - ◆ **Compliance Applications:** Enterprises need to comply with applicable laws and regulations and have to adopt e-compliance for its citizens with government promoting e-filing of documents, e-payments taxes, e-storage of data, etc. A separate class of business applications are available that facilitate meeting the compliance requirements.

- ◆ **Customer Relationship Management Software:** These are specialized applications catering to the need of organizations largely in **FMCG (Fast-Moving Consumer Goods)** categories. These entities need to interact with their customers and respond to them.
 - ◆ **Management Support Software:** These are applications catering to decision-making needs of the management. For example, Management Information System are generally used by middle level managers for their decision-making needs, on the other hand Decision Support Systems are used by top management for their information requirements.
 - ◆ **ERP Software:** These applications called as Enterprise Resource Planning software, which are used by entities to manage resources optimally and to maximize the three Es i.e. Economy, Efficiency and Effectiveness of business operations.
 - ◆ **Product Lifecycle Management Software:** These business applications are used by enterprises that launch new products and are involved in development of new products.
 - ◆ **Logistics Management Software:** For large logistics managing companies, these are key business applications. These companies need to keep track of products and people across the globe to check whether there are any discrepancies that need action.
 - ◆ **Legal Management Software:** In India, a lot of effort is being put to digitize the legal system. Government of India, is keen to reduce the pendency in courts. As this process goes on legal profession in India shall need such systems. There are big legal firms in India, which are already using such business applications.
 - ◆ **Industry Specific Applications:** These are industry specific applications focused on a specific industry sector. For example, software designed especially for Banking applications, Insurance applications, Automobile dealer system, billing systems for malls, Cinema ticketing software, Travel industry related software, etc.
15. **Fat Client:** A Fat client or 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:** Thin clients use 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.

SECTION – B: STRATEGIC MANAGEMENT

Correct/Incorrect with reasoning

1. State with reasons which of the following statements are correct/incorrect:
 - (a) Managers simplify complexity by focusing on limited aspects of the environment.
 - (b) External environment must be scanned to identify strengths and weaknesses.
 - (c) Businesses aim to create and retain customer.
 - (d) In BCG matrix, question marks represent low growth, low share businesses.
 - (e) Judgement about what strategies should be pursued flows from intuition.
 - (f) To diversify organisations need to enter into businesses that are unrelated to the present business of the organisation.
 - (g) Strategies need to be segregated into functional level strategies and plans.
 - (h) A match between strategy and structure may create competitive advantage.
 - (i) In hourglass structure, more personnel are required at middle levels for effective functioning.
 - (j) Strategist in governmental organisations have lesser autonomy than their counterparts in private sector.
 - (k) There are challenges in implementing business process reengineering.

Differences between the two concepts

2. Distinguish between the following:
 - (a) Micro environment and Macro environment.
 - (b) Inbound logistics and Outbound logistics.
 - (c) Divestment strategy and Liquidation strategy.
 - (d) Logistic Management and Supply Chain Management.

Short notes

3. Write short notes on the following:
 - (a) Exchange of influence and power with environment
 - (b) Merger and acquisition
 - (c) Network organisation structure
 - (d) Place in Marketing

Brief answers

4. Briefly answer the following questions:
 - (a) Briefly explain balanced scorecard as approach for measuring company performance by setting both financial and strategic objectives and tracking achievement.
 - (b) "A company should focus on external perspective to define its mission". Support this statement with reasons."
 - (c) ABC consultancy firm receives a project from its client organisation to advise it on factors it need to consider for environmental scanning. Briefly explain these factors.

Descriptive answers*Chapter 1-Business Environment*

5. It is possible that different organisations cooperate with one another. Discuss.
6. Explain how technological factors present an opportunity as well as threat to a particular business organization.

Chapter 2-Business Policy and Strategic Management

7. Explain the dynamics of competitive strategy?
8. What tips can you offer to write a 'right' Mission Statements?

Chapter 3-Strategic Analysis

9. What are the different issues in strategic analysis?
10. What do you understand by Trigger of Change? How is trigger related to driving force?

Chapter 4-Strategic Planning

11. To convert strategic plans into actions and results, a manager should be able to implement and execute the strategy. Discuss.
12. The Management of a sick company manufacturing various electrical home appliances seeks your advice for an appropriate retrenchment strategy. What will be your advice and why?

Chapter 5-Formulation of Functional Strategy

13. 'Determining an appropriate mix of debt and equity in a firm's capital structure can be vital to successful strategy implementation'. Discuss.
14. Explain the strategic role of Human Resources Management in the following areas:
 - (a) Facilitation of Change
 - (b) Building Core Competency

(c) Development of Work Ethics and Culture

Chapter 6-Strategic Implementation and Control

15. How does the core competency and value chain linked together helps the company to be unique?
16. ABC Ltd. plans to introduce changes in its structure, technology and people. Explain how Kurt Lewin's change process can help this firm.

Chapter 7-Reaching Strategic Edge

17. To implement six sigma in an organisation is difficult. Explain the critical elements of six sigma.
18. What is Benchmarking? Explain briefly the elements involved in Benchmarking process.

SUGGESTED ANSWERS

- 1 (a) **Correct:** Often managers simplify environmental complexities by focussing on those aspects that are historically important, or confirm to their prior views. These are not perverse managerial behaviours; they are the natural behaviour of everyone faced with complexity.
- (b) **Incorrect:** An organisation possess certain internal strengths and weaknesses. External environment needs to be scanned to identify external opportunities and threats.
- (c) **Correct:** According to Peter Drucker the aim of business is to create and retain customer. Customers are the people who pay money to acquire an organization's products. Organizations cannot survive without customers.
- (d) **Incorrect:** Question Marks, also known as problem children or wildcats, are low market share business in high-growth markets. They need heavy investments with low potential to generate cash. On the other hand dogs are low-growth, low-share businesses and products. Dogs generate enough cash to maintain themselves, but do not have much future.
- (e) **Incorrect:** Strategy formulation is not a task which managers can get by with intuition, opinions, good instincts, and creative thinking. Judgments about what strategy to pursue need to flow directly from analysis of an organisational external environment and internal situation.
- (f) **Incorrect:** Diversification endeavours can be related or unrelated to existing businesses of the firm. A related diversification can be vertically integrated, horizontally integrated or concentric. In conglomerate diversification no linkages with the existing businesses exist.
- (g) **Correct:** Functional strategies are made within the higher level strategies and

guidelines. Functional managers need guidance from the business strategy in order to take decisions. Strategies need to be segregated into viable functional plans and policies. Operational plans tell the functional managers what has to be done while policies state how the plans are to be implemented.

- (h) **Correct:** A competitive advantage is created when there is a proper match between strategy and structure. Ineffective strategy/structure matches may result in company rigidity and failure, given the complexity and need for rapid changes in today's competitive landscape. Thus, effective strategic leaders seek to develop an organizational structure and accompanying controls that are superior to those of their competitors.
 - (i) **Incorrect:** 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.
 - (j) **Correct:** Strategists in governmental organizations operate with less strategic autonomy than their counterparts in private firms. Public enterprises generally cannot diversify into unrelated businesses or merge with other firms. Governmental strategists usually enjoy little freedom in altering the organizations' missions or redirecting objectives. There is also scare of public scrutiny.
 - (k) **Correct:** BPR disturbs established hierarchies and functional structures. It also involve resistance among the work-force. Reengineering takes time and expenditure, at least in the short run. Even there can be loss in revenue during the transition period. Setting of targets is tricky and difficult. If the targets are not properly set or the whole transformation not properly carried out, reengineering efforts may turn-out as a failure.
2. (a) The business environment consists of both the macro environment and the micro environment. Following are the differences between the two:
1. The micro environment refers to the forces that are very close to the company and affect its ability to do routine functions. Macro environment refers to all forces that are part of the larger periphery and distantly affect organization and micro environment.
 2. Micro environment includes the company itself, its suppliers, marketing intermediaries, customer markets and competitors. Whereas macro environment includes demography, economy, natural forces, technology, politics, legal and socio-cultural.
 3. The elements of micro environment are specific to the said business and affects its working on short term basis. The elements of macro environment are general environment and affect the working of all the firms in an industry.

- (b) Inbound logistics are the activities concerned with receiving, storing and distributing the inputs to the product/service. It includes all activities such as materials handling, stock control, transport, etc.

Outbound logistics relate to collection, storage and distribution of the product to customers. It includes all activities such as storage/warehousing of finished goods, order processing, scheduling deliveries, operation of delivery vehicles, etc.

- (c) **Divestment Strategy:** Divestment strategy involves the sale or liquidation of a portion of business, or a major division, profit centre or SBU. Divestment is usually a part of rehabilitation or restructuring plan and is adopted when a turnaround has been attempted but has proved to be unsuccessful. The option of a turnaround may even be ignored if it is obvious that divestment is the only answer.

Liquidation Strategy: Liquidation as a form of retrenchment strategy is considered as the most extreme and unattractive. It involves closing down a firm and selling its assets. It is considered as the last resort because it leads to serious consequences such as loss of employment for workers and other employees, termination of opportunities a firm could pursue, and the stigma of failure.

- (d) Supply chain management is an extension of logistic management. However, there are differences between the two. Logistical activities typically include management of inbound and outbound goods, transportation, warehousing, handling of material, fulfillment of orders, inventory management and supply/demand planning. Although these activities also form part of supply chain management, the latter is much broader. Logistic management can be termed as one of its part that is related to planning, implementing, and controlling the movement and storage of goods, services and related information between the point of origin and the point of consumption.

Supply chain management is an integrating function of all the major business activities and business processes within and across organisations. Supply Chain Management is a systems view of the linkages in the chain consisting of different channel partners – suppliers, intermediaries, third-party service providers and customers. Different elements in the chain work together in a collaborative and coordinated manner. Often it is used as a tool of business transformation and involves delivering the right product at the right time to the right place and at the right price.

3. (a) Exchange of power and influence is an area in organizational-environmental interaction. The external environment holds considerable power over the organization both by virtue of its being more inclusive as also by its command over resources, information and other inputs. External environment offers a range of opportunities, incentives and rewards on the one hand and a set of constraints, threats and restrictions on the other. In both ways, the organization is conditioned and constrained. The external environment is also in a position to impose its will

over the organization and can force it to fall in line. Governmental control over the organization is one such power relationship. Other organizations, competitors, markets, customers, suppliers, investors, etc., also exercise considerable collective power and influence over the planning and decision making processes of the organization.

In turn, the organization itself is sometimes in a position to wield considerable power and influence over some of the elements of the external environment by virtue of its command over resources and information. The same elements which exercise power over the organization are also subject to the influence and power of the organization in some respects. To the extent that the organization is able to hold power over the environment it increases its autonomy and freedom of action.

- (b) Mergers and acquisition in simple words are defined as a process of combining two or more organizations together. There is a thin line of difference between the two terms but the impact of combination is completely different in both the cases. Some organizations prefer to grow through mergers. Merger is considered to be a process when two or more companies come together to expand their business operations. In such a case the deal gets finalized on friendly terms and both the organizations share profits in the newly created entity. In a merger two organizations combine to increase their strength and financial gains along with breaking the trade barriers.

When one organization takes over the other organization and controls all its business operations, it is known as acquisition. In this process of acquisition, one financially strong organization overpowers the weaker one. Acquisitions often happen during recession in economy or during declining profit margins. The combined operations then run under the name of the powerful entity. A deal in case of an acquisition is often done in an unfriendly manner, it is more or less a forced association where the powerful organization either consumes the operation or a company in loss is forced to sell its entity.

- (c) In a network structure many activities are outsourced. It can be termed as a "non-structure" on account of its virtual elimination of in-house business functions. A corporation organized in this manner is often called a virtual organization because it is composed of a series of project groups or collaborations linked by constantly changing non-hierarchical, cobweb-like networks.

The network structure becomes useful when the environment of a firm is unstable and is expected to remain so. Under such conditions, there is usually a strong need for innovation and quick response. Instead of having salaried employees, the business may contract with people for a specific project or length of time. Long-term contracts with suppliers and distributors replace services that the company could provide for itself through vertical integration. Rather than being located in a single building or area, an organization's business functions are scattered worldwide.

The network organization structure provides an organization with increased

flexibility and adaptability to cope with rapid technological change and shifting patterns of international trade and competition. It allows a company to concentrate on its distinctive competencies, while gathering efficiencies from other firms who are concentrating their efforts in their areas of expertise.

- (d) Place stands for company activities that make the product available to target consumers. One of the most basic marketing decision is choosing the most appropriate marketing channel. Strategies should be taken for the management of channel(s) by which ownership of product is transferred from producers to customers and in many cases, the system(s) by which goods are moved from where they are produced to where they are purchased by the final customers. Strategies applicable to the middleman such as wholesalers and retailers must be designed.

The distribution policies of a company are important determinants of the functions of marketing. The decision to utilize a particular marketing channel or channels sets the pattern of operations of sales force.

4. (a) *The balanced scorecard approach:* A combination of strategic and financial objectives – The balanced scorecard approach for measuring company performance requires setting both financial and strategic objectives and tracking their achievement. Unless a company is in deep financial difficulty, such that its very survival is threatened, company managers are well advised to put more emphasis on achieving strategic objectives than on achieving financial objectives whenever a trade-off has to be made. The surest path to sustained future profitability quarter after quarter and year after year is to relentlessly pursue strategic outcomes that strengthen a company's business position and, ideally, give it a growing competitive advantage over rivals.
- (b) A business organization is a part of overall structure of society and functions within wide external environmental factors. It draws its resources from its external environment, processes them and provides output in the form of goods and services. Therefore, it is correct to say that a business enterprise should focus on external perspective to define its mission although enterprise's internal situation cannot be delinked while doing so. Bringing an external perspective justifies the very existence of company. The mission statement is a message designed to be inclusive of the expectations of all stakeholders for the performance of an enterprise / company over the long run.
- (c) Organizational environment consists of both external and internal factors. Environment must be scanned so as to determine development and forecasts of factors that will influence organizational success. The factors that need to be considered are explained below:
- **Events:** Events are important and specific happenings in the internal or external organisational environment which can be observed and tracked.

- **Trends:** Trends are grouping of similar or related events that tend to move in a given direction, increasing or decreasing in strength or frequency of observation.
 - **Issues** are the current concerns that arise in response to events and trends. Identifying an emerging issue is more difficult.
 - **Expectations** are the demands made by interested groups in the light of their concern for issues.
5. Businesses cooperate with one other for their mutual benefit. In the process of cooperation, the members look at their own business objectives and identify areas of cooperation for mutual interest. Cooperation is often achieved through cartelisation, kieretsus and in family based organisations.
- (i) **Cartelisation:** Many a times, some companies form group or cartel to make market suitable to them. In cartelisation interest of their members is paramount. These group create monopoly kind situation. Cartelisation is not taken in healthy sense. We all know about famous cartel in Middle East market as OPEC, which try to create the price and supply chain scenario of oil to protect their interest.
- (ii) **Kieretsus:** Kieretsus is a loosely-coupled group of companies, usually in related industries. It is a Japanese term which is used for large cooperative networks of businesses. Kieretsus members are peers and may own significant amounts of each other's stock and have many board members in common.
- The primary purpose of a kieretsu is not to share information or agree industry standards, but to share purchasing, distribution or any other functions. In kieretsu members remain independent companies. The only strategy they have in common is to prefer to do business with other kieretsu members, both when buying and selling. The formation of kieretsu allows a manufacturer to establish, stable, long term partnerships.
- (iii) **Family owned co-operation:** Many a time ownership groups are engaged in the management of their enterprise in a direct manner. Commonly, the ownership group is nothing but a family and its kith and kin. In India, a very large number of business enterprises, big, medium and small, are family-managed enterprises. These include large business houses such as Tata, Birla, Godrej, Reliance, Modi, Escorts and so on. Major decisions and sometimes even minor decisions are made by members of the family who manage the enterprise. It is possible that cooperation happens automatically in families. At the same time, conflicts can distort their behaviour.
6. Technology is the most dynamic of all the environmental factors. Changes in technology vitally affect the enterprise's costs, profitability, plant location decisions, product lines, growth and development. The technology and business are highly interrelated and interdependent also. Technology is patronized by business. Technology also drives business and makes a total change on how it is carried out.
- 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. For example, an innovative and modern production system can act as weakness if the business is not able to change their production system. New entrants or existing competitors can always use availability of technological improvements in products or production methods that can be a threat to a business.

Technological opportunities and threats are not limited to the product or production. Technology permeates whole gambit of business. It can transform how a business acts and functions.

7. Strategic thinking involves orientation of the firm's internal environment with the changes of the external environment. The competitive strategy evolves out of consideration of several factors that are external to the firm as shown in the figure - Context in which competitive strategy is formulated.

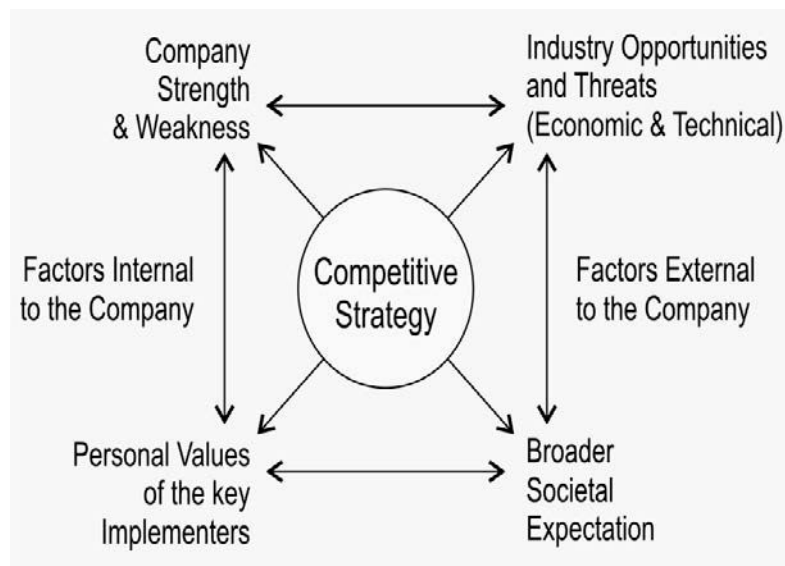


Figure: Context in which competitive strategy is formulated

The economic and technical components of the external environment are considered as major factors leading to new opportunities for the organization and closing threats. Similarly, the broader expectation of the society in which the organization operates is again an important factor to determine the competitive strategy. The strengths and weaknesses of organizations are the internal factors, which determine the corporate strategy. It is to be analysed and found out in which functional area such as marketing, R & D, operations, etc. the organization has superiority over the competitors. Strengths are

to be considered in the context of the opportunities arising in the external environment. The personal values of the key implementers also play major roles in formulating the competitive strategy.

8. Mission statements broadly describe an organizations present capabilities, customer focus, activities, and business makeup. Following points are useful while writing mission of a company:
 - Good mission statements are highly personalized – unique to the organization for which they are developed.
 - One of the roles of a mission statement is to give the organization its own special identity, business emphasis and path for development.
 - A company's business is defined by what needs it is trying to satisfy, customer groups it is targeting, technologies and competencies it uses and the activities it performs.
 - Technology, competencies and activities are important in defining a company's business because they indicate the boundaries on its operation.
 - The mission should not be to make profit.
9. The following are the different issues which must be considered in strategic analysis:
 - (i) **Time line:** There are different forces that drive and constrain strategy and that must be balanced in any strategic decision. An important aspect of strategic analysis is to consider the possible implications of routine decisions. Strategy of a business, at a point of time, is result of a series of small decisions taken over an extended period. A manager who tries to increase the growth momentum of an organization is materially changing strategy.
 - (ii) **Balancing:** The process of strategy formulation is often described as one of the matching the internal potential of the organization with the environmental opportunities. As perfect match between the two may not be feasible, strategic analysis involves a workable balance between diverse and conflicting considerations. A manager working on a strategic decision has to balance opportunities, influences and constraints. There are pressures that are driving towards a choice such as entering a new market. Simultaneously there are constraints that limit the choice such as existence of a big competitor.
 - (iii) **Risk:** The complexity and intermingling of variables in the environment reduces the strategic balance in the organization. Competitive markets, liberalization, globalization, booms, recessions, technological advancements, inter-country relationships all affect businesses and pose risk at varying degree. An important aspect of strategic analysis is to identify potential imbalances or risks and assess their consequences. A broad classification of the strategic risk that requires consideration in strategic analysis is given below:

		Time	
		Short-term	Long-term
Strategic Risks	External	Errors in interpreting the environment cause strategic failure.	Changes in the environment lead to obsolescence of strategy.
	Internal	Organizational capacity is unable to cope up with strategic demands.	Inconsistencies with the strategy are developed on account of changes in internal capacities and preferences

External risk is on account of inconsistencies between strategies and the forces in the environment. Internal risk occurs on account of forces that are either within the organization or are directly interacting with the organization on a routine basis.

10. Triggers of change: Triggers are fundamental character to make movements. The intensity of competition is determined by the triggers. Triggers hits the driving force and driving force creates impact on competition. This analysis has two steps:

- Identify most common driving forces causing the competition.
- Find how much it is creating impact on competition.

There is popular concept of life cycle of the product. The life cycle change is applicable to the whole industries. But we know that there are other factors also which provide stimulant for changes.

The trigger hits the driving force. Industry and competition changes because of force and motion in business. The most dominant force or reason for change is called driving force. This driving forces have biggest influences on kind of competition that will take place in industry. Most powerful driving force is good enough to make quality upgradation. Some of the categories of drivers are to take the industry on the top in the quality, awareness, stability etc. Many events can affect an industry powerfully enough to qualify as driving force. Some of them can be industry specific and some of them can be general. Some of the categories of drivers are the following:

- The internet and the new e-commerce opportunities and threats it breeds in the industry.
- Increasing globalization.
- Changes in the long-term industry growth rate.
- Product innovation.
- Marketing innovation.
- Entry or exit of major forms.

- Diffusion of technical know-how across more companies and more countries.
- Changes in cost and efficiency.

11. Managing strategy implementation and execution is an operations-oriented, activity aimed at shaping the performance of core business activities in a strategy-supportive manner. It is easily the most demanding and time-consuming part of the strategy-management process. To convert strategic plans into actions and results, a manager must be able to direct organizational change, motivate people, build and strengthen company competencies and competitive capabilities, create a strategy-supportive work climate, and meet or beat performance targets.

In most situations, managing the strategy-execution process includes the following principal aspects:

- Staffing the organization with the needed skills and expertise, consciously building and strengthening strategy-supportive competencies and competitive capabilities, and organizing the work effort.
- Developing budgets that steer ample resources into those activities critical to strategic success.
- Ensuring that policies and operating procedures facilitate rather than impede effective execution.
- Using the best-known practices to perform core business activities and pushing for continuous improvement.
- Installing information and operating systems that enable company personnel to better carry out their strategic roles day in and day out.
- Motivating people to pursue the target objectives energetically.
- Tying rewards and incentives directly to the achievement of performance objectives and good strategy execution.
- Creating a company culture and work climate conducive to successful strategy implementation and execution.
- Exerting the internal leadership needed to drive implementation forward and keep improving strategy execution. When the organization encounters stumbling blocks or weaknesses, management has to see that they are addressed and rectified quickly.

Good strategy execution involves creating strong "fits" between strategy and organizational capabilities, between strategy and the reward structure, between strategy and internal operating systems, and between strategy and the organization's work climate and culture.

12. A sick company has huge accumulated losses that have eroded its net worth. The electric home appliance company may analyse its various products to take decisions on

their individual viability.

Retrenchment becomes necessary for coping with hostile and adverse situations in the environment and when any other strategy is likely to be suicidal. The nature, extent and timing of retrenchment are matters to be carefully decided by management, depending upon each contingency.

Retrenchment strategy is adopted because:

- The management no longer wishes to remain in business either partly or wholly due to continuous losses and unviability.
- The environment faced is threatening.
- Stability can be ensured by reallocation of resources from unprofitable to profitable businesses.

Retrenchment grand strategy is followed when an organization substantially reduces the scope of its activity. This is done through an attempt to find out the problem areas and diagnose the causes of the problems. Next, steps are taken to solve the problems. These steps result in different kinds of retrenchment strategies.

Turnaround strategy: If the organization chooses to transform itself into a leaner structure and focuses on ways and means to reverse the process of decline, it adopts a turnaround strategy. It may try to reduce costs, eliminate unprofitable outputs, generate revenue, improve coordination, better control, and so on. It may also involve changes in top management and reorienting leadership.

Divestment Strategy: Divestment strategy involves the sale or liquidation of a portion of business, or a major division, profit centre or SBU. Divestment is usually a part of rehabilitation or restructuring plan and is adopted when a turnaround has been attempted but has proved to be unsuccessful.

Liquidation Strategy: In the retrenchment strategy, the most extreme and unattractive is liquidation strategy. It involves closing down a firm and selling its assets.

It is considered as the last resort because it leads to serious consequences such as loss of employment for workers and other employees, termination of opportunities where a firm could pursue any future activities, and the stigma of failure. Liquidation strategy may be unpleasant as a strategic alternative but when a "dead business is worth more than alive", it is a good proposition.

The management of a Sick company manufacturing various electrical home appliances be explained about the each of the above three options of retrenchment strategy with their pros and cons. But the appropriate advice with respect to a particular option of retrenchment strategy will depend on the specific circumstances of each electrical home appliances and management goals of the company.

13. Successful strategy implementation often require additional capital. Besides net profit from operations and the sale of assets, two basic sources of capital for an organization are debt and equity. Being a financial manager to determine an appropriate mix of debt and equity in a firm's capital structure can be vital to successful strategy implementation. Fixed debt obligations generally must be met, regardless of circumstances. This does not mean that stock issuances are always better than debt for raising capital. If ordinary stock is issued to finance strategy implementation; ownership and control of the enterprise are diluted. This can be a serious concern in today's business environment of hostile takeovers, mergers, and acquisitions.

The major factors regarding which strategies have to be made by a financial manager are: capital structure; procurement of capital and working capital borrowings; reserves and surplus as sources of funds; and relationship with lenders, banks and financial institutions. Strategies related to the sources of funds are important since they determine how financial resources will be made available for the implementation of strategies. Organizations have a range of alternatives regarding the sources of funds. While one company may rely on external borrowings, another may follow a policy of internal financing.

14. (a) **Facilitation of change:** The Human resource will be more concerned with substance rather than form, accomplishments rather than activities, and practice rather than theory. The personnel function will be responsible for furthering the organization not just maintaining it. Human resource management will have to devote more time to promote changes than to maintain the status quo.
- (b) **Building core competency:** The human resource manager has a great role to play in developing core competency by the firm. A core competence is a unique strength of an organization which may not be shared by others. If the business is organized on the basis of core competency, it is likely to generate competitive advantage. Because of this reason, many organizations have restructured their businesses by divesting those businesses which do not match core competence.
- (c) **Development of works ethics and culture:** As changing work ethic requires increasing emphasis on individuals, jobs will have to be redesigned to provide challenge. Flexible starting and quitting times for employees may be necessary. Focus will shift from extrinsic to intrinsic motivation. A vibrant work culture will have to be developed in the organizations to create an atmosphere of trust among people and to encourage creative ideas by the people. Far reaching changes with the help of technical knowledge will be required for this purpose.
15. Core competences in separate activities may provide competitive advantage for an organization, but nevertheless over time may be imitated by competitors. Core competences are likely to be more robust and difficult to imitate if they relate to the management of linkages within the organization's value chain and linkages into the supply and distribution chains. It is the management of these linkages which provides

'leverage' and levels of performance which are difficult to match.

The management of internal linkages in the value chain could create competitive advantage in a number of ways:

- There may be important linkages between the primary activities. For example, a decision to hold high levels of finished stock might ease production scheduling problems and provide for a faster response time to the customer. However, it will probably add to the overall cost of operations. An assessment needs to be made of whether the value added to the customer by this faster response through holding stocks is greater than the added cost.
- It is easy to miss this issue of managing linkages between primary activities in an analysis if, for example, the organization's competences in marketing activities and operations are assessed separately.
- The management of the linkages between a primary activity and a support activity may be the basis of a core competence. It may be key investments in systems or infrastructure which provides the basis on which the company outperforms competition. Computer-based systems have been exploited in many different types of service organization and have fundamentally transformed the customer experience.
- Linkages between different support activities may also be the basis of core competences.

In addition to the management of internal linkage, competitive advantage may also be gained by the ability to complement/co-ordinate the organization's own activities with those of suppliers, channels or customers. Again, this could occur in a number of different ways:

- Vertical integration attempts to improve performance through ownership of more parts of the value system, making more linkages internal to the organization. However, the practical difficulties and costs of co-ordinating a wider range of internal activities can outweigh the theoretical benefits.
- Within manufacturing industry, the competence in closely specifying requirements and controlling the performance of suppliers (sometimes linked to quality checking and/or penalties for poor performance) can be critical to both quality enhancement and cost reduction.
- A more recent philosophy has been total quality management, which seeks to improve performance through closer working relationships between the specialists within the value system. For example, many manufacturers will now involve their suppliers and distributors at the design stage of a product or project.
- The merchandising activities which manufacturers undertake with their distributors are now much improved and are an important

16. The changes in the environmental forces often require businesses to make modifications in their existing strategies and bring out new strategies. Strategic change is a complex process and it involves a corporate strategy focused on new markets, products, services and new ways of doing business.

To make the change lasting, Kurt Lewin proposed three phases of the change process for moving the organization from the present to the future. These stages are unfreezing, changing and refreezing.

- (a) **Unfreezing the situation:** The process of unfreezing simply makes the individuals or organizations aware of the necessity for change and prepares them for such a change. Lewin proposes that the changes should not come as a surprise to the members of the organization. Sudden and unannounced change would be socially destructive and morale lowering. The management must pave the way for the change by first “unfreezing the situation”, so that members would be willing and ready to accept the change.

Unfreezing is the process of breaking down the old attitudes and behaviours, customs and traditions so that they start with a clean slate. This can be achieved by making announcements, holding meetings and promoting the ideas throughout the organization.

- (b) **Changing to New situation:** Once the unfreezing process has been completed and the members of the organization recognise the need for change and have been fully prepared to accept such change, their behaviour patterns need to be redefined. H.C.Kellman has proposed three methods for reassigning new patterns of behaviour. These are compliance, identification and internalisation.

- **Compliance:** It is achieved by strictly enforcing the reward and punishment strategy for good or bad behaviour. Fear of punishment, actual punishment or actual reward seems to change behaviour for the better.
- **Identification:** Identification occurs when members are psychologically impressed upon to identify themselves with some given role models whose behaviour they would like to adopt and try to become like them.
- **Internalization:** Internalization involves some internal changing of the individual's thought processes in order to adjust to a new environment. They have given freedom to learn and adopt new behaviour in order to succeed in the new set of circumstances.

- (c) **Refreezing:** Refreezing occurs when the new behaviour becomes a normal way of life. The new behaviour must replace the former behaviour completely for successful and permanent change to take place. In order for the new behaviour to become permanent, it must be continuously reinforced so that this newly acquired behaviour does not diminish or extinguish.

Change process is not a one time application but a continuous process due to

dynamism and ever changing environment. The process of unfreezing, changing and refreezing is a cyclical one and remains continuously in action.

17. The critical elements of six sigma can be put into six themes as follows:

- **Theme one** – *genuine focus on the customer*: Companies launching six sigma often to find that how little they really understand about their customers. In six sigma, customer focus becomes the top priority. For example, the measures of six sigma performance begin with the customer. Six sigma improvements are defined by their impact on customer satisfaction and value.
- **Theme two** – *data and fact-driven management*: Six sigma takes the concept 'of "management by fact" to a new, more powerful level. Despite the attention paid in recent years to improved information systems, knowledge management, and so on, many business decisions are still being based on opinions, assumptions and gut feeling. Six sigma disciplines begins by clarifying what measures are key to gauging business performance and then gathers data and analyzes key variables. Problems are effectively defined, analyzed, and resolved. Six sigma also helps managers to answer two essential questions to support data-driven decisions and solutions.
 - What data/information is really required?
 - How to use the data/information for maximum benefit?
- **Theme three** – *processes are where the action is*: Designing products and services, measuring performance, improving efficiency and customer satisfaction and so on. Six sigma positions the process as the key vehicle of success. One of the most remarkable breakthroughs in Six Sigma efforts to date has been convincing leaders and managers. Process may relate to build competitive advantage in delivering value to customers.

Theme four – *proactive management*: In simple terms, being proactive means acting in advance of events rather than reacting to them. In the real world, though, proactive management means making habits out of what are, too often, neglected business practices: defining ambitious goals and reviewing them frequently, setting clear priorities, focusing on problem prevention rather than fire-fighting, and questioning why we do things instead of blindly defending them.
- **Theme five** – *boundaryless collaboration*: "Boundarylessness" is one of Jack Welch's mantras for business success. Years before launching six sigma, GE's chairman was working to break barriers and to improve teamwork up, down, and across organizational lines. The opportunities available through improved collaboration within companies and with vendors and customers are huge. Billions of dollars are lost every day because of disconnects and outright competition between groups that should be working for a common cause: providing value to customers.

- **Theme six – drive for perfection; tolerate failure:** Organizations need to make efforts to achieve perfection and yet at the same time tolerate failure. In essence, though, the two ideas are complementary. No company will get even close to six sigma without launching new ideas and approaches-which always involve some risk. Six sigma cannot be implemented by individuals who are overly cautious and are scared of making mistakes.
18. Benchmarking is an approach of setting goals and measuring productivity of firms based on best industry practices or against the products, services and practices of its competitors or other acknowledged leaders in the industry. It developed out of need to have information against which performance can be measured. Benchmarking helps businesses in improving performance by learning from the best practices and the processes by which they are achieved. Thus, benchmarking is a process of continuous improvement in search for competitive advantage. Firms can use benchmarking practices to achieve improvements in diverse range of management functions like product development, customer services, human resources management, etc.

The various steps in Benchmarking Process are as under:

- (i) **Identifying the need for benchmarking:** This step will define the objectives of the benchmarking exercise. It will also involve selecting the type of benchmarking. Organizations identify realistic opportunities for improvements.
- (ii) **Clearly understanding existing decisions processes:** The step will involve compiling information and data on performance.
- (iii) **Identify best processes:** Within the selected framework best processes are identified. These may be within the same organization or external to them.
- (iv) **Comparison of own process and performance with that of others:** Benchmarking process also involves comparison of performance of the organization with performance of other organization. Any deviation between the two is analysed to make further improvements.
- (v) **Prepare a report and implement the steps necessary to close the performance gap:** A report on benchmarking initiatives containing recommendations is prepared. Such a report also contains the action plans for implementation.
- (vi) **Evaluation:** Business organizations evaluate the results of the benchmarking process in terms of improvements vis-à-vis objectives and other criteria set for the purpose. It also periodically evaluates and reset the benchmarks in the light of changes in the conditions that impact the performance.