

**PART – I: ANNOUNCEMENTS STATING APPLICABILITY & NON-APPLICABILITY
For May, 2018 EXAMINATION**

A. Applicable for May, 2018 Examination

I. Companies Act, 2013

Relevant sections of the Companies Act, 2013 notified up to 31st October, 2017 will be applicable for May, 2018 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, 2018 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 with contingencies (viz. paragraphs	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 impairment of financial assets such	Footnote has been modified.

		1(a), 2, 3.1, 4 (4.1 to 4.4), 5 (5.1 to 5.6), 6, 7 (7.1 to 7.3), 9.1 (relevant portion), 9.2, 10, 11, 12 and 16) stand withdrawn except to the extent they deal with impairment of assets not covered by other Indian Accounting Standards.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.	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 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 because no obligation exists at	No liability for proposed dividends must be created now. Such proposed dividends are to be disclosed in the notes.

			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., 'Amalgamation Adjustment	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., 'Amalgamation Adjustment	Corresponding debit on account of statutory reserve in case of amalgamation in the nature of purchase is termed as 'Amalgamatio

		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.	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.	n 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
AS 29	35 (An extract)	The amount of a provision should not be discounted to its present value.	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) should not reflect risks for which future cash flow estimates have been adjusted. Periodic unwinding of discount should	Now discounting of provision for decommissioning, restoration and similar liabilities should be done as per the pre-tax discount rate as mentioned therein.

			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. Provisions of the Companies Act, 2013 related with Liquidation of Companies

As per Section 2 (94A) of the Companies Act, 2013, winding up means winding up under this Act. As per section 270, the provision of Part I should apply to the winding up of a company by the Tribunal under this Act.

Circumstances in which Company may be Wound Up by Tribunal [Section 271]

- (a) The company has resolved that the company be wound up by the Tribunal.
- (b) The company has acted against the interests of the sovereignty and integrity of India, the security of the State, friendly relations with foreign States, public order, decency or morality
- (c) The Registrar or any other person authorized by the Central Government by notification under this Act can make an application to tribunal. The Tribunal is of the opinion that the affairs of the company have been conducted in a fraudulent manner or the company was formed for fraudulent and unlawful purpose or the persons concerned in the formation or management of its affairs have been guilty of fraud, misfeasance or misconduct in connection therewith and that it is proper that the company be wound up.
- (d) The company has made a default in filing with the Registrar its financial statements or annual returns for immediately preceding 5 consecutive financial years.
- (e) The Tribunal is of the opinion that it is just and equitable that the company should be wound up.

A company may file petition for winding up under section 272 of the Companies Act, 2013. Petition for winding up to Tribunal can be made by the company, any contributory or contributories, the registrar, any person authorized by Central Govt. in that behalf or in case affairs of the company have been conducted in a fraudulent manner, by the Central Government or a State Government.

Petition by Contributory

A contributory should be entitled to present a petition for the winding up of a company. Shares in respect of which he is a contributory were either originally allotted to him or have been held by him for at least 6 months during the 18 months immediately before the commencement of the winding up and registered in his name or have transferred to him through the death of a former holder.

Petition by Registrar

The Registrar should be entitled to present a petition for winding up under section 271, except on the grounds specified in section 271 (a) or (e). The Registrar should obtain the previous sanction of the Central Government to the presentation of a petition. The Central Government should not accord its sanction unless the company has been given a reasonable opportunity of making representations.

Petition by Company

A petition presented by the company for winding up before the Tribunal should be admitted only if accompanied by a statement of affairs in such form and in such manner as may be prescribed.

A copy of the petition made under this section should also be filed with the Registrar and the Registrar should, without prejudice to any other provisions, submit his views to the Tribunal within 60 days of receipt of such petition.

A company may be wound up voluntarily [Section 304¹],:

- (a) if the company in general meeting passes a resolution requiring the company to be wound up voluntarily as a result of the expiry of the period for its duration, if any, fixed by its articles or on the occurrence of any event in respect of which the articles provide that the company should be dissolved; or
- (b) if the company passes a special resolution that the company be wound up.

Liquidators' Statement of Account

In case of Compulsory wound-up, the Company Liquidator should keep proper books in such manner, as may be prescribed, in which he should cause entries or minutes to be made of proceedings at meetings and of such other matters as may be prescribed.

¹Applicable until 31 March 2017; with effect from 1 April 2017, Section 59 of the Insolvency and Bankruptcy Code, 2016 is applicable.

Any creditor or contributory may, subject to the control of the Tribunal, inspect any such books, personally or through his agent.

While preparing the liquidator's statement of account, receipts are shown in the following order:

- (a) Amount realised from assets are included in the prescribed order.
- (b) In case of assets specifically pledged in favour of creditors, only the surplus from it, if any, is entered as 'surplus from securities'.
- (c) In case of partly paid up shares, the equity shareholders should be called up to pay necessary amount (not exceeding the amount of uncalled capital) if creditors' claims/claims of preference shareholders can't be satisfied with the available amount. Preference shareholders would be called upon to contribute (not exceeding the amount as yet uncalled on the shares) for paying of creditors.
- (d) Amounts received from calls to contributories made at the time of winding up are shown on the Receipts side.
- (e) Receipts per Trading Account are also included on the Receipts side.
- (f) Payments made to redeem securities and cost of execution and payments per Trading Account are deducted from total receipts.

Payments are made and shown in the following order:

- (a) Legal charges;
- (b) Liquidator's expenses;
- (c) Debenture holders (including interest up to the date of winding up if the company is insolvent and to the date of payment if it is solvent);
- (d) Creditors:
 - (i) Preferential (in actual practice, preferential creditors are paid before debenture holders having a floating charge);
 - (ii) Unsecured creditors;
- (e) Preferential shareholders (Arrears of dividends on cumulative preference shares should be paid up to the date of commencement of winding up); and
- (f) Equity shareholders.

Commencement of Winding Up by Tribunal [Section 357]

Where, before the presentation of a petition for the winding up of a company by the Tribunal, a resolution has been passed by the company for voluntary winding up, the winding up of the company should be deemed to have commenced at the time of the passing of the resolution, and unless the Tribunal, on proof of fraud or mistake, thinks fit

to direct otherwise, all proceedings taken in the voluntary winding up should be deemed to have been validly taken.

In any other case, the winding up of a company by the Tribunal should be deemed to commence at the time of the presentation of the petition for the winding up.

Exclusion of Certain Time in Computing Period of Limitation [Section 358]

Notwithstanding anything in the Limitation Act, 1963, or in any other law for the time being in force, in computing the period of limitation specified for any suit or application in the name and on behalf of a company which is being wound up by the Tribunal, the period from the date of commencement of the winding up of the company to a period of one year immediately following the date of the winding up order should be excluded.

Statement of Affairs

In case of winding up by Tribunal, Section 272(5) of the Companies Act, 2013 provides that a petition presented by the company for winding up before the Tribunal shall be admitted only if accompanied by a statement of affairs in such form and in such manner as may be prescribed.

In accordance with Section 274(1), where a petition for winding up is filed before the Tribunal by any person other than the company, the Tribunal shall, if satisfied that a prima facie case for winding up of the company is made out, by an order direct the company to file its objections along with a statement of its affairs within thirty days of the order in such form and in such manner as may be prescribed. The Tribunal may allow a further period of thirty days in a situation of contingency or special circumstances.

The broad lines on which the Statement of Affairs is prepared are the following —

- (1) Include assets on which there is no fixed charge at the value they are expected to realise. Students should note to include calls in arrear but not uncalled capital.
- (2) Include assets on which there is a fixed charge. The amount expected to be realised would be compared with the amount due to the creditor concerned. Any **surplus** is to be extended to the other column. A **deficit** (the amount owed to the creditor exceeding the amount realisable from the asset) is to be added to unsecured creditors.
- (3) The total of assets in point (1) and any surplus from assets mentioned in point (2) is available for all the creditors (except secured creditors already covered by specifically mortgaged assets).
- (4) From the total assets available, the following should be deducted one by one:-
 - (i) Preferential creditors,
 - (ii) Debentures having a floating charge, and
 - (iii) Unsecured creditors.

If a minus balance emerges, there would be deficiency as regards creditors, otherwise there would be a surplus.

- (5) The amount of total paid-up capital (giving details of each class of shares) should be added and the figure emerging will be deficiency (or surplus) as regards members.

Note: Statement of affairs should accompany eight lists:

List A Full particulars of every description of property not specifically pledged and included in any other list are to be set forth in this list.

List B Assets specifically pledged and creditors fully or partly secured.

List C Preferential creditors for rates, taxes, salaries, wages and otherwise.

List D List of debenture holders secured by a floating charge.

List E Unsecured creditors.

List F List of preference shareholders.

List G List of equity shareholders.

List H Deficiency or surplus account.

Deficiency Account

The official liquidator will specify a date for period (minimum three years) beginning with the date on which information is supplied for preparation of an account to explain the deficiency or surplus. On that date either assets would exceed capital plus liabilities, that is, there would be a reserve or there would be a deficit or debit balance in the Profit and Loss Account. The Deficiency account is divided into two parts:

1. The first part starts with the deficit (on the given date) and contains every item that increases deficiency (or reduces surplus such as losses, dividends etc.).
2. The second part starts with the surplus on the given date and includes all profits.

If the total of the first exceeds that of the second, there would be a deficiency to the extent of the difference, and if the total of the second part exceeds that of the first, there would be a surplus.

Overriding Preferential Payments [Section 326]: In the winding up of a company under this Act, the following debts should be paid in priority to all other debts:

- a. workmen's dues; and
- b. where a secured creditor has realized a secured asset, so much of the debts due to such secured creditor as could not be realized by him or the amount of the workmen's portion in his security (if payable under the law), whichever is less, pari- passu with the workmen's dues:

Explanation: For the purposes of this section, and section 327 -

- a) **Workmen**, in relation to a company, means the employees of the company, being workmen within the meaning of Section 2 (s) of the Industrial Disputes Act, 1947;
- b) **Workmen's dues**, in relation to a company, means the aggregate of the following sums due from the company to its workmen, namely:
 - (i) All wages or salary including wages payable;
 - (ii) all accrued holiday remuneration becoming payable to any workman
 - (iii) unless the company is being wound up voluntarily merely for the purposes of reconstruction or amalgamation with another company or unless the company has, at the commencement of the winding up, under such a contract with insurers as is mentioned in section 14 of the Workmen's Compensation Act, 1923 (19 of 1923), rights capable of being transferred to and vested in the workmen, all amount due in respect of any compensation or liability for compensation under the said Act in respect of the death or disablement of any workman of the company;
 - (iv) all sums due to any workman from provident fund, pension fund, gratuity fund or any other fund maintained by the company.

The following payment should be made in priority to secured creditors :

- (i) All wages or salary including wages payable;
 - (ii) all accrued holiday remuneration becoming payable to any workman
 - (iii) If the above payments are payable for a period of 2 years preceding the winding up order then the same shall be paid in priority to all other debts (including debts due to secured creditors), within a period of 30 days of sale of assets and shall be subject to such charge over the security of secured creditors.
- c) **Workmen's portion**, in relation to the security of any secured creditor of a company, means the amount which bears to the value of the security the same proportion as the amount of the workmen's dues bears to the aggregate of the amount of workmen's dues and the amount of the debts due to the secured creditors.

Preferential Creditors

In a winding up there should be paid in priority to all other debts subject to the provisions of section 326.

Preferential Creditors are as follows:

- a. **Government Taxes:** All revenues, taxes, cess and rates due from the company to the Central Government or a State Government or to a local authority at the relevant date, and having become due and payable within the twelve months immediately

before that date;

- b. **Salary and Wages:** All wages or salary including wages payable for time or piece work and salary earned wholly or in part by way of commission of any employee in respect of services rendered to the company and due for a period not exceeding four months within the 12 months immediately before the relevant date, subject to the condition that the amount payable under this clause to any workman should not exceed such amount as may be notified;
- c. **Holiday Remuneration:** All accrued holiday remuneration becoming payable to any employee, or in the case of his death, to any other person claiming under him, on the termination of his employment before, or by the winding up order, or, as the case may be, the dissolution of the company;
- d. **Contribution under ESI Act:** Unless the company is being wound up voluntarily merely for the purposes of reconstruction or amalgamation with another company, all amount due in respect of contributions payable during the period of twelve months immediately before the relevant date by the company as the employer of persons under the Employees' State Insurance Act, 1948 or any other law for the time being in force;
- e. **Compensation in respect of death or disablement:** Unless the company has, at the commencement of winding up, under such a contract with any insurer as is mentioned in section 14 of the Workmen's Compensation Act, 1923, rights capable of being transferred to and vested in the workmen, all amount due in respect of any compensation or liability for compensation under the said Act in respect of the death or disablement of any employee of the company: Where any compensation under the said Act is a weekly payment, the amount payable under this clause should be taken to be the amount of the lump sum for which such weekly payment could, if redeemable, be redeemed, if the employer has made an application under that Act;
- f. **PF, Pension Fund or Gratuity Fund:** All sums due to any employee from the provident fund, the pension fund, the gratuity fund or any other fund for the welfare of the employees, maintained by the company; and
- g. **Expenses of Investigation:** The expenses of any investigation held in pursuance of sections 213 and 216, in so far as they are payable by the company.

Where any advance payment has been made to any employee of a company on account of wages or salary or accrued holiday remuneration himself by some person for that purpose. The person by whom the money was advanced should have a right of priority in respect of the money so advanced and paid-up to the amount. The sum in respect of which the employee or other person in his right would have been entitled to priority in the winding up has been reduced by reason of the payment having been made.

The debts enumerated in this section should—

- h. rank equally among themselves and be paid in full, unless the assets are insufficient to meet them, in which case they should abate in equal proportions; and

- i. so far as the assets of the company available for payment to general creditors are insufficient to meet them, have priority over the claims of holders of debentures under any floating charge created by the company, and be paid accordingly out of any property comprised in or subject to that charge.

The debts under this section should be discharged forthwith so far as the assets are sufficient to meet them, subject to the retention of such sums as may be necessary for the costs and expenses of the winding up.

In the event of a landlord or other person distraining or having distrained on any goods or effects of the company within three months immediately before the date of a winding up order, the debts to which priority is given under this section should be a first charge on the goods or effects so distrained on or the proceeds of the sale thereof: Provided that, in respect of any money paid under any such charge, the landlord or other person should have the same rights of priority as the person to whom the payment is made. Any remuneration in respect of a period of holiday or of absence from work on medical grounds through sickness or other good cause should be deemed to be wages in respect of services rendered to the company during that period.

Explanations: For the purposes of this section,

- **Accrued Holiday Remuneration includes**, in relation to any person, all sums which, by virtue either of his contract of employment or of any enactment including any order made or direction given thereunder, are payable on account of the remuneration which would, in the ordinary course, have become payable to him in respect of a period of holiday, had his employment with the company continued until he became entitled to be allowed the holiday;
- **Employee** does not include a workman; and
- **Relevant Date** means in the case of a company being wound up by the Tribunal, the date of appointment or first appointment of a provisional liquidator, or if no such appointment was made, the date of the winding up order, unless, in either case, the company had commenced to be wound up voluntarily before that date under the Insolvency and Bankruptcy Code, 2016.

Effect of Floating Charge [Section 332]

Where a company is being wound up, a floating charge on the undertaking or property of the company created within the 12 months immediately preceding the commencement of the winding up, should be invalid unless it is proved that the company immediately after the creation of the charge was solvent except for the amount of any cash paid to the company at the time of and in consideration for or subsequent to the creation of the charge together with interest on that amount at the rate of 5 per cent per annum or such other rate as may be notified by the Central Government in this behalf.

B List Contributories

- (a) **Persons:** Shareholders who had transferred Partly Paid Shares (otherwise than by operation of law or by death) within one year, prior to the date of winding up may be called upon to pay an amount to pay off such Creditors as existed on the date of transfer of shares. These Transferors are called as B List Contributories.
- (b) **Liability:** Their liability is restricted to the amount not called up when the shares were transferred. They cannot be called upon to pay more than the entire face value of the share. For example, if Shares having Face Value ₹ 100 were paid up ₹ 60, the B List Contributory can be called up to pay a maximum of ₹ 40 only.
- (c) **Conditions:** Liability of B List Contributories will crystallize only (a) when the existing assets available with the liquidator are not sufficient to cover the liabilities; (b) when the existing shareholders fail to pay the amount due on the shares to the Liquidator.

IV. Maintenance of Statutory Liquidity Ratio (SLR)**Section 24 and Section 56 of the Banking Regulation Act, 1949 – Maintenance of SLR and holdings of SLR in HTM category**

It has been decided to reduce the SLR requirement of banks from 20.0 per cent of their Net Demand and Time Liabilities (NDTL) to 19.5 per cent from the fortnight commencing October 14, 2017 as announced in the Fourth Bi-monthly Monetary Policy Statement, 2017-18 on October 04, 2017. The related notification is DBR.No.Ret.BC.91/12.02.001/2017-18 dated October 4, 2017.

Currently, the banks are permitted to exceed the limit of 25 per cent of the total investments under HTM category, provided the excess comprises of SLR securities and total SLR securities held under HTM category are not more than 20.5 per cent of NDTL. In order to align this ceiling on the SLR holdings under HTM category with the mandatory SLR, it has been decided to reduce the ceiling from 20.5 per cent to 19.5 per cent in a phased manner, i.e. 20 per cent by December 31, 2017 and 19.5 per cent by March 31, 2018.

As per extant instructions, banks may shift investments to/from HTM with the approval of the Board of Directors once a year, and such shifting will normally be allowed at the beginning of the accounting year. In order to enable banks to shift their excess SLR securities from the HTM category to AFS/HFT to comply with instructions as indicated in paragraph 3 above, it has been decided to allow such shifting of the excess securities and direct sale from HTM category. This would be in addition to the shifting permitted at the beginning of the accounting year, i.e., in the month of April. Such transfer to AFS/HFT category as well as sale of securities from HTM category, to the extent required to reduce the SLR securities in HTM category in accordance with the regulatory instructions, would be excluded from the 5 per cent cap prescribed for value of sales and transfers of securities to/from HTM category under paragraph 2.3 (ii) of the Master Circular on Prudential Norms for Classification, Valuation and Operation of Investment Portfolio by Banks.

V. Maintenance of Cash Reserve Ratio (CRR)

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

VI. Relevant Provisions of the Insurance Act [updated as per the Insurance (Amendment) Act, 2015]

The provisions of sections 10 and 11 have been modified vide the Insurance Laws (Amendment) Act, 2015. These amendments have necessitated changes to the IRDA (Preparation of Financial Statements and Auditors' Report of Insurance Companies) Regulations 2002. The significant provisions are as follows:

- (1) Forms for final accounts [Section 11(1)]: Every insurer, on or after the date of the commencement of the Insurance Laws (Amendment) Act, 2015, in respect of insurance business transacted by him and in respect of his shareholders' funds, should, at the expiration of each financial year, prepare with reference to that year, balance sheet, a profit and loss account, a separate account of receipts and payments, a revenue account in accordance with the regulations as may be specified.
- (2) Audit [Section 12]: The balance sheet, profit and loss account, revenue account and profit and loss appropriation account of every insurer, in respect of all insurance business transacted by him, should, unless they are subject to audit under the Companies Act, 2013, be audited annually by an auditor, and the auditor should in the audit of all such accounts have the powers of, exercise the functions vested in, and discharge the duties and be subject to the liabilities and penalties imposed on, auditors of companies by Section 147 of the Companies Act, 2013.
- (3) Register of policies [Section 14(1)]: Every insurer, in respect of all business transacted by him, should maintain— (a) a record of policies, in which should be entered, in respect of every policy issued by the insurer, the name and address of the policyholder, the date when the policy was effected and a record of any transfer, assignment or nomination of which the insurer has notice; (b) a record of claims, every claim made together with the date of the claim, the name and address of the claimant and the date on which the claim was discharged, or, in the case of a claim which is rejected, the date of rejection and the grounds thereof; and (c) a record of policies and claims in accordance with clauses (a) and (b) may be maintained in any such form, including electronic mode, as may be specified by the regulations made under this Act.

- (4) Approved investments (Section 27B(1)): A company carrying on general insurance business must invest its funds only in approved securities listed in this section.
- (5) Payment of commission to authorized agents (Section 40(1)): As per the Insurance (Amendment) Act 2015, no person should, pay or contract to pay any remuneration or reward, whether by way of commission or otherwise for soliciting or procuring insurance business in India to any person except an insurance agent or an intermediary or insurance intermediary in such manner as may be specified by the regulations.
- (6) Limit on expenditure (Sections 40B and 40C): As per the Insurance (Amendment) Act 2015 No insurer should, in respect of insurance business transacted by him in India, spend as expenses of management in any financial year any amount exceeding the amount as may be specified by the regulations made under this Act and every insurer transacting insurance business in India should furnish to the Authority, the details of expenses of management in such manner and form as may be specified by the regulations made under this Act."
- (7) Sufficiency of assets [Section 64VA(1)]: Every insurer and re-insurer should at all times maintain an excess of value of assets over the amount of liabilities of, not less than fifty per cent. of the amount of minimum capital as stated under section 6 and arrived at in the manner specified by the regulations.
- (8) Segregation of Policyholders' and Shareholders' Funds by the insurers carrying on General Insurance, Health Insurance and Reinsurance business: Section 11 (2) of the Insurance Laws (Amendment) Act, 2015 mandates that every insurer shall keep separate funds of shareholders and policyholders.
- (9) Unearned Premium Reserve (UPR): A Reserve for Unearned Premium shall be created as the amount representing that part of the premium written which is attributable to, and is to be allocated to the succeeding accounting periods. Such Reserves shall be computed as under:
 - a) Marine Hull: 100 percent of Net Written Premium during the preceding twelve months;
 - b) Other Segments: Insurers have an option to create UPR either at 50 percent of Net Written Premium of preceding twelve months or on the basis of 1/365th method on the unexpired period of the respective policies.

The insurers can follow either percentage or 1/365th method for computation of UPR of the other segments. However, Insurers shall follow the method of provisioning of UPR in a consistent manner. Any change in the method of provisioning can be done only with the prior written approval of the Authority.
10. Recoupment of the Deficit: Every Insurer shall ensure that the policyholders' fund are fully supported by the policyholders' investments shown in Schedule-SA. Therefore, any deficit/shortfall in policyholders' investments arising out of the loss in

the Revenue Account or otherwise shall be recouped by transfer of securities from the shareholders' investments to the policyholders' investments on a half yearly basis. The valuation of such securities shall be in accordance with the valuation norms as specified in the IRDA (Preparation of Financial Statements and Auditors' Report) Regulations, 2002.

11. Investment made out of the policyholders' funds: Investment made out of the policyholders' funds shall be shown in a separate schedule i.e., 8 A. The format of the same is given as below:

Annexure

SCHEDULE- 8A

INVESTMENTS-POLICYHOLDERS

Particulars	Current Year	Previous Year
	('000)	('000)
LONG TERM INVESTMENTS		
1. Government securities and Government guaranteed bonds including Treasury Bills		
2. Other Approved Securities		
3. Other Investments		
(a) Shares - i) Equity; ii) Preference (b) Mutual Funds (c) Debentures/ Bonds (d) Investment Property-Real Estate (e) Other Securities (to be specified)		
4. Investments in Infrastructure and Housing		
Sub-Total		
SHORT TERM INVESTMENTS		
1. Government securities and Government guaranteed bonds including Treasury Bills		
2. Other Approved Securities		
3. Other Investments		
(a) Shares- i) Equity ii) Preference (b) Mutual Funds (c) Debentures/ Bonds (d) Other Securities (to be specified)		

4. Investments in Infrastructure and Housing		
Sub-Total		
Total		

B. Not applicable for May, 2018 examination**Non-Applicability of Ind AS for May, 2018 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 are not applicable for May, 2018 Examination.

PART – II : QUESTIONS AND ANSWERS**QUESTIONS****Amalgamation of Partnership firms**

1. Firm B & Co. consists of partners Murli and Honey sharing Profits and Losses in the ratio of 3 : 2. The firm C & Co. consists of partners Honey and Prince sharing Profits and Losses in the ratio of 5 : 3. On 31st March, 2017 it was decided to amalgamate both the firms and form a new firm BC & Co., wherein Murli, Honey and Prince would be partners sharing Profits and Losses in the ratio of 4:5:1.

Balance Sheet as at 31.3.2017

<i>Liabilities</i>	<i>B & Co.</i>	<i>C & Co.</i>	<i>Assets</i>	<i>B & Co.</i>	<i>C & Co.</i>
	₹	₹		₹	₹
Capital:			Cash in hand/bank	80,000	60,000
Murli	3,00,000	---	Debtors	1,20,000	1,60,000
Honey	2,00,000	1,50,000	Stock	1,00,000	40,000
Prince	---	1,00,000	Vehicles	---	1,80,000
Reserves	1,00,000	80,000	Machinery	2,40,000	---
Creditors	<u>2,40,000</u>	<u>1,10,000</u>	Building	<u>3,00,000</u>	<u>---</u>
	<u>8,40,000</u>	<u>4,40,000</u>		<u>8,40,000</u>	<u>4,40,000</u>

The following were the terms of amalgamation:

- (i) Goodwill of B & Co., was valued at ₹ 1,50,000. Goodwill of C & Co. was valued at ₹ 80,000. 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 ₹ 4,00,000, ₹ 2,00,000 and ₹ 1,48,000 respectively.

- (iii) Provision for doubtful debts ₹ 10,000 in respect of B & Co. and ₹ 8,000 in respect of C & Co. are to be provided.

You are required to:

- (i) Show, how the value of Goodwill is to be adjusted amongst the partners.
- (ii) Prepare the Balance Sheet of BC & Co. as at 31.3.2017 by keeping partners' capital in their profit sharing ratio by taking capital of 'Honey' as the basis. The excess or deficiency to be kept in the respective Partners' Current accounts.

Dissolution of partnership firm

2. A partnership firm was dissolved on 30th June, 2016. Its Balance Sheet on the date of dissolution was as follows:

Liabilities	₹	₹	Assets	₹
Capitals:			Cash	10,800
A	76,000		Sundry Assets	1,89,200
B	48,000			
C	<u>36,000</u>	1,60,000		
Loan A/c – B		10,000		
Sundry Creditors		<u>30,000</u>		
		<u>2,00,000</u>		<u>2,00,000</u>

The assets were realized in instalments and the payments were made on the proportionate capital basis. Creditors were paid ₹ 29,000 in full settlement of their account. Expenses of realization were estimated to be ₹ 5,400 but actual amount spent was ₹ 4,000. This amount was paid on 15th September. Draw up a statement showing distribution of cash, which was realized as follows:

	₹
On 5 th July, 2016	25,200
On 30 th August, 2016	60,000
On 15 th September, 2016	80,000

The partners shared profits and losses in the ratio of 2 : 2 : 1. Prepare a statement showing distribution of cash amongst the partners by 'Highest Relative Capital' method.

Sale of Partnership firm to a Company

3. M, N and O were Partners sharing Profits and Losses in the ratio of 5:3:2 respectively. The Trial Balance of the Firm as on 31st March, 2017 was the following:

Particulars	₹	₹
Machinery at Cost	2,00,000	
Inventory	1,37,400	

Trade receivables	1,24,000	
Trade payables		1,69,400
Capital A/cs:		
M		1,36,000
N		90,000
O		46,000
Drawing A/cs:		
M	50,000	
N	46,000	
O	34,000	
Depreciation on Machinery		80,000
Profit for the year ended 31 st March		2,48,600
Cash at Bank	<u>1,78,600</u>	<u>7,70,000</u>
	7,70,000	7,70,000

Interest on Capital Accounts at 10% p.a. on the amount standing to the credit of Partners' Capital Accounts at the beginning of the year, was not provided before preparing the above Trial Balance. On the above date, they formed a company named MNO Private Limited Company with an Authorized Share Capital of 2,00,000 in shares of ₹ 10 each to be divided in different classes to take over the business of Partnership firm.

You are required as under:

1. Machinery is to be transferred at ₹ 1,40,000.
2. Shares in the Company are to be issued to the partners, at par, in such numbers, and in such classes as will give the partners, by reason of their shareholdings alone, the same rights as regards interest on capital and the sharing of profit and losses as they had in the partnership.
3. Before transferring the business, the partners wish to draw from the partnership profits to such an extent that the bank balance is reduced to ₹ 1,00,000. For this purpose, sufficient profits of the year are to be retained in profit-sharing ratio.
4. Assets and liabilities except Machinery and Bank, are to be transferred at their book value as on the above date.

The information is provided as under:

- (a) Statement showing the workings of the Number of Shares of each class to be issued by the company, to each partner.
- (b) Capital Accounts showing all adjustments required to dissolve the Partnership.
- (c) Balance Sheet of the Company immediately after acquiring the business of the Partnership and Issuing of Shares.

Conversion of Partnership Firm into Company

4. (a) Aman, Baal and Chand share profits and losses of a business as to 3:2:1 respectively. Their balance sheet as at 31st March, 2017 was as follows:

Liabilities	₹	Assets	₹
Capital Accounts:		Goodwill	10,000
Aman	70,000	Land	20,000
Baal	80,000	Buildings	1,10,000
Chand	10,000	Machinery	50,000
General Reserve	18,000	Motor Car	28,000
Investment Fluctuation Fund	4,000	Furniture	12,000
Chand's Loan	33,000	Investments	18,000
Mrs. Aman's loan	15,000	Loose tools	7,000
Creditors	96,000	Stock	18,000
Bills Payable	14,000	Bills receivable	20,000
Bank overdraft	60,000	Debtors: 40,000	
		Less: Provision <u>2,000</u>	38,000
		Cash	1,000
		Chand's current A/c	56,000
		Profit and Loss A/c	<u>12,000</u>
	<u>4,00,000</u>		<u>4,00,000</u>

The partners decide to convert their firm into a Joint Stock Company. For this purpose ABC Ltd. was formed with an authorized capital of ₹ 10,00,000 divided into ₹ 100 equity Shares. The business of the firm was sold to the company as at the date of balance sheet given above on the following terms:

- Motor car, furniture, investments, loose tools, debtors and cash are not to be taken over by the company.
- Liabilities for bills payable and bank overdraft are to be taken over by the company.
- The purchase price is settled at ₹ 1,95,500 payable as to ₹ 75,500 in cash and the balance in company's fully paid shares of ₹ 100 each.
- The remaining assets and liabilities of the firm are directly disposed of by the firm as per details given below:

Investments are taken over by Aman for ₹ 13,000; debtors realize in all ₹ 20,000; Motor Car, furniture and loose tools fetch ₹ 24,000, ₹ 4,000, and ₹ 1,000 respectively. Aman agrees to pay his wife's loan. The creditors were paid ₹ 94,000 in final settlement of their claims. The realization expenses amount to ₹ 500.

- (v) The equity share received from the vendor company are to be divided among the partners in profit-sharing ratio.

You are required to prepare the necessary ledger accounts in the books of the partnership firm.

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

ESOPs

5. PQ Ltd. grants 100 stock options to each of its 1,000 employees on 1-4-2015, conditional upon the employee remaining in the company for 2 years. The fair value of the option is ₹ 18 on the grant date and the exercise price is ₹ 55 per share. The other information is given as under:
- Number of employees expected to satisfy service condition are 930 in the 1st year and 850 in the 2nd year.
 - 40 employees left the company in the 1st year of service and 880 employees have actually completed 2 year vesting period.

You are required to compute ESOP cost to be amortized by PQ Ltd. in the years 2015-2016 and 2016-2017.

Buy Back of Securities

6. Following is the summarized Balance Sheet of Complicated Ltd. as on 31st March, 2016 :

Liabilities	Amount (₹)
Equity shares of ₹ 10 each, fully paid up	12,50,000
Bonus shares of ₹ 10 each, fully paid up	1,00,000
Share option outstanding Account	4,00,000
Revenue Reserve	15,00,000
Securities Premium	2,50,000
Profit & Loss Account	1,25,000
Capital Reserve	2,00,000
Unpaid dividends	1,00,000
12% Debentures (Secured)	18,75,000
Advance from related parties (Unsecured)	10,00,000
Current maturities of long term borrowings	16,50,000
Application money received for allotment due for refund	<u>2,00,000</u>
	<u>86,50,000</u>

Fixed Assets	46,50,000
Current Assets	<u>40,00,000</u>
	86,50,000

The Company wants to buy back 25,000 equity shares of ₹ 10 each, on 1st April, 2016 at ₹ 20 per share. Buy back of shares is duly authorised by its Articles and necessary resolution has been passed by the Company towards this. The buy back of shares by the Company is also within the provisions of the Companies Act, 2013. The payment for buy back of shares will be made by the Company out of sufficient bank balance available shown as part of Current Assets.

You are required to give the necessary journal entries towards buy back of shares and prepare the Balance Sheet after buy back of shares.

Redemption of Debentures

7. On 1st January, 2006 Raman Ltd. (company is not governed by section 133 of Companies Act, 2013) allotted 20,000 9% Debentures of ₹100 each at par, the total amount having been received along with applications.
- On 1st January, 2008 the Company purchased in the open market 2,000 of its own debentures @ ₹ 101 each and cancelled them immediately.
 - On 1st January, 2011 the company redeemed at par debentures for ₹6,00,000 by draw of a lot.
 - 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.
 - 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.

You are required to pass journal entries for the above-mentioned transactions ignoring debenture redemption reserve, debenture interest and interest on own' debentures.

Underwriting of Shares and Debentures

8. Paper Limited comes out with a public issue of share capital on 01-01-2017 of 30,00,000 equity shares of ₹ 10 each at a premium of 5%. ₹ 2.50 is payable on application (on or before 31-01-2017) and ₹ 3 on allotment (31-3-2017) including premium.

This issue was underwritten by two underwriters namely White and Black, equally, the commission being 4% of the issue price. Each of the underwriters underwrites 60,000 shares firm. Subscriptions including firm underwriting came for 28,80,000 shares, the distribution of forms being White: 15,60,000; Black; 10,80,000 and Unmarked 2,40,000.

One of the allottees (using forms marked with name of White) for 6,000 shares fails to pay the amount due to allotment, all the other money due being received in full including any due from the shares devolving upon the underwriters. The commission due was paid separately.

6,000 shares of one allottee who failed to pay the allotment money were finally forfeited by 30-06-2017 and were re-allotted for payment in cash of ₹ 4 per share. You are required to prepare each underwriter's liability (in shares) in statement form assuming that benefit of firm underwriting is given to individual underwriter and to pass necessary journal entries to record the above events and transactions (including cash).

Amalgamation of Companies

9. P Ltd. and Q Ltd. agreed to amalgamate their business. The scheme envisaged a share capital, equal to the combined capital of P Ltd. and Q Ltd. for the purpose of acquiring the assets, liabilities and undertakings of the two companies in exchange for share in PQ Ltd.

The Summarized Balance Sheets of P Ltd. and Q Ltd. as on 31st March, 2017 (the date of amalgamation) are given below:

Summarized balance sheets as at 31-03-2017

Liabilities	P Ltd. ₹	Q Ltd. ₹	Assets	P Ltd. ₹	Q Ltd. ₹
<u>Equity & liabilities:</u>			<u>Assets:</u>		
<u>Shareholders Fund</u>			<u>Non-current Assets:</u>		
a. Share Capital	6,00,000	8,40,000	Fixed Assets (excluding Goodwill)	7,20,000	10,80,000
b. Reserves	10,20,000	6,00,000	<u>Current Assets</u>		
<u>Current Liabilities</u>			a. Inventories	3,60,000	6,60,000
Bank Overdraft	-	5,40,000	b. Trade receivables	4,80,000	7,80,000
Trade payables	<u>2,40,000</u>	<u>5,40,000</u>	c. Cash at Bank	<u>3,00,000</u>	-
	<u>18,60,000</u>	<u>25,20,000</u>		<u>18,60,000</u>	<u>25,20,000</u>

The consideration was to be based on the net assets of the companies as shown in the above Balance Sheets, but subject to an additional payment to P Ltd. for its goodwill to be calculated as its weighted average of net profits for the three years ended 31st March, 2017. The weights for this purpose for the years 2014-15, 2015-16 and 2016-17 were agreed as 1, 2 and 3 respectively.

The profit had been:

2014-15 ₹ 3,00,000; 2015-16 ₹ 5,25,000 and 2016-17 ₹ 6,30,000.

The shares of PQ Ltd. were to be issued to P Ltd. and Q Ltd. at a premium and in proportion to the agreed net assets value of these companies.

In order to raise working capital, PQ Ltd proceeded to issue 72,000 shares of ₹ 10 each at the same rate of premium as issued for discharging purchase consideration to P Ltd. and Q Ltd.

You are required to:

- (i) Calculate the number of shares issued to P Ltd. and Q Ltd; and
- (ii) Give required journal entries in the books of PQ Ltd.; and
- (iii) Prepare the Balance Sheet of PQ Ltd. as per Schedule III after recording the necessary journal entries.

Internal Reconstruction of a Company

10. M/s Xylem Limited has decided to reconstruct the Balance Sheet since it has accumulated huge losses. The following is the summarized Balance Sheet of the company as on 31st March, 2017 before reconstruction:

Liabilities	Amount (₹)	Assets	Amount (₹)
Share Capital		Land & Building	42,70,000
50,000 shares of ₹ 50 each fully paid up	25,00,000	Machinery	8,50,000
1,00,000 shares of ₹ 50 each ₹ 40 paid up	40,00,000	Computers	5,20,000
Capital Reserve	5,00,000	Inventories	3,20,000
8% Debentures of ₹ 100 each	4,00,000	Trade receivables	10,90,000
12% Debentures of ₹ 100 each	6,00,000	Cash at Bank	2,68,000
Trade creditors	12,40,000	Profit & Loss Account	29,82,000
Outstanding Expenses	<u>10,60,000</u>		
	<u>1,03,00,000</u>		<u>1,03,00,000</u>

Following is the interest of Mr. A and Mr. B in M/s Xylem Limited:

	Mr. A	Mr. B
8% Debentures	3,00,000	1,00,000
12% Debentures	<u>4,00,000</u>	<u>2,00,000</u>
Total	<u>7,00,000</u>	<u>3,00,000</u>

The following scheme of internal reconstruction was framed and implemented, as approved by the court and concerned parties:

- (1) Uncalled capital is to be called up in full and then all the shares to be converted into Equity Shares of ₹ 40 each.
- (2) The existing shareholders agree to subscribe in cash, fully paid up equity shares of 40 each for ₹ 12,50,000.
- (3) Trade creditors are given option of either to accept fully paid equity shares of ₹ 40 each for the amount due to them or to accept 70% of the amount due to them in cash in full settlement of their claim. Trade creditors for ₹ 7,50,000 accept equity shares and rest of them opted for cash towards full and final settlement of their claim.
- (4) Mr. A agrees to cancel debentures amounting to ₹ 2,00,000 out of total debentures due to him and agree to accept 15% Debentures for the balance amount due. He also agree to subscribe further 15% Debentures in cash amounting to ₹ 1,00,000.
- (5) Mr. B agrees to cancel debentures amounting to ₹ 50,000 out of total debentures due to him and agree to accept 15% Debentures for the balance amount due.
- (6) Land & Building to be revalued at ₹ 51,84,000, Machinery at ₹ 7,20,000, Computers at ₹ 4,00,000, Inventories at ₹ 3,50,000 and Trade receivables at 10% less to as they are appearing in Balance Sheet as above.
- (7) Outstanding Expenses are fully paid in cash.
- (8) Profit & Loss A/c will be written off and balance, if any, of Capital Reduction A/c will be adjusted against Capital Reserve.

You are required to pass necessary Journal Entries for all the above transactions and draft the company's Balance Sheet immediately after the reconstruction.

Liquidation of a Company

11. The position of Careless Ltd. on its liquidation is as under:

5,000, 10% Preference Shares of ₹ 100 each ₹ 60 paid up

2,000, Equity shares of ₹ 75 each, ₹ 50 paid up

Unsecured Creditors ₹ 99,000

Liquidation Expenses ₹ 1,000

Liquidator is entitled to a commission of 2% on the amount realized from calls made on contributories

You are required to Prepare Liquidator's Final Statement of Account if the total assets realized ₹ 3,80,400.

Financial Statements of Insurance Companies

12. From the following information given by Long Live Insurance Co. Ltd., you are required to pass necessary Journal Entries (with narration and required working notes) relating to Unexpired Risk Reserve.

- (i) On 31.03.16, it had reserve for unexpired risks amounting to ₹ 80 crores. Its composition was as under:
- (a) ₹ 30 crores in respect of Marine insurance business
- (b) ₹ 40 crores in respect of Fire insurance business and
- (c) ₹ 10 crores in respect of Miscellaneous insurance business
- (ii) Long Live Insurance Co. Ltd. reserves 100% of net premium income in respect of Marine insurance business and 50% of net premium income in respect of Fire and Miscellaneous income policies.
- (iii) During 2016-17, the following business was conducted:

	₹ In crore		
	Marine	Fire	Miscellaneous
Premium Collected from:			
(a) Insured in respect of Policies issued	36	86	24
(b) Other Insurance Companies in respect of risks undertaken	14	10	8
Premium paid/payable to other insurance Companies on Business ceded.	20	10	15

Financial Statements of Banking Companies

13. The following are the figures extracted from the books of TOP Bank Limited as on 31.3.2017.

	₹
Interest and discount received	59,29,180
Interest paid on deposits	32,59,920
Issued and subscribed capital	16,00,000
Salaries and allowances	3,20,000
Directors fee and allowances	48,000
Rent and taxes paid	1,44,000
Postage and telegrams	96,460
Statutory reserve fund	12,80,000

Commission, exchange and brokerage	3,04,000
Rent received	1,04,000
Profit on sale of investments	3,20,000
Depreciation on bank's properties	48,000
Statutory expenses	44,000
Preliminary expenses	40,000
Auditor's fee	28,000

The following further information is given:

- (i) A customer to whom a sum of ₹ 16 lakhs has been advanced has become insolvent and it is expected only 40% can be recovered from his estate.
- (ii) There were also other debts for which a provision of ₹ 2,10,000 was found necessary by the auditors.
- (iii) Rebate on bills discounted on 31.3.2016 was ₹ 19,000 and on 31.3.2017 was ₹ 25,000.
- (iv) Preliminary expenses are to be fully written off during the year.
- (v) Provide ₹ 9,00,000 for Income-tax.
- (vi) Profit and Loss account opening balance was Nil as on 31.3.2016.

Prepare the Profit and Loss account of TOP Bank Limited for the year ended 31.3.2017.

Departmental Accounts

14. Following is the Trial Balance of Mr. Mohan as on 31.03.2017:

	<i>Particulars</i>	<i>Debit (₹)</i>	<i>Credit (₹)</i>
Capital Account			40,000
Drawing Account		1,500	
Opening Stock	Department A	8,500	
	Department B	5,700	
	Department C	1,200	
Purchases	Department A	22,000	
	Department B	17,000	
	Department C	8,000	
Sales	Department A		54,000
	Department B		33,000
	Department C		21,000
Sales Returns	Department A	4,000	
	Department B	3,000	

	Department C	1,000	
Freight and Carriage	Department A	1,400	
	Department B	800	
	Department C	200	
Furniture and fixtures		4,600	
Plant and Machinery		20,000	
Motor Vehicles		40,000	
Sundry Debtors		12,200	
Sundry Creditors			15,000
Salaries		4,500	
Power and water		1,200	
Telephone charges		2,100	
Bad Debts		750	
Rent and taxes		6,000	
Insurance		1,500	
Wages	Department A	800	
	Department B	550	
	Department C	150	
Printing and Stationeries		2,000	
Advertising		3,500	
Bank Overdraft			12,000
Cash in hand		<u>850</u>	<u>12,000</u>
		1,75,000	1,75,000

You are required to prepare Department Trading, Profit and Loss Account and the Balance Sheet taking into account the following adjustments:

- Outstanding Wages: Department B- ₹ 150, Department C – ₹ 50.
- Depreciate Plant and Machinery and Motor Vehicles at the rate of 10%.
- Each Department shall share all expenses in proportion to their sales.
- Closing Stock: Department A - ₹ 3,500, Department B - ₹ 2,000, Department C - ₹ 1,500.

Branch Accounting

- Alpha Ltd. has a retail shop under the supervision of a manager. The ratio of gross profit at selling price is constant at 25 per cent throughout the year to 31st March, 2017.

Branch manager is entitled to a commission of 10 per cent of the profit earned by his branch, calculated before charging his commission but subject to a deduction from such

commission equal in 25 per cent of any ascertained deficiency of branch stock. All goods were supplied to the branch in head office.

From the under mentioned figures, calculate the commission due to manager for the year ended 31st March, 2017.

	₹		₹
Opening Stock (at cost)	74,736	Chargeable expenses	49,120
Goods sent to branch (at cost)	2,89,680	Closing Stock (Selling Price)	1,23,328
Sales	3,61,280		
Manager's commission paid on account	2,400		

Framework for Preparation and Presentation of Financial Statements

16. (a) Write short note on main elements of Financial Statements.

Accounting standards

AS 16 Borrowing costs

(b) In May, 2016, Capacity Ltd. took a bank loan to be used specifically for the construction of a new factory building. The construction was completed in January, 2017 and the building was put to its use immediately thereafter. Interest on the actual amount used for construction of the building till its completion was ₹ 18 lakhs, whereas the total interest payable to the bank on the loan for the period till 31st March, 2017 amounted to ₹ 25 lakhs. Can ₹ 25 lakhs be treated as part of the cost of factory building and thus be capitalized on the plea that the loan was specifically taken for the construction of factory building?

AS 4 Contingencies and Events Occurring after the Balance Sheet Date

17. (a) With reference to AS 4 "Contingencies and events occurring after the balance sheet date", state whether the following events will be treated as contingencies, adjusting events or non-adjusting events occurring after balance sheet date in case of a company which follows April to March as its financial year.

- (i) A major fire has damaged the assets in a factory on 5th April, 5 days after the year end. However, the assets are fully insured and the books have not been approved by the Directors.
- (ii) A suit against the company's advertisement was filed by a party on 10th April, 10 days after the year end claiming damages of ₹ 20 lakhs.

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

(b) Bela Ltd. has a vacant land measuring 20,000 sq. mts, which it had no intention to use in the future. The Company decided to sell the land to tide over its liquidity problems and made a profit of ₹10 Lakhs by selling the said land. Moreover, there

was a fire in the factory and a part of the unused factory shed valued at ₹ 8 Lakhs was destroyed. The loss from fire was set off against the profit from sale of land and profit of ₹2 lakhs was disclosed as net profit from sale of assets. Do you agree with the treatment and disclosure? If not, state your views.

AS 11 The Effects of Changes in Foreign Exchange Rates

18. (a) Power Track Ltd. purchased a plant for US\$ 50,000 on 31st October, 2016 payable after 6 months. The company entered into a forward contract for 6 months @ ₹ 64.25 per Dollar. On 31st October, 2016, the exchange rate was ₹ 61.50 per Dollar.

You are required to recognize the profit or loss on forward contract in the books of the company for the year ended 31st March, 2017.

AS 12 Government Grants

- (b) D Ltd. acquired a machine on 01-04-2012 for ₹ 20,00,000. The useful life is 5 years. The company had applied on 01-04-2012, for a subsidy to the tune of 80% of the cost. The sanction letter for subsidy was received in November 2015. The Company's Fixed Assets Account for the financial year 2015-16 shows a credit balance as under:

Particulars	₹
Machine (Original Cost)	20,00,000
Less: Accumulated Depreciation (from 2012-13- to 2014-15 on Straight Line Method)	<u>12,00,000</u>
	8,00,000
Less: Grant received	<u>(16,00,000)</u>
Balance	<u>(8,00,000)</u>

You are required to state how should the company deal with this asset in its accounts for 2015-16?

AS 19 Leases

19. (a) WIN Ltd. has entered into a three year lease arrangement with Tanya sports club in respect of Fitness Equipment's costing ₹ 16,99,999.50. The annual lease payments to be made at the end of each year are structured in such a way that the sum of the Present Values of the lease payments and that of the residual value together equal the cost of the equipments leased out. The unguaranteed residual value of the equipment at the expiry of the lease is estimated to be ₹ 1,33,500. The assets would revert to the lessor at the end of the lease. Given that the implicit rate of interest is 10%. You are required to compute the amount of the annual lease payment and the unearned finance income. Discounting Factor at 10% for years 1, 2 and 3 are 0.909, 0.826 and 0.751 respectively.

AS 20 Earnings Per Share

- (b) Mohur Ltd. has equity capital of ₹ 40,00,000 consisting of fully paid equity shares of ₹ 10 each. The net profit for the year 2016-2017 was ₹ 60,00,000. It has also issued 36,000, 10% convertible debentures of ₹ 50 each. Each debenture is convertible into five equity shares. The tax rate applicable is 30%. You are required to compute the amount of diluted earnings for the year 2016-2017.

AS 26 Intangible Assets

20. (a) K Ltd. launched a project for producing product X in October, 2016. The Company incurred ₹ 40 lakhs towards Research and Development expenses upto 31st March, 2017. Due to prevailing market conditions, the Management came to conclusion that the product cannot be manufactured and sold in the market for the next 10 years. The Management hence wants to defer the expenditure write off to future years.

Advise the Company as per the applicable Accounting Standard.

AS 29 Provisions, Contingent Liabilities and Contingent Assets

- (b) The company has not made provision for warrantee in respect of certain goods considering that the company can claim the warranty cost from the original supplier. Comment in line with the provisions of AS 29.

ANSWERS

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

	Raised in old profit sharing ratio		Total	Written off in new ratio	Difference
	B & Co.	C & Co.			
	3:2	5:3		4:5:1	
	₹	₹	₹	₹	₹
Murli	90,000	---	90,000 Cr.	92,000 Dr.	2,000 Dr.
Honey	60,000	50,000	1,10,000 Cr.	1,15,000 Dr.	5,000 Dr.
Prince	---	<u>30,000</u>	<u>30,000 Cr.</u>	<u>23,000 Dr.</u>	<u>7,000 Cr.</u>
	<u>1,50,000</u>	<u>80,000</u>	<u>2,30,000</u>	<u>2,30,000</u>	<u>Nil</u>

(ii) **Balance Sheet of BC & Co. (New firm) as on 31.3.2017**

Liabilities	₹	Assets	₹
Capital Accounts:		Vehicle	1,48,000
Murli	3,44,000	Machinery	2,00,000

Honey	4,30,000	Building	4,00,000
Prince	86,000	Stock	1,40,000
Current Accounts:		Debtors	2,62,000
Murli	44,000	Cash & Bank	1,40,000
Prince	36,000		
Creditors	<u>3,50,000</u>		
	<u>12,90,000</u>		<u>12,90,000</u>

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

	<i>Murli's Capital</i> ₹	<i>Honey's Capital</i> ₹
B & Co.'s Profit and loss sharing ratio 3:2		
Balance as per the Balance Sheet	3,00,000	2,00,000
Add: Reserves	60,000	40,000
Revaluation profit (Building)	60,000	40,000
Less: Revaluation loss (Machinery)	(24,000)	(16,000)
Provision for doubtful debts	<u>(6,000)</u>	<u>(4,000)</u>
	<u>3,90,000</u>	<u>2,60,000</u>
	<i>Honey's Capital</i>	<i>Prince's Capital</i>
C & Co.'s Profit and loss sharing ratio 5:3	₹	₹
Balance as per the Balance sheet	1,50,000	1,00,000
Add: Reserves	50,000	30,000
Less: Revaluation loss (vehicle)	(20,000)	(12,000)
Provision for doubtful debts	<u>(5,000)</u>	<u>(3,000)</u>
	<u>1,75,000</u>	<u>1,15,000</u>

2. Balance of Capital Accounts in the balance sheet of the new firm as on 31.3.2017

	<i>Murli</i> ₹	<i>Honey</i> ₹	<i>Prince</i> ₹
Balance b/d: B & Co.	3,90,000	2,60,000	--
C & Co.	<u>--</u>	<u>1,75,000</u>	<u>1,15,000</u>
	3,90,000	4,35,000	1,15,000
Adjustment for goodwill	<u>(2,000)</u>	<u>(5,000)</u>	<u>7,000</u>
	<u>3,88,000</u>	<u>4,30,000</u>	<u>1,22,000</u>

Total capital ₹8,60,000 (Taking Honey's capital* as base i.e. ₹4,30,000 x 10/5) to be contributed in 4:5:1 ratio.	<u>3,44,000</u>	<u>4,30,000</u>	<u>86,000</u>
Transfer to Current Account	<u>44,000</u>	---	<u>36,000</u>

2. Statement showing distribution of cash amongst the partners

	Creditors	B's Loan	A	B	C
2016	₹	₹	₹	₹	₹
June 30					
Balance b/d	30,000	10,000	76,000	48,000	36,000
Cash balance less Provision for expenses (₹ 10,800 – ₹ 5,400)	5,400	-	-	-	-
Balances unpaid	24,600	10,000	76,000	48,000	36,000
July 5					
1 st Instalment of ₹ 25,200	23,600	1,600	-	-	-
Discount received on full settlement	1,000	8,400	76,000	48,000	36,000
Less: Transferred to Realization A/c	1,000				
	Nil				
August 30					
2 nd instalment of ₹ 60,000 (W.N. 2)		8,400	32,640	4,640	14,320
Balance unpaid		Nil	43,360	43,360	21,680
September 15					
Amount realised ₹ 80,000					
Add: Balance out of the Provision for Expenses A/c					
1,400					
<u>81,400</u>			32,560	32,560	16,280
Amount unpaid being loss on Realization in the ratio of 2 : 2 : 1			10,800	10,800	5,400

* Honey's Capital ₹ 4,30,000 being one-half of the total capital of the firm.

Working Notes:**1. Highest relative capital basis**

		A	B	C
		₹	₹	₹
1.	Present Capitals	76,000	48,000	36,000
2.	Profit-sharing ratio	<u>2</u>	<u>2</u>	<u>1</u>
3.	Capital per unit of Profit share (1 ÷ 2)	<u>38,000</u>	<u>24,000</u>	<u>36,000</u>
4.	Proportionate capitals taking B, whose capital is the least, as the basis	48,000	48,000	24,000
5.	Excess capital (1-4)	28,000	Nil	12,000
6.	Profit-sharing ratio	<u>2</u>	<u>-</u>	<u>1</u>
7.	Excess capital per unit of Profit share (5 ÷ 6)	14,000		12,000
8.	Proportionate capitals as between A and C taking C capital as the basis	24,000	-	12,000
9.	Excess of A's Capital over C's Excess capital (5-8)	4,000	-	-
10.	Balance of Excess capital (5-9)	24,000		12,000
11.	Distribution sequence:			
	First ₹ 4,000 (2 : 0 : 0)	4,000	-	-
	Next ₹ 36,000 (2 : 0 : 1)	24,000	-	12,000
	Over ₹ 40,000 (2 : 2 : 1)			

2. Distribution of Second instalment

		Creditors	A	B	C
First	₹ 8,400	8,400	-	-	-
Next	₹ 4,000 (2 : 0 : 0)		4,000	-	-
Next	₹ 36,000 (2 : 0 : 1)		24,000	-	12,000
Balance	<u>₹ 11,600 (2 : 2 : 1)</u>		4,640	4,640	2,320
	60,000	8,400	32,640	4,640	14,320

3. (a) Number of Shares to be issued to Partners

	₹
Assets: Machinery ₹ 1,40,000 + Inventory ₹ 1,37,400 + Trade Receivable ₹ 1,24,000 + Bank ₹ 1,00,000	5,01,400

Less: Liabilities taken over				(1,69,400)
Net Assets taken over (Purchase Consideration)				3,32,000
Classes of Shares to be issued:	M	N	O	Total
10% Preference Shares of ₹ 10 each (to retain rights as to Interest on Capital)	1,36,000	90,000	46,000	2,72,000
Balance in Equity Shares of ₹ 10 each	30,000	18,000	12,000	60,000
(3,32,000 - 2,72,000) (issued in profit sharing ratio)				
	<u>1,66,000</u>	<u>1,08,000</u>	<u>58,000</u>	<u>3,32,000</u>

(b) Partners' Capital Accounts

Particulars	M	N	O	Particulars	M	N	O
To Drawings	50,000	46,000	34,000	By balance b/d	1,36,000	90,000	46,000
To 10% Preference share capital	1,36,000	90,000	46,000	By Interest on Capital	13,600	9,000	4,600
To Equity Shares	30,000	18,000	12,000	By profit for the year 5:3:2 (W.N. 1)	1,10,700	66,420	44,280
To Bank – Additional drawings (W.N. 2)	54,300	17,420	6,880	By Machinery* A/c	10,000	6,000	4,000
Total	2,70,300	1,71,420	98,880		2,70,300	1,71,420	98,880

* Gain on Transfer of Machinery = ₹ 1,40,000 – (₹ 2,00,000 – ₹ 80,000) = ₹ 20,000 in 5:3:2 ratio.

(c) Balance sheet of MNO Ltd. as on 31st March, 2017 (after Takeover of Firm)

	Note No.	₹
I Equity and Liabilities:		
(1) Shareholders Funds		
Share Capital	1	3,32,000
(2) Current Liabilities		
Trade Payables		<u>1,69,400</u>
Total		<u>5,01,400</u>

II	Assets		
	(1) Non-Current Assets		
	Fixed Assets		
	Tangible Assets- Machinery		1,40,000
	(2) Current Assets:		
	(a) Inventories		1,37,400
	(b) Trade Receivables		1,24,000
	(c) Cash and Cash Equivalents		<u>1,00,000</u>
	Total		<u>5,01,400</u>

Notes to Accounts

Particulars	₹
Share capital	
Authorized share capital	20,00,000
Issued, Subscribed & paid up	
6,000 Equity Shares of ₹ 10 each	60,000
27,200 10% Preference Shares capital of ₹ 10 each	<u>2,72,000</u>
(All above shares were issued for consideration other than cash, in takeover of partnership firm)	3,32,000

Working Note:1. **Profit & Loss Appropriation Account for the year ended 31st March, 2017**

Particulars	₹	₹	Particulars	₹
To Interest on Capital:			By Net Profit (given)	2,48,600
M [₹ 1,36,000 x 10%]	13,600			
N [₹ 90,000 x 10%]	9,000			
O [₹ 46,000 x 10%]	<u>4,600</u>	27,200		
To Profits transferred to Capital in profit sharing ratio 5:3:2				
M	1,10,700			
N	66,420			
O	<u>44,280</u>	<u>2,21,400</u>		
Total		2,48,600		<u>2,48,600</u>

2. Statement showing Additional Drawings in Cash

(a) Funds available for Drawings

	Total Drawing of Partners (given)	1,30,000
Add:	Further Funds available for Drawings (1,78,600-1,00,000)	<u>78,600</u>
		2,08,600
Less:	Interest on Capital	<u>(27,200)</u>
	Amount available for Additional Drawings	1,81,400

(b) Ascertainment of Additional Drawings

Particulars	M	N	O
As per above statement ₹ 1,81,400 (in profit sharing ratio)	90,700	54,420	36,280
Add: Interest	<u>13,600</u>	<u>9,000</u>	<u>4,600</u>
	1,04,300	63,420	40,880
Less: Already drawn	<u>(50,000)</u>	<u>(46,000)</u>	<u>(34,000)</u>
Additional Drawings	<u>54,300</u>	<u>17,420</u>	<u>6,880</u>

4. (a) Necessary Ledger Accounts in the books of Partnership Firm

Realization Account

Particulars	₹	₹	Particulars	₹	₹
To Goodwill		10,000	By provision to doubtful Debts		2,000
To land		20,000	By Trade creditors		96,000
To Buildings		1,10,000	By Bills Payable		14,000
To Machinery		50,000	By Bank overdraft		60,000
To Motor Car		28,000	By Mrs. Aman's loan		15,000
To Furniture		12,000	By ABC Ltd. (Purchase price)		1,95,500
To Investments		18,000	By Aman's Capital A/c (Investments taken over)		13,000
To Loose tools		7,000	By Cash A/c:		
To Stock		18,000	Debtors	20,000	
To Bill receivable		20,000	Motor Car	24,000	
To Debtors		40,000	Furniture	4,000	
To Aman's Capital A/c (Mrs. Aman's Loan)		15,000	Loose tools	<u>1,000</u>	49,000
To Cash A/c:					

Creditors	94,000			
Realisation expenses	<u>500</u>	94,500		
To Profit on Realisation t/f to:				
Aman's Capital A/c	1,000			
Baal's Capital A/c	667			
Chand's Capital A/c	<u>333</u>	<u>2,000</u>		
		4,44,500		<u>4,44,500</u>

ABC Ltd. Account

Particulars	₹	Particulars	₹
To Realisation A/c	1,95,500	By Cash A/c	75,500
	<u> </u>	By Shares in ABC Ltd.	<u>1,20,000</u>
	1,95,500		1,95,500

Partners' Capital Accounts

Particulars	Aman ₹	Baal ₹	Chand ₹	Particulars	Aman ₹	Baal ₹	Chand ₹
To Profit and Loss A/c	6,000	4,000	2,000	By Balance b/d	70,000	80,000	10,000
To Realisation A/c	13,000	-	-	By Chand's Loan A/c	-	-	33,000
To Chand's Current A/c	-	-	56,000	By General reserve	9,000	6,000	3,000
To shares in ABC Ltd.	60,000	40,000	20,000	By Investment Fluctuation Fund*	2,000	1,333	667
To Cash A/c	18,000	44,000	-	By Realization A/c	1,000	667	333
				By Realisation A/c (Mrs. Aman's loan A/c)	15,000	-	-
				By Cash A/c	-	-	<u>31,000</u>
	<u>97,000</u>	<u>88,000</u>	<u>78,000</u>		<u>97,000</u>	<u>88,000</u>	<u>78,000</u>

*Alternatively, Investment Fluctuation Fund Account may be transferred to Realization Account.

Chand's Current Account

Particulars	₹	Particulars	₹
To Balance b/d	<u>56,000</u>	By Chand's Capital A/c-transfer	<u>56,000</u>
	<u>56,000</u>		<u>56,000</u>

Shares in ABC Ltd. Account

Particulars	₹	Particulars	₹
To ABC Ltd. Account	1,20,000	By Aman's Capital A/c	60,000
		By Baal's Capital A/c	40,000
		By Chand's Capital A/c	20,000
	1,20,000		1,20,000

Cash Account

Particulars	₹	Particulars	₹
To Balance b/d	1,000	By Realisation A/c (Liabilities and expenses)	94,500
To ABC Ltd.	75,500	By Aman's Capital A/c	18,000
To Realisation A/c (sale of assets)	49,000	By Baal's Capital A/c	44,000
To Chand's Capital A/c	<u>31,000</u>		<u>-</u>
	<u>1,56,500</u>		<u>1,56,500</u>

- (b) 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. Calculation of ESOP cost to be amortized

	2015-2016	2016-2017
Fair value of options per share	₹ 18	₹ 18

No. of options expected to vest under the scheme	93,000 (930 x 100)	88,000 (880 x 100)
Fair value of options	16,74,000	₹ 15,84,000
Value of options recognized as expenses	(₹ 16,74,000 / 2) 8,37,000	(₹ 15,84,000 – ₹ 8,37,000) 7,47,000

6. As per the information given in the question, buy-back of 25,000 shares @ ₹ 20, as desired by the company, is within the provisions of the Companies Act, 2013.

Journal Entries for buy-back of shares

		Debit (₹)	Credit (₹)
(a)	Equity shares buy-back account Dr. To Bank account (Being buy back of 25,000 equity shares of ₹ 10 each @ ₹ 20 per share)	5,00,000	5,00,000
(b)	Equity share capital account Dr. Securities premium account Dr. To Equity shares buy-back account (Being cancellation of shares bought back)	2,50,000 2,50,000	5,00,000
(c)	Revenue reserve account Dr. To Capital redemption reserve account (Being transfer of free reserves to capital redemption reserve to the extent of nominal value of capital bought back through free reserves)	2,50,000	2,50,000

**Balance Sheet of Complicated Ltd.
as on 1st April, 2016**

Particulars	Note No	Amount ₹
EQUITY AND LIABILITIES		
1 Shareholders' funds		
(a) Share capital	1	11,00,000
(b) Reserves and Surplus	2	22,25,000
2 Non-current liabilities		
(a) Long-term borrowings	3	28,75,000

3	Current liabilities		
	(a) Other current liabilities		
		4	<u>19,50,000</u>
	Total		<u>81,50,000</u>
	ASSETS		
1	Non-current assets		
	(a) Fixed assets		46,50,000
2	Current assets (40,00,000-5,00,000)		<u>35,00,000</u>
	Total		<u>81,50,000</u>

Notes to Accounts

		₹	₹
1.	Share Capital		
	Equity share capital		
	1,10,000 Equity shares of ₹10 each		11,00,000
2.	Reserves and Surplus		
	Profit and Loss A/c	1,25,000	
	Revenue reserves	15,00,000	
	Less: Transfer to CRR	<u>(2,50,000)</u>	
	Securities premium	2,50,000	
	Less: Utilization for share buy-back	<u>(2,50,000)</u>	
	Share Option Outstanding Account	4,00,000	
	Capital Reserve	2,00,000	
	Capital Redemption Reserve	<u>2,50,000</u>	<u>22,25,000</u>
3.	Long-term borrowings		
	Secured		
	12% Debentures	18,75,000	
	Unsecured loans	<u>10,00,000</u>	<u>28,75,000</u>
4.	Other Current Liabilities		
	Current maturities of long term borrowings	16,50,000	
	Unpaid dividend	1,00,000	
	Application money received for allotment due for refund	<u>2,00,000</u>	<u>19,50,000</u>

7. Journal Entries

		(₹) 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)	20,00,000	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) 2012 Jan. 1	Own Debentures Dr. To Bank (Being purchase of own debentures of the face value of ₹4,00,000 for ₹3,95,600)	3,95,600	3,95,600
2013 "	9% Debentures Dr. 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)	4,00,000	3,95,600 4,400
" "	Profit on Cancellation of Own Debentures	4,400	

	Account To Capital Reserve Account (Being transfer of profit on cancellation of own debentures to capital reserve)	Dr.		4,400
(iv) 2016Jan. 1	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

8. Statement showing liability of underwriters

	Particulars	Basis	White	Black
A.	Gross Liability [No. of Shares]	1:1	15,00,000	15,00,000
B.	Less: Marked Applications {Net of firm underwriting}		<u>(15,00,000)</u>	<u>(10,20,000)</u>
C.	Balance [A-B]		-	4,80,000
D.	Less: Unmarked Applications	1:1	<u>(1,20,000)</u>	<u>(1,20,000)</u>
E.	Balance [C-D]		(1,20,000)	3,60,000
F.	Less: Firm Underwriting		<u>(60,000)</u>	<u>(60,000)</u>
G.	Balance		(1,80,000)	3,00,000
H.	Credit for White 's Oversubscription		<u>1,80,000</u>	<u>(1,80,000)</u>
I.	Net Liability		-	1,20,000
J.	Add: Firm Underwriting		<u>60,000</u>	<u>60,000</u>
K.	Total Liability [No. Shares]		60,000	1,80,000

Journal Entries

2017 Jan 31	Bank A/c To Equity Share Application A/c	Dr.	72,00,000	72,00,000
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March 31	(Being application money received @ ₹ 2.50 per share on 28,80,000 shares) Equity Share Application A/c To Equity Share Capital A/c	Dr.	72,00,000	72,00,000
March 31	(Being the transfer of application money to share capital on 28,80,000 shares vide Board's Resolution) Equity Share Allotment A/c (28,80,000 x ₹ 3) To Equity Share Capital A/c (28,80,000 x ₹ 2.5) To Securities Premium A/c (28,80,000 x ₹ 0.5) (Being allotment money due on 28,80,000 shares allotted to public)	Dr.	86,40,000	72,00,000 14,40,000
March 31	Black (1,20,000 x ₹ 5.5) To Equity Share Capital A/c (1,20,000 x ₹ 5) To Securities Premium A/c (1,20,000 x ₹ 0.5) (Being the application and allotted money due on net liability of underwriter i.e. 1,20,000 shares)	Dr.	6,60,000	6,00,000 60,000
March 31	Bank A/c To Equity Share Allotment A/c [(28,80,000 – 6,000) x ₹ 3] To Black (1,20,000 x ₹ 5.5) (Being the receipt of money due on allotment except from the allottee for 6,000 shares)	Dr.	92,82,000	86,22,000 6,60,000
March 31	Underwriting Commission A/c To Black A/c To White A/c (Being commission @ 4 % on issue price of ₹ 10.50 for ₹30 lakh shares payable to underwriters)	Dr.	12,60,000	6,30,000 6,30,000

March 31	Black A/c		6,30,000	
	White A/c		6,30,000	
	To Bank A/c			12,60,000
	(Being commission paid to underwriters)			
June 30	Equity Share Capital A/c (6,000 x 5)	Dr.	30,000	
	Securities Premium A/c (6,000 x 0.5)	Dr.	3,000	
	To Share Allotment A/c (6,000 x 3)			18,000
	To Forfeited Shares A/c (6,000 x 2.5)			15,000
	(Being 6,000 shares forfeited vide Board's Resolution)			
June 30	Bank A/c (6,000 x ₹ 4)	Dr.	24,000	
	Forfeited Shares A/c	Dr.	6,000	
	To Equity Share Capital A/c (6,000 x ₹ 5)			30,000
	(Being the reissue of 6,000 shares @ ₹ 4 as ₹ 5 paid up at par)			
	Forfeited Shares A/c (15,000 – 6,000)	Dr.	9,000	
	To Capital Reserve A/c			9,000
	(Being the transfer of profit on reissue)			

9. (i) Calculation of number of shares issued to P Ltd. and Q Ltd.:

Amount of Share Capital as per balance sheet	₹
P Ltd.	6,00,000
Q Ltd.	<u>8,40,000</u>
	<u>14,40,000</u>
<u>Share of P Ltd.</u>	= ₹ 14,40,000 x [21,60,000 / (21,60,000 + 14,40,000)]
	= ₹ 8,64,000 or 86,400 shares
Securities premium	= ₹ 21,60,000 – ₹ 8,64,000 = ₹ 12,96,000
Premium per share	= ₹ 12,96,000 / ₹ 86,400 = ₹ 15
Issued 86,400 shares	@ ₹ 10 each at a premium of ₹ 15 per share
<u>Share of Q Ltd.</u>	= ₹ 14,40,000 x [14,40,000 / (21,60,000 + 14,40,000)]
	= ₹ 5,76,000 or 57,600 shares
Securities premium	= ₹ 14,40,000 – ₹ 5,76,000 = ₹ 8,64,000
Premium per share	= ₹ 8,64,000 / ₹ 57,600 = ₹ 15
Issued 57,600 shares	@ ₹ 10 each at a premium of ₹ 15 per share

(ii)

Journal Entries

In the books of PQ Ltd.

<i>Particulars</i>	<i>Dr.</i>	<i>Cr.</i>
	<i>Amount (₹)</i>	<i>Amount (₹)</i>
Business purchase account	Dr. 36,00,000	
To Liquidator of P Ltd. account		21,60,000
To Liquidator of Q Ltd. account		14,40,000
(Being the amount of purchase consideration payable to liquidator of P Ltd. and Q Ltd. for assets taken over)		
Goodwill	Dr. 5,40,000	
Fixed assets account	Dr. 7,20,000	
Inventory account	Dr. 3,60,000	
Trade receivables account	Dr. 4,80,000	
Cash at bank	Dr. 3,00,000	
To Trade payables account		2,40,000
To Business purchase account		21,60,000
(Being assets and liabilities of P Ltd. taken over)		
Fixed assets account	Dr. 10,80,000	
Inventory account	Dr. 6,60,000	
Trade receivables account	Dr. 7,80,000	
To bank overdraft account		5,40,000
To Trade payables account		5,40,000
To Business purchase account		14,40,000
(Being assets and liabilities of Q Ltd. taken over)		
Liquidator of P Ltd. Account	Dr. 21,60,000	
To Equity share capital account (86,400 x ₹ 10)		8,64,000
To Securities premium (86,400 x ₹ 15)		12,96,000
(Being the allotment of shares as per agreement for discharge of purchase consideration)		
Liquidator of Q Ltd. account	Dr. 14,40,000	
To Equity share capital account (57,600 x ₹ 10)		5,76,000

To Securities premium (57,600 x ₹ 15) (Being the allotment of shares as per agreement for discharge of purchase consideration)		8,64,000
Bank A/c	18,00,000	
To Equity share capital account		7,20,000
To Securities premium (Equity share capital issued to raise working capital)		10,80,000

(iii) Balance Sheet of PQ Ltd. on 31st March, 2017 after amalgamation

	Particulars	Notes	₹
	Equity and Liabilities		
1	Shareholders' funds		
a	Share capital	1	21,60,000
b	Reserves and Surplus	2	32,40,000
2	Current liabilities		
a	Trade payables (2,40,000 + 5,40,000)		<u>7,80,000</u>
	Total		<u>61,80,000</u>
	Assets		
1	Non-current assets		
a	Fixed assets		
	Tangible assets (7,20,000 + 10,80,000)		18,00,000
	Intangible assets (goodwill)	4	5,40,000
2	Current assets		
a	Inventories (3,60,000 + 6,60,000)		10,20,000
b	Trade receivables (4,80,000 + 7,80,000)		12,60,000
c	Cash and cash equivalents	3	15,60,000
	Total		<u>61,80,000</u>

Notes to accounts

	₹
1 Share Capital	
Issued, subscribed and paid up share capital	
2,16,000 Equity shares of ₹10 each	21,60,000

(Out of the above 1,44,000 shares issued for non-cash consideration under scheme of amalgamation)		
2	Reserves and Surplus	
	Securities premium (@₹15 for 2,16,000 shares)	32,40,000
3	Cash and cash equivalents	
	Cash at Bank	15,60,000
4	Intangible Assets	
	Goodwill	5,40,000

Working Notes:1. **Calculation of goodwill of P Ltd.**

Particulars	Amount ₹	Weight	Weighted amount ₹
2014-15	3,00,000	1	3,00,000
2015-16	5,25,000	2	10,50,000
2016-17	<u>6,30,000</u>	3	<u>18,90,000</u>
Total (a+b+c)	<u>14,55,000</u>	6	<u>32,40,000</u>
weighted Average = [Total weighted amount / Total of weight]			
[₹ 32,40,000/6]			
Goodwill			5,40,000

2. **Calculation of Net assets**

	P Ltd. ₹	Q Ltd. ₹
Assets		
Goodwill	5,40,000	
Fixed assets	7,20,000	10,80,000
Inventory	3,60,000	6,60,000
Trade receivable	4,80,000	7,80,000
Cash at bank	3,00,000	
Less: Liabilities		
Bank overdraft		5,40,000
Trade payables	<u>2,40,000</u>	<u>5,40,000</u>
Net assets or Purchase consideration	<u>21,60,000</u>	<u>14,40,000</u>

3. **New authorized capital**

$$= ₹ 14,40,000 + ₹ 12,00,000 = ₹ 26,40,000$$

4. **Cash and Cash equivalents**

	₹
P Ltd. Balance	3,00,000
Cash received from Fresh issue (72,000 X ₹ 25)	<u>18,00,000</u>
	21,00,000
Less: Bank Overdraft	<u>5,40,000</u>
	<u>15,60,000*</u>

*The balance of cash and cash equivalents has been shown after setting off overdraft amount.

10

Journal Entries

		₹	₹
Bank A/c	Dr.	10,00,000	
To Equity share capital A/c			10,00,000
(Being money on final call received)			
Equity share capital (₹ 50) A/c	Dr.	75,00,000	
To Equity share capital (₹ 40) A/c			60,00,000
To Capital Reduction A/c			15,00,000
(Being conversion of equity share capital of ₹ 50 each into ₹ 40 each as per reconstruction scheme)			
Bank A/c	Dr.	12,50,000	
To Equity Share Capital A/c			12,50,000
(Being new shares allotted at ₹ 40 each)			
Trade payables A/c	Dr.	12,40,000	
To Equity share capital A/c			7,50,000
To Bank A/c (4,90,000 x 70%)			3,43,000
To Capital Reduction A/c			1,47,000
(Being payment made to creditors in shares or cash to the extent of 70% as per reconstruction scheme)			
8% Debentures A/c	Dr.	3,00,000	
12% Debentures A/c	Dr.	4,00,000	
To A A/c			7,00,000
(Being cancellation of 8% and 12% debentures of A)			
A A/c	Dr.	7,00,000	

To 15% Debentures A/c			5,00,000
To Capital Reduction A/c			2,00,000
(Being issuance of new 15% debentures and balance transferred to capital reduction account as per reconstruction scheme)			
Bank A/c	Dr.	1,00,000	
To 15% Debentures A/c			1,00,000
(Being new debentures subscribed by A)			
8% Debentures A/c	Dr.	1,00,000	
12% Debentures A/c	Dr.	2,00,000	
To B A/c			3,00,000
(Being cancellation of 8% and 12% debentures of B)			
B A/c	Dr.	3,00,000	
To 15% Debentures A/c			2,50,000
To Capital Reduction A/c			50,000
(Being issuance of new 15% debentures and balance transferred to capital reduction account as per reconstruction scheme)			
Land and Building	Dr.	9,14,000	
(51,84,000 – 42,70,000)			
Inventories	Dr.	30,000	
To Capital Reduction A/c			9,44,000
(Being value of assets appreciated)			
Outstanding expenses A/c	Dr.	10,60,000	
To Bank A/c			10,60,000
(Being outstanding expenses paid in cash)			
Capital Reduction A/c	Dr.	33,41,000	
To Machinery A/c			1,30,000
To Computers A/c			1,20,000
To Trade receivables A/c			1,09,000
To Profit and Loss A/c			29,82,000
(Being amount of Capital Reduction utilized in writing off P & L A/c (Dr.) balance and downfall in value of other assets)			

Capital Reserve A/c	Dr.	5,00,000	
To Capital Reduction A/c			5,00,000
(Being debit balance of capital reduction account adjusted against capital reserve)			

Balance Sheet of Xylem Ltd. (as reduced) as on 31.3.2017

Particulars		Notes	₹
Equity and Liabilities			
1	Shareholders' funds		
a	Share capital	1	80,00,000
2	Non-current liabilities		
a	Long-term borrowings	2	<u>8,50,000</u>
	Total		<u>88,50,000</u>
Assets			
1	Non-current assets		
a	Fixed assets		
	Tangible assets	3	63,04,000
2	Current assets		
a	Inventories		3,50,000
b	Trade receivables		9,81,000
c	Cash and cash equivalents		<u>12,15,000</u>
	Total		<u>88,50,000</u>

Notes to accounts

			₹
1.	Share Capital		
	2,00,000 Equity shares of ₹ 40		80,00,000
2.	Long-term borrowings		
	Secured		
	15% Debentures (assumed to be secured)		8,50,000
3.	Tangible assets		
	Land & Building	51,84,000	
	Machinery	7,20,000	
	Computers	<u>4,00,000</u>	63,04,000

Working Notes:1. **Cash at Bank Account**

<i>Particulars</i>	₹	<i>Particulars</i>	₹
To Balance b/d	2,68,000	By Trade Creditors A/c	3,43,000
To Equity Share capital A/c	10,00,000	By Outstanding expenses A/c	10,60,000
To Equity Share Capital A/c	12,50,000	By Balance c/d (bal. fig.)	12,15,000
To 15% Debentures A/c	<u>1,00,000</u>		
	<u>26,18,000</u>		<u>26,18,000</u>

2. **Capital Reduction Account**

<i>Particulars</i>	₹	<i>Particulars</i>	₹
To Machinery A/c	1,30,000	By Equity Share Capital A/c	15,00,000
To Computers A/c	1,20,000	By Trade payables A/c	1,47,000
To Trade receivables A/c	1,09,000	By A A/c	2,00,000
To Profit and Loss A/c	29,82,000	By B A/c	50,000
		By Land & Building	9,14,000
		By Inventories	30,000
		By Capital Reserve A/c	<u>5,00,000</u>
	<u>33,41,000</u>		<u>33,41,000</u>

11. **Liquidator's Final Statement of Account**

<i>Receipts</i>	₹	<i>Payments</i>	₹
Assets realized	3,80,400	Liquidation Expenses	1,000
Call on contributories: 2,000	20,000	Liquidator's Remuneration	400
Equity Shares @ ₹ 10 per share (W.N.)		Unsecured Creditors	99,000
	<u>4,00,400</u>	Preference Shareholders	<u>3,00,000</u>
			<u>4,00,400</u>

Working Notes:

(i) Calculation of Shortage of funds	₹
Total Amount Available	3,80,400
Less: liquidation Expenses	<u>(1,000)</u>
Balance	3,79,400
Less: Unsecured Creditors	<u>(99,000)</u>

Balance	2,80,400
Less: Pref. Shareholders	<u>(3,00,000)</u>
Shortage of Funds	<u>19,600</u>

(ii) Calculation of funds required to meet shortage and commission payable on Calls to be made (to be called from equity shareholders)

$$\begin{aligned} \text{Shortage of funds} \times \frac{100}{100 - \text{Rate of Commission}} &= ₹ 19,600 \times \frac{100}{100 - 2} \\ &= \frac{₹ 19,600 \times 100}{98} = ₹ 20,000 \end{aligned}$$

(iii) Uncalled Capital @ ₹ 25 on 2,000 shares = ₹ 50,000

(iv) Amount of Calls to be made (least of funds required and uncalled capital) i.e. ₹ 20,000 i.e. ₹ 10 per Share (20,000 / 20)

(v) Commission on Call = ₹ 20,000 x 2/100 = ₹ 400

12. In the books of Long Live Insurance Co. Ltd.

Journal Entries

Date	Particulars	₹ in crores	
		Dr.	Cr.
1.4.2016	Unexpired Risk Reserve (Fire) A/c Dr.	40.00	
	Unexpired Risk Reserve (Marine) A/c Dr.	30.00	
	Unexpired Risk Reserve (Miscellaneous) A/c Dr.	10.00	
	To Fire Revenue Account		40.00
	To Marine Revenue Account		30.00
	To Miscellaneous Revenue Account		10.00
	(Being unexpired risk reserve brought forward from last year)		
31.3.2017	Marine Revenue A/c Dr.	30	
	To Unexpired Risk Reserve (Marine) A/c		30
	(Being closing reserve for unexpired risk created at 100% of net premium income for marine)		
	Fire Revenue A/c Dr.	43	

To Unexpired Risk Reserve(Fire) A/c (Being closing reserve for unexpired risk created at 50% of net premium income for Fire)			43
Miscellaneous Revenue A/c	Dr.	8.5	
To Unexpired Risk Reserve(Misc.) A/c (Being closing reserve for unexpired risk created at 50% net premium income for Misc.)			8.5

Working Note:**Calculation of Closing balance of Reserve for Unexpired Risks**

	Marine	Fire	Misc.
Premium Collected from:			
a. Insured in respect of policies issued	36.00	86.00	24.00
b. Other insurance companies in respect of risks undertaken	14.00	10.00	8.00
Total (a+b)	50.00	96.00	32.00
Less: Premium paid/payable to other insurance companies on business ceded	<u>20.00</u>	<u>10.00</u>	<u>15.00</u>
	<u>30.00</u>	<u>86.00</u>	<u>17.00</u>
% of creation of unexpired Risk Reserve	100%	50%	50%
Amount of Closing Unexpired Risk Reserve	30.00	43.00	8.50

13.

TOP Bank Limited**Profit and Loss Account for the year ended 31st March, 2017**

		Schedule	Year ended 31.03.2017
			(₹ in '000s)
I. Income:			
Interest earned	13		5923.18
Other income	14		<u>728.00</u>
Total			<u>6,651.18</u>
II. Expenditure			
Interest expended	15		3259.92
Operating expenses	16		768.46

	Provisions and contingencies (960+210+900)	<u>2,070.00</u>
	Total	<u>6,098.38</u>
III.	Profits/Losses	
	Net profit for the year	552.80
	Profit brought forward	<u>nil</u>
		<u>552.80</u>
IV.	Appropriations	
	Transfer to statutory reserve (25%)	138.20
	Balance carried over to balance sheet	<u>414.60</u>
		<u>552.80</u>

		<i>Year ended 31.3. 2017 (₹ in '000s)</i>
	Schedule 13 – Interest Earned	
I.	Interest/discount on advances/bills (Refer W.N.)	<u>5923.18</u>
		<u>5923.18</u>
	Schedule 14 – Other Income	
I.	Commission, exchange and brokerage	304
II.	Profit on sale of investments	320
III.	Rent received	<u>104</u>
		<u>728</u>
	Schedule 15 – Interest Expended	
I.	Interests paid on deposits	<u>3259.92</u>
	Schedule 16 – Operating Expenses	
I.	Payment to and provisions for employees	320
II.	Rent and taxes	144
III.	Depreciation on bank's properties	48
IV.	Director's fee, allowances and expenses	48
V.	Auditors' fee	28
VI.	Law (statutory) charges	44
VII.	Postage and telegrams	96.46

VIII.	Preliminary expenses	40
		<u>768.46</u>

Working Note:

	(₹ in '000s)
Interest/discount	5,929.18
Add: Rebate on bills discounted on 31.3. 2016	19.00
Less: Rebate on bills discounted on 31.3. 2017	<u>(25.00)</u>
	<u>5,923.18</u>

**14. Trading and Profit and Loss Account
for the year ended on 31st March, 2017**

Particulars	A (₹)	B (₹)	C (₹)	Particulars	A (₹)	B (₹)	C (₹)
To Opening Stock	8,500	5,700	1,200	By Sales less Sales returns	50,000	30,000	20,000
To Purchases	22,000	17,000	8,000	By Closing Stock	3,500	2,000	1,500
To Freight & carriage	1,400	800	200				
To Wages	800	700	200				
To Gross profit	<u>20,800</u>	<u>7,800</u>	<u>11,900</u>				
	<u>53,500</u>	<u>32,000</u>	<u>21,500</u>		<u>53,500</u>	<u>32,000</u>	<u>21,500</u>
To Salaries	2,250	1,350	900	By Gross Profit	20,800	7,800	11,900
To Power & Water	600	360	240	By Net Loss	-	465	-
To Telephone Charges	1,050	630	420				
To Bad Debts	375	225	150				
To Rent & Taxes	3,000	1,800	1,200				
To Insurance	750	450	300				
To Printing & Stationery	1,000	600	400				
To Advertising	1,750	1,050	700				
To Depreciation (2,000 +4,000)	3,000	1,800	1,200				
To Net Profit	<u>7,025</u>		<u>6,390</u>				
	<u>20,800</u>	<u>8,265</u>	<u>11,900</u>		<u>20,800</u>	<u>8,265</u>	<u>11,900</u>

Balance Sheet as at 31.03.2017

Liabilities	₹	Assets	₹
Capital A/c	40,000	Furniture & Fixtures	4,600
Add: Net Profit (₹ 7,025 + ₹ 6,390)	<u>13,415</u>	Plant & Machinery	20,000
	53,415	Less: Depreciation	<u>2,000</u> 18,000
Less: Net loss in Dept B	<u>465</u>	Motor Vehicles	40,000
	52,950	Less: Depreciation	<u>4,000</u> 36,000
Less: Drawings	<u>1,500</u>	Sundry Debtors	12,200
Sundry Creditors	15,000	Cash in hand	850
Bank Overdraft	12,000	Closing Stock	7,000
Wages Outstanding	<u>200</u>		
	<u>78,650</u>		<u>78,650</u>

Note: Allocation of expenses has been done in proportion of sales, as required by the question.

15. Step 1: Calculation of Deficiency

Branch stock account (at invoice price)

Particulars	₹	Particulars	₹
To Opening Stock (₹ 74,736 + 1/3 of ₹ 74,736)	99,648	By Sales	3,61,280
To Goods sent to Branch A/c (₹ 2,89,680 + 1/3 of ₹ 2,89,680)	3,86,240	By Closing Stock	1,23,328
		By Deficiency at sale price [Balancing figure]	<u>1,280</u>
	<u>4,85,888</u>		<u>4,85,888</u>

Step 2: Calculation of Net Profit before Commission

Branch account

Particulars	₹	Particulars	₹
To Opening [₹74,736 + 1/3 of ₹ 74,736]	99,648	By Sales	3,61,280
To Gross sent to Branch A/c (₹ 2,89,680 + 1/3 of ₹ 2,89,680)	3,86,240	By Closing Stock	1,23,328
To Expenses	49,120	By Stock Reserve A/c	24,912

To Stock Reserve A/c (₹ 1,23,328 x 25/100)	30,832	By goods sent to Branch A/c	96,560
To Net Profit – subject to manager's commission	<u>40,240</u>		
	<u>6,06,080</u>		<u>6,06,080</u>

Step 3: Calculation of Commission still due to manager

		₹
A	Calculation at 10% profit before charging his commission [₹ 40,240 x 10/100]	4,024
B	Less: 25% of cost of deficiency in stock (25% of (75% of ₹ 1,280))	<u>(240)</u>
C	Commission for the year [A-B]	3,784
D	Less: Paid on account	<u>(2,400)</u>
E	Balance due (C-D)	1,384

16. (a) Elements of Financial Statements

The framework classifies items of financial statements can be classified in five broad groups depending on their economic characteristics: Asset, Liability, Equity, Income/Gain and Expense/Loss.

Asset	Resource controlled by the enterprise as a result of past events from which future economic benefits are expected to flow to the enterprise
Liability	Present obligation of the enterprise arising from past events, the settlement of which is expected to result in an outflow of a resource embodying economic benefits.
Equity	Residual interest in the assets of an enterprise after deducting all its liabilities.
Income/gain	Increase in economic benefits during the accounting period in the form of inflows or enhancement of assets or decreases in liabilities that result in increase in equity other than those relating to contributions from equity participants
Expense/loss	Decrease in economic benefits during the accounting period in the form of outflows or depletions of assets or incurrance of liabilities that result in decrease in equity other than those relating to distributions to equity participants.

- (b) AS 16 clearly states that capitalization of borrowing costs should cease when substantially all the activities necessary to prepare the qualifying asset for its intended use are completed. Therefore, interest on the amount that has been used for the

construction of the building upto the date of completion (January, 2017) i.e. ₹ 18 lakhs alone can be capitalized. It cannot be extended to ₹ 25 lakhs.

17. (a) According to AS 4 on 'Contingencies and Events Occurring after the Balance Sheet Date', adjustments to assets and liabilities are required for events occurring after the balance sheet date that provide additional information materially affecting the determination of the amounts relating to conditions existing at the balance sheet date. However, adjustments to assets and liabilities are not appropriate for events occurring after the balance sheet date, if such events do not relate to conditions existing at the balance sheet date. "Contingencies" used in the Standard is restricted to conditions or situations at the balance sheet date, the financial effect of which is to be determined by future events which may or may not occur.
- (i) Fire has occurred after the balance sheet date and also the loss is totally insured. Therefore, the event becomes immaterial and the event is **non-adjusting** in nature.
- (ii) The contingency is restricted to conditions existing at the balance sheet date. However, in the given case, suit was filed against the company's advertisement by a party on 10th April for amount of ₹ 20 lakhs. Therefore, it does not fit into the definition of a contingency and hence is a **non-adjusting event**.
- (b) As per AS 5 "Net Profit or Loss for the Period, Prior Period Items and Changes in Accounting Policies" Extraordinary items should be disclosed in the statement of profit and loss as a part of net profit or loss for the period. The nature and the amount of each extraordinary item should be separately disclosed in the statement of profit and loss in a manner that its impact on current profit or loss can be perceived.

In the given case the selling of land to tide over liquidation problems as well as fire in the Factory does not constitute ordinary activities of the Company. These items are distinct from the ordinary activities of the business. Both the events are material in nature and expected not to recur frequently or regularly. Thus, these are Extraordinary Items.

Therefore, in the given case, disclosing net profits by setting off fire losses against profit from sale of land is not correct. The profit on sale of land, and loss due to fire should be disclosed separately in the statement of profit and loss.

18. (a) **Calculation of profit or loss to be recognized in the books of Power Track Limited**

	₹
Forward contract rate	64.25
Less: Spot rate	(61.50)
Loss on forward contract	2.75
Forward Contract Amount	\$ 50,000

Total loss on entering into forward contract = (\$ 50,000 × ₹ 2.75)	₹1,37,500
Contract period	6 months
Loss for the period 1 st November, 2016 to 31 st March, 2017 i.e. 5 months falling in the year 2016-2017	5 months
Hence, Loss for 5 months will be ₹ 1,37,500 × $\frac{5}{6}$ =	₹ 1,14,583

Thus, the loss amounting to ₹ 1,14,583 for the period is to be recognized in the year ended 31st March, 2017.

- (b) From the above account, it is inferred that the Company follows Reduction Method for accounting of Government Grants. Accordingly, out of the ₹ 16,00,000 that has been received, ₹ 8,00,000 (being the balance in Machinery A/c) should be credited to the machinery A/c.

The balance ₹ 8,00,000 may be credited to P&L A/c, since already the cost of the asset to the tune of ₹ 12,00,000 had been debited to P&L A/c in the earlier years by way of depreciation charge, and ₹ 8,00,000 transferred to P&L A/c now would be partial recovery of that cost.

There is no need to provide depreciation for 2015-16 or 2016-17 as the depreciable amount is now Nil.

19. (a) (i) **Computation of annual lease payment to the lessor**

	₹
Cost of equipment	16,99,999.50
Unguaranteed residual value	1,33,500.00
Present value of residual value after third year @ 10% (₹ 1,33,500 × 0.751)	1,00,258.50
Fair value to be recovered from lease payments (₹ 16,99,999.5 – ₹ 1,00,258.5)	15,99,741.00
Present value of annuity for three years is 2.486	
Annual lease payment = ₹ 15,99,741 / 2.486	6,43,500.00

(ii) **Computation of Unearned Finance Income**

	₹
Total lease payments (₹ 6,43,500 × 3)	19,30,500
Add: Unguaranteed residual value	<u>1,33,500</u>
Gross investment in the lease	20,64,000.00
Less: Present value of investment (lease payments and residual value) (₹ 1,00,258.5 + ₹ 15,99,741)	<u>(16,99,999.50)</u>
Unearned finance income	<u>3,64,000.50</u>

(b)

Interest on Debentures @ 10% for the year	=	$36,000 \times ₹ 50 \times \frac{10}{100}$
	=	₹ 1,80,000
Tax on interest @ 30%	=	₹ 54,000
Diluted Earnings (Adjusted net profit)	=	(₹ 60,00,000 + ₹ 1,80,000 - ₹ 54,000)
	=	₹ 61,26,000

20. (a) As per provisions of AS 26 “Intangible Assets”, expenditure on research should be recognized as an expense when it is incurred. An intangible asset arising from development (or from the development phase of an internal project) should be recognized if, and only if, an enterprise can demonstrate all of the conditions specified in para 44 of the standard. An intangible asset (arising from development) should be derecognized when no future economic benefits are expected from its use according to para 87 of the standard. Thus, the manager cannot defer the expenditure write off to future years in the given case. Hence, the expenses amounting ₹ 40 lakhs incurred on the research and development project has to be written off in the current year ending 31st March, 2017.

(b) As per provisions of AS 29 “Provisions, Contingent Liabilities and Contingent Assets”, where some or all of the expenditure required to settle a provision is expected to be reimbursed by another party, the reimbursement should be recognized when, and only when, it is virtually certain that reimbursement will be received if the enterprise settles the obligation. The reimbursement should be treated as a separate asset. The amount recognized for the reimbursement should not exceed the amount of the provision.

It is apparent from the question that the company had not made provision for warranty in respect of certain goods considering that the company can claim the warranty cost from the original supplier. However, the provision for warranty should have been made as per AS 29 and the amount claimable as reimbursement should be treated as a separate asset in the financial statements of the company rather than omitting the disclosure of such liability. Accordingly, it can be said that the accounting treatment adopted by the company with respect to warranty is not correct.

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.

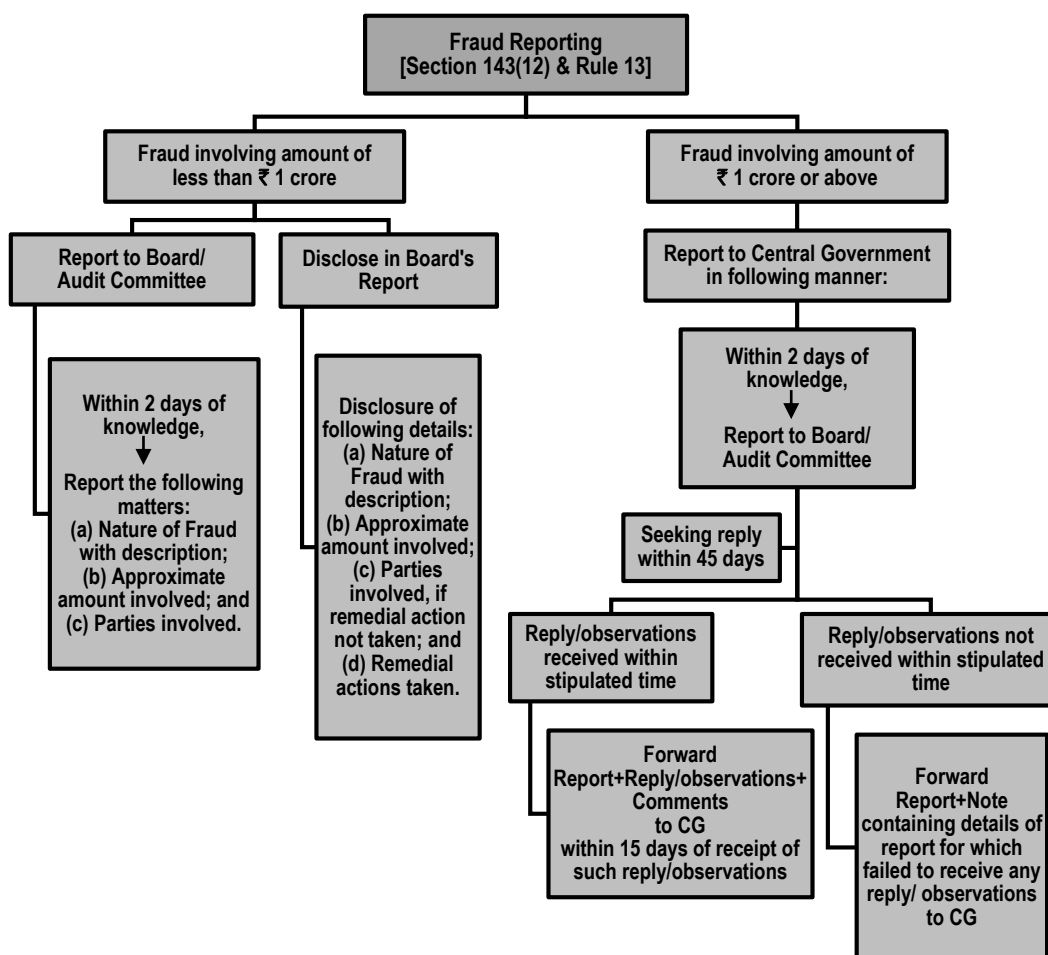
In this regard, sub-rule (3) of Rule 13 of the Companies (Audit and Auditors) Rules, 2014 states that in case of a fraud involving lesser than the amount specified in sub-rule (1) [i.e. less than ₹ 1 crore], the auditor shall report the matter to Audit Committee constituted under section 177 or to the 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. Reporting under Companies (Auditor's Report) Order, 2016 [CARO, 2016]

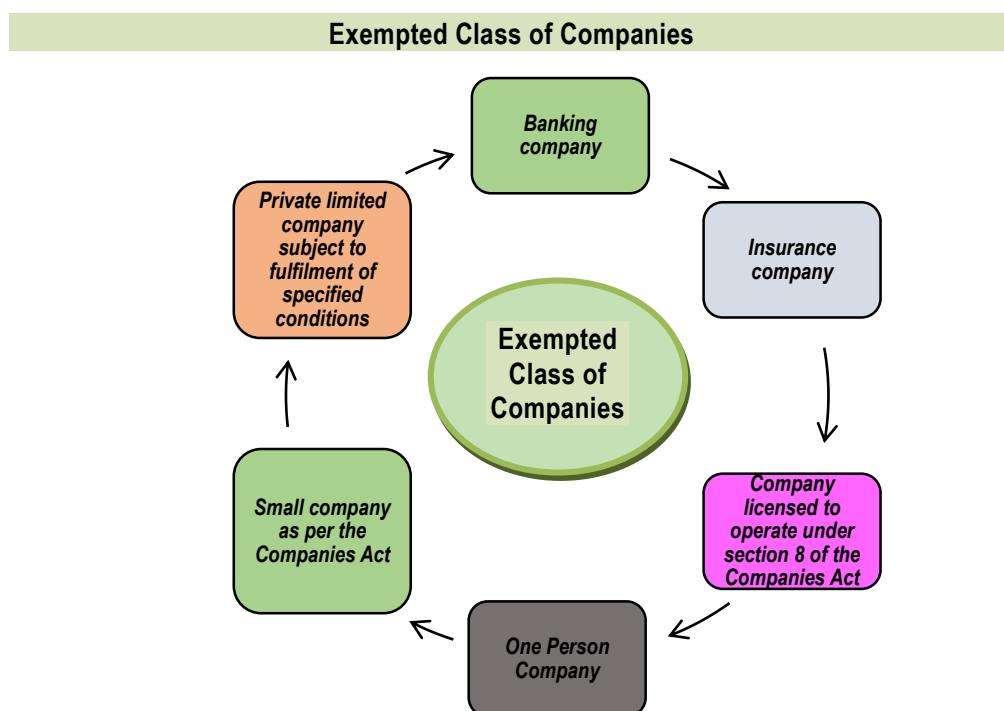
In exercise of the powers conferred by sub-section (11) of section 143 of the Companies Act, 2013 (18 of 2013) and in supersession of the Companies (Auditor's Report) Order, 2015 published in the Gazette of India, Extraordinary, Part II, Section 3, Sub-section (ii), vide number S.O. 990 (E), dated the 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.



- 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.

4. 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.

5. 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.

6. 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.

7. 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.

8. 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.

9. In exercise of powers conferred by section 143 read with sub-sections (1) and (2) of section 469 of the Companies Act, 2013 (18 of 2013), the Central Government hereby inserted the clause "(d) whether the company had provided requisite disclosures in its financial statements as to holdings as well as dealings in Specified Bank Notes during the period from 8th November, 2016 to 30th December, 2016 and if so, whether these are in accordance with the books of accounts maintained by the company.", after clause (c) in rule 11 of the Companies (Audit and Auditors) Rules, 2014.

10. In exercise of the powers conferred by section 139 read with sub-sections (1) and (2) of section 469 of the Companies Act, 2013 (18 of 2013), the Central Government hereby makes the following rules further to amend the Companies (Audit and Auditors) Rules, 2014, namely:—

"In the Companies (Audit and Auditors) Rules, 2014, in rule 5, in clause (b), for the word "twenty", the word "fifty" shall be substituted"

The impact of this amendment on the study material would be :

1. Point no. (II) - para 7.3.1 on page number 7.10 be read as -
all private limited companies having paid up share capital of rupees fifty crores or more ;
2. In diagram appearing at page number 7.10, line in the middle box be read as -
all private limited companies having paid up share capital \geq Rs 50 crore

For more details students may refer below mentioned link:
<http://www.mca.gov.in/Ministry/pdf/CompaniesAuditandAuditorsSecondAmendmentRules2017.pdf>

11. MCA vide Notification S.O. 2218(E) dated 13th July 2017 with respect to the Notification G.S.R. 583(E) Dated 13th June, 2017 (Corrigendum), stated that for the words "statement or" to read as "statement and" under section 143(3)(i).

12. Notification No. G.S.R. 583(E) dated 13th June, 2017 stated that requirements of reporting under section 143(3)(i) read Rule 10 A of the Companies (Audit and Auditors) Rules, 2014 of the Companies Act 2013 shall not apply to certain private companies. Clarification regarding applicability of exemption given to certain private companies under section 143(3)(i) (vide circular no. 08/2017 dated 25th July 2017) clarified that the exemption shall be applicable for those audit reports in respect of financial statements pertaining to financial year, commencing on or after 1st April, 2016, which are made on or after the date of the said notification.
13. The Central Government amends the Notification G.S.R. 464(E), dated 5th June 2015 Vide Notification G.S.R. 583(E) Dated 13th June, 2017. Amendments are given below:
- (1) Section 143(3)(i), shall not apply to a private company:-
- (i) which is a one person company or a small company; or
which has turnover less than rupees fifty crore as per latest audited financial **statement** or which has aggregate borrowings from banks or financial institutions or anybody corporate at any point of time during the financial year less than rupees twenty five crore."
14. **Quality Control and Engagement Standards:** The Council of the ICAI has inserted/ revised following Quality Control and Engagement Standards which are applicable for May 2018 and onward examination:

S. No.	No. of Standard	Title of the Standard
(1)	SA 260 (Revised)	Communication with Those Charged with Governance
(2)	SA 570 (Revised)	Going Concern
(3)	SA 610 (Revised)	Using the Work of Internal Auditors
(4)	SA 700 (Revised)	Forming an Opinion and Reporting on Financial Statements
(5)	SA701(New)	Communicating Key Audit Matters in the Independent Auditor's Report
(6)	SA 705 (Revised)	Modifications to the Opinion in the Independent Auditor's Report
(7)	SA 706 (Revised)	Emphasis of Matter Paragraphs and Other Matter Paragraphs in the Independent Auditor's Report

Note- Students are advised to refer Auditing Pronouncements for Intermediate Course – New Scheme.

Note: Students are also advised to refer RTP of Paper 1 Accounting and Paper 5 Advanced Accounting (for AS, Ind AS etc.) and Paper 2 Business Laws, Ethics and Communication (for academic updates relating to Company Law).

PART – II: QUESTIONS AND ANSWERS

QUESTIONS

1. State with reason (in short) whether the following statements are true or false:
 - (i) The objective of audit is to obtain absolute assurance and to report on the financial statements.
 - (ii) Teeming and lading is one of the techniques of suppressing cash receipts.
 - (iii) There is direct relationship between materiality and the degree of audit risk.
 - (iv) As per SA 230 on “Audit Documentations”, 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) Saburi Yarns Ltd is engaged in manufacturing and trading of yarns of different types. Its huge amount is locked up in account receivables. Moreover, Management of Saburi Yarns Ltd is worried about its Internal Control system over receipts from

account receivables and other receipts. Management wants to understand from you as an auditor few techniques as to how receipts can be suppressed resulting into frauds and finally incurring losses.

- (b) 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. Explain
3. (a) State the significant difficulties encountered during audit with reference to SA-260 (communication with those charged with governance).
(b) Discuss the principal aspects to be covered in an audit concerning final statements of account.
4. (a) 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 judgment as to which risks are significant risks, state the factors which shall be considered by the auditor.
Explain the above in context of SA-315.
(b) The matter of difficulty, time, or cost involved is not in itself a valid basis for the auditor to omit an audit procedure for which there is no alternative or to be satisfied with audit evidence that is less than persuasive. Explain.

Basic Concepts in Auditing

5. (a) Evaluating responses to inquiries is an integral part of the inquiry process. Explain
(b) Audit evidence includes both information contained in the accounting records underlying the financial statements and other information. Discuss
6. (a) The quantity of audit evidence needed is affected by the auditor's assessment of the risks of misstatement. Auditor's judgment as to sufficiency may be affected by few factors. Explain
(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 clearly 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) The auditor P of PAR and Co., a firm of Chartered Accountants is conducting audit of AB Industries Ltd. The auditor requests management to provide Banker's certificate

in support of Fixed deposits whereas management provides only written representation on the matter.

Discuss how would you deal as an auditor

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) Planning an audit involves establishing the overall audit strategy for the engagement and developing an audit plan. Adequate planning benefits the audit of financial statements in several ways. Discuss
9. (a) Evolving one audit programme applicable to all audit engagements under all circumstances is not practicable. Explain
- (b) State what special points you would keep in mind for the purpose of construction of an Audit programme. Explain.

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.
- (c) How would you assess the reliability of internal control system in Computerised Information System (CIS) environment?
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 CIS" Discuss
- (c) State any four important elements of input control in processing of data in a computerised accounting system.

Vouching & Verification of Assets and Liabilities

12. (a) How will you vouch/verify Repair to Assets.
- (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) Profit or Loss Arising on Sale of Plots Held by Real Estate Dealer.

- (b) Trade Marks and Copyrights.
 - (c) Machinery acquired under Hire-purchase system.
 - (d) Refund of General Insurance Premium Paid
14. (a) Point out any eight areas where external confirmation are used as an audit procedure.
- (b) Indicate expenses which are essentially of a revenue nature, if incurred for creating an asset, are also regarded as expenditure of a capital nature.

The Company Audit

15. Discuss the following:
- (a) “Section 139(1) of the Companies Act, 2013 provides that every company shall, at the first annual general meeting appoint an auditor who shall hold office till the conclusion of its sixth annual general meeting” Explain
 - (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 statutory dues and repayment of loans or borrowing to a financial institution, bank, Government or dues to debenture holders as per CARO, 2016.
- (b) “Auditor of a company shall have a right of access to the books of account and vouchers of the company” Explain
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) Discuss the rules contained in the Companies Act, 2013 regarding the books of account and other relevant books and papers maintained in electronic mode.
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 / HINTS

1. (i) **Incorrect:** As per SA-200 "Overall Objectives of the Independent Auditor", in conducting an audit of financial statements, the overall objectives of the auditor are:
- (a) To obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement; and
 - (b) To report on the financial statements, and communicate as required by the SAs, in accordance with the auditor's findings.
- (ii) **Correct:** Teeming and Lading is one of the techniques of suppressing cash receipts. 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 Documentations" the working papers are the property of the auditor and the auditor has right to retain them. He may at his discretion 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: 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 ₹ 50 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) Few Techniques of how receipts are suppressed are:

- (1) *Teeming and Lading:* Amount received from a customer being misappropriated; also to prevent its detection the money received from another customer subsequently being credited to the account of the customer who has paid earlier. Similarly, moneys received from the customer who has paid thereafter being credited to the account of the second customer and such a practice is continued so that no one account is outstanding for payment for any length of time, which may lead the management to either send out a statement of account to him or communicate with him.
- (2) Adjusting unauthorised or fictitious rebates, allowances, discounts, etc. to customer' accounts and misappropriating amount paid by them.
- (3) Writing off as debts in respect of such balances against which cash has already been received but has been misappropriated.
- (4) Not accounting for cash sales fully.
- (5) Not accounting for miscellaneous receipts, e.g., sale of scrap, quarters allotted to the employees, etc.
- (6) Writing down asset values in entirety, selling them subsequently and misappropriating the proceeds.

(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) **Aspects to be covered in Audit:** The Principal Aspect To Be Covered In An Audit Concerning Final Statements Of Account Are The Following:
- (i) An examination of the system of accounting and internal control to ascertain whether it is appropriate for the business and helps in properly recording all transactions. This is followed by such tests and enquiries as are considered necessary to ascertain whether the system is in actual operation. These steps are necessary to form an opinion as to whether reliance can be placed on the records as a basis for the preparation of final statements of account.
 - (ii) Reviewing the system and procedures to find out whether they are adequate and comprehensive and incidentally whether material inadequacies and weaknesses exist to allow frauds and errors going unnoticed.
 - (iii) Checking of the arithmetical accuracy of the books of account by the verification

of postings, balances, etc.

- (iv) Verification of the authenticity and validity of transaction entered into by making an examination of the entries in the books of accounts with the relevant supporting documents.
- (v) Ascertaining that a proper distinction has been made between items of capital and of revenue nature and that the amounts of various items of income and expenditure adjusted in the accounts corresponding to the accounting period.
- (vi) Comparison of the balance sheet and profit and loss account or other statements with the underlying record in order to see that they are in accordance therewith.
- (vii) Verification of the title, existence and value of the assets appearing in the balance sheet.
- (viii) Verification of the liabilities stated in the balance sheet.
- (ix) Checking the result shown by the profit and loss and to see whether the results shown are true and fair.
- (x) Where audit is of a corporate body, confirming that the statutory requirements have been complied with.
- (xi) Reporting to the appropriate person/body whether the statements of account examined do reveal a true and fair view of the state of affairs and of the profit and loss of the organisation.

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) Timeliness of Financial Reporting and the Balance between Benefit and Cost:

The matter of difficulty, time, or cost involved is not in itself a valid basis for the auditor to omit an audit procedure for which there is no alternative or to be satisfied with audit evidence that is less than persuasive. Appropriate planning assists in making sufficient time and resources available for the conduct of the audit. Notwithstanding this, the relevance of information, and thereby its value, tends to diminish over time, and there is a balance to be struck between the reliability of information and its cost. There is an expectation by users of financial statements that the auditor will form an opinion on the financial statements within a reasonable period of time and at a reasonable cost, recognising that it is impracticable to address all information that may exist or to pursue every matter exhaustively on the assumption that information is in error or fraudulent until proved otherwise.

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) Audit evidence may be defined as the information used by the auditor in arriving at the conclusions on which the auditor's opinion is based. Audit evidence includes both

information contained in the accounting records underlying the financial statements and other information.

Explaining this further, audit evidence includes:-

- (1) **Information contained in the accounting records:** Accounting records include the records of initial accounting entries and supporting records, such as checks and records of electronic fund transfers; invoices; contracts; the general and subsidiary ledgers, journal entries and other adjustments to the financial statements that are not reflected in journal entries; and records such as work sheets and spreadsheets supporting cost allocations, computations, reconciliations and disclosures.
 - (2) Other information that authenticates the accounting records and also supports the auditor's rationale behind the true and fair presentation of the financial statements: Other information which the auditor may use as audit evidence includes, for example minutes of the meetings, written confirmations from trade receivables and trade payables, manuals containing details of internal control etc. A combination of tests of accounting records and other information is generally used by the auditor to support his opinion on the financial statements.
6. (a) **Sufficiency of Audit Evidence:** Sufficiency is the measure of the quantity of audit evidence. The quantity of audit evidence needed is affected by the auditor's assessment of the risks of misstatement (the higher the assessed risks, the more audit evidence is likely to be required) and also by the quality of such audit evidence (the higher the quality, the less may be required). Obtaining more audit evidence, however, may not compensate for its poor quality. **Auditor's judgment as to sufficiency may be affected by the factors such as:**
- (i) **Materiality**
 - (ii) **Risk of material misstatement**
 - (iii) **Size and characteristics of the population.**
- (i) **Materiality** may be defined as the significance of classes of transactions, account balances and presentation and disclosures to the users of the financial statements. Less evidence would be required in case assertions are less material to users of the financial statements. But on the other hand if assertions are more material to the users of the financial statements, more evidence would be required.
 - (ii) **Risk of material misstatement** may be defined as the risk that the financial statements are materially misstated prior to audit. This consists of two components described as follows at the assertion level (a) Inherent risk—The susceptibility of an assertion to a misstatement that could be material before consideration of any related controls. (b) Control risk—The risk that a misstatement that could occur in an assertion that could be material will not be

prevented or detected and corrected on a timely basis by the entity's internal control. Less evidence would be required in case assertions that have a lower risk of material misstatement. But on the other hand if assertions have a higher risk of material misstatement, more evidence would be required.

(iii) **Size of a population** refers to the number of items included in the population. Less evidence would be required in case of smaller, more homogeneous population but on the other hand in case of larger, more heterogeneous populations, more evidence would be required.

(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) Although written representations provide necessary audit evidence, they do not provide sufficient appropriate audit evidence on their own about any of the matters with which they deal. Furthermore, the fact that management has provided reliable written representations does not affect the nature or extent of other audit evidence that the auditor obtains about the fulfillment of management's responsibilities, or about specific assertions.

Applying the above to the given problem, the auditor would further request the management to provide him with the Banker's certificate in support of fixed deposits held by the company.

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)** Planning an audit involves establishing the overall audit strategy for the engagement and developing an audit plan. Adequate planning benefits the audit of financial statements in several ways, including the following:
1. Helping the auditor to devote appropriate attention to important areas of the audit.
 2. Helping the auditor identify and resolve potential problems on a timely basis.
 3. Helping the auditor properly organize and manage the audit engagement so that it is performed in an effective and efficient manner.
 4. Assisting in the selection of engagement team members with appropriate levels of capabilities and competence to respond to anticipated risks, and the proper assignment of work to them.
 5. Facilitating the direction and supervision of engagement team members and the review of their work.
 6. Assisting, where applicable, in coordination of work done by auditors of components and experts.
- 9. (a)** Businesses vary in nature, size and composition; work which is suitable to one business may not be suitable to others; efficiency and operation of internal controls and the exact nature of the service to be rendered by the auditor are the other factors that vary from assignment to assignment. On account of such variations, evolving one audit programme applicable to all businesses under all circumstances is not practicable. However, it becomes a necessity to specify in detail in the audit programme the nature of work to be done so that no time will be wasted on matters not pertinent to the engagement and any special matter or any specific situation can be taken care of.

(b) For the purpose of programme construction, the following points should be kept in mind

- (1) Stay within the scope and limitation of the assignment.
- (2) Determine the evidence reasonably available and identify the best evidence for deriving the necessary satisfaction.
- (3) Apply only those steps and procedures which are useful in accomplishing the verification purpose in the specific situation.
- (4) Consider all possibilities of error.
- (5) Co-ordinate the procedures to be applied to related items.

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 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.

(c) Reliability of Internal Control System in CIS Environment: For evaluating the reliability of internal control system in CIS environment, the auditor would consider the following-

- (i) That authorised, correct and complete data is made available for processing.

- (ii) That it provides for timely detection and corrections of errors.
- (iii) That in case of interruption due to mechanical, power or processing failures, the system restarts without distorting the completion of entries and records.
- (iv) That it ensures the accuracy and completeness of output.
- (v) That it provides security to application softwares & data files against fraud etc.
- (vi) That it prevents unauthorised amendments to programs.

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:

- (a) The invoice and statement of account received from the supplier.
- (b) The entry in the inventory record showing that the goods were received.
- (c) The Goods Received Note and Inspection Certificate showing that the goods on receipt were verified and inspected.
- (d) 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.

(c) **Control Over Input in a Computerised Data System:**

- (i) The input fed into the computer should be authorized. The authorization levels should be checked. The authorization is effected by levels of access to the entry for the computer system. The access control is operated through use of password and logging procedures.
- (ii) The system should devise controls to check that data input are accurate.

- (iii) The input document should be reviewed and verified by another person after preparation.
- (iv) Transaction should be accurately converted into machine readable language and recorded in a computer data file.
- (v) The transactions are not lost, duplicated, or changed without authorization.
- (vi) There should be validity and cross reference checks inbuilt in the system to throw light on errors which appear in the process of feeding input.
- (vii) Incorrect transactions are thrown out by a list which must be corrected, resubmitted before the process could run on the inputs.
- (viii) The check digit total of financial information contained in the document or hash total may be used to act as a control tool.
- (ix) The serial control may be used in inputting data that are to follow serial sequence. Any deviation in serial sequence will have to be automatically signalled out.

12. (a) Repair to Assets:

- (i) Since the line demarcating repairs from renewals is slender, usually it is not a simple matter to determine the amount of the expenditure, if any, included as charges for repairs, which should be considered as that incurred for renewal of an asset and added to its cost.
- (ii) It may sometimes be possible to determine this on a consideration of the nature of repairs carried out. The proportion of the charges which had the effect of increasing the value of an asset or enhancing its capacity or life should be treated as capital expenditure.
- (iii) Where, however, it is not possible to form an opinion accurately on the basis of evidence as regards the nature of repairs, a certificate from the engineer under whose supervision the repairs were carried out, confirming the classification of expenditure should be obtained.
- (iv) It should be ensured that Repairs to 'Certain Assets' like Building and Machinery have been separately disclosed as per the requirements of Schedule III to the Companies Act, 2013.

- (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)** Profit or Loss Arising on Sale of Plots Held by Real Estate Dealer: The land holding in the case of real estate dealer will be a current asset and not a fixed asset. The same should, therefore, be valued at cost or market value, whichever is less.

Profit or loss arising on sale of plots of land by Real Estate Dealer should be verified as follows-

- (i) Each property account should be examined from the beginning of the development with special reference to the nature of charges so as to find out that only the appropriate cost and charges have been debited to the account and the total cost of the property has been set off against the price realised for it.
- (ii) This basis of distribution of the common charges between different plots of land developed during the period, and basis for allocation of cost to individual

properties comprised in a particular piece of land should be scrutinised.

- (iii) If land price lists are available, these should be compared with actual selling prices obtained. And it should be verified that contracts entered into in respect of sale have been duly sanctioned by appropriate authorities.
- (iv) Where part of the sale price is intended to reimburse taxes or expenses, suitable provisions should be maintained for the purpose.
- (v) The prices obtained for various plots of land sold should be checked with the plan map of the entire tract and any discrepancy or unreasonable price variations should be inquired into. The sale price of different plots of land should be verified on a reference to certified copies of sale deeds executed.
- (vi) Out of the sale proceeds, provision should be made for the expenditure incurred on improvement of land, which so far has been accounted for.

(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) Refund of General Insurance Premium Paid: The refund of insurance premium may be because of earlier provisional payment of premium or may be a policy might have been cancelled at a later date. The auditor should take following steps while vouching such refunds-

- (i) Ascertain the reasons for refund of insurance premium.
- (ii) Examine insurance policy or cover note to find out the amount of premium.
- (iii) Verify advice of refund received from the insurance company. When refund is admitted, the insurance company sends the advice. This will be evidence as a covering letter to the cheque for the refund. Sometimes, a cheque is issued after a receipt is sent in advance to the insurance company.
- (iv) Scrutinise correspondence between the insurance company and the client.
- (v) Check entries in the bank book or the bank statement. If necessary, the counterfoil of the pay-in-slips can also be verified.

14. (a) External Confirmation as an Audit Procedure: SA 505, "External Confirmations", lays down standards for external confirmation of balances. External confirmations are frequently used in relation to account balances and their components but need not be restricted to these items. For example, the auditor may request external confirmation of the terms of agreements or transactions an entity has with third parties. The confirmation request is designed to ask if any modifications have been made to the agreement, and if so, the relevant details thereof. Other areas where external confirmations may be used include the following:

- Bank balances and other information from bankers.
- Accounts receivable balances.
- Inventories held by third parties.
- Property title deeds held by third parties.
- Investments purchased but delivery not taken.
- Loans from lenders.
- Accounts payable balances.
- Long outstanding share application money.

- (b) Expenses which are essentially of a revenue nature, if incurred for creating an asset or adding to its value for achieving higher productivity, are also regarded as expenditure of a capital nature.

Examples-

- (i) Material and wages: capital expenditure when expended on the construction of a building or erection of machinery.
- (ii) Legal expenses: capital expenditure when incurred in connection with the purchase of land or building.
- (iii) Freight: capital expenditure when incurred in respect of purchase of plant and machinery.
- (iv) Repair: Major repairs of a fixed asset that increases its productivity.
- (v) Wages: Wages paid on installation costs incurred in Plant & Machinery.
- (vi) Interest: Interest paid for the qualification period as per AS-16 i.e. before the asset is constructed.

Whenever, therefore, a part of the expenditure, ostensibly of a revenue nature, is capitalized, it is the duty of the auditor not only to examine the precise particulars of the expenditure but also the considerations on which it has been capitalised.

15. (a) **Appointment of Subsequent Auditors in case of Non Government Companies:** **Section 139(1)** of the Companies Act, 2013 provides that every company shall, at the first annual general meeting appoint an individual or a firm as an auditor who shall hold office from the conclusion of that meeting till the conclusion of its sixth annual general meeting and thereafter till the conclusion of every sixth meeting.

The following points need to be noted in this regard-

- (i) The company shall place the matter relating to such appointment of ratification by member at every Annual General Meeting.
- (ii) Before such appointment is made, the written consent of the auditor to such appointment, and a certificate from him or it that the appointment, if made, shall be in accordance with the conditions as may be prescribed, shall be obtained from the auditor.
- (iii) The certificate shall also indicate whether the auditor satisfies the criteria provided in **section 141**.
- (iv) The company shall inform the auditor concerned of his or its appointment, and also file a notice of such appointment with the Registrar within 15 days of the meeting in which the auditor is appointed.

- (b) **Filling of a Casual Vacancy**

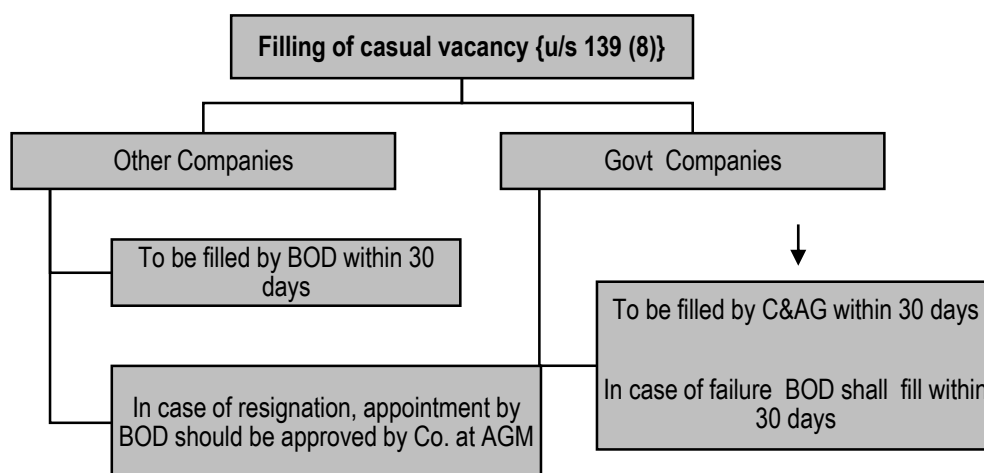
As per **Section 139(8)**, any casual vacancy in the office of an auditor shall-

- (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 three 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.



Casual Vacancy by Resignation: As per **section 140(2)** the auditor who has resigned from the company shall file within a period of 30 days from the date of resignation, a statement in the prescribed **Form ADT-3** (as per Rule 8 of CAAR) with the company and the Registrar, and in case of the companies referred to in **section 139(5)** i.e. Government company, the auditor shall also file such statement with the Comptroller and Auditor-General of India, indicating the reasons and other facts as may be relevant with regard to his resignation. In case of failure the auditor shall be punishable with fine which shall not be less than fifty thousand rupees but which may extend to five lakh rupees as per **section 140(3)**.

16. (a) **Matters to be included in the auditor's report- statutory dues and repayment of loans or borrowing to a financial institution, bank, Government or dues to debenture holders (CARO, 2016) –**

Clause (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 with the appropriate authorities and if not, the extent of the arrears of outstanding statutory dues as at 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;

Clause (vii)(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 constitute a dispute).

Clause (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).

(b) **Right of access to books, etc. – Section 143(1)** of the Act provides that the auditor of a company, at all times, shall have a right of access to the books of account and vouchers of the company, whether kept at the registered office of the company or at any other place and he is entitled to require from the officers of the company such information and explanation as he may consider necessary for the performance of his duties as auditor.

It may be noted that according to **section 2(59)** of the Act, the term 'officer' includes any director, manager or key managerial personnel or any person in accordance with whose directions or instructions the Board of Directors or any one or more of the directors is or are accustomed to act;

The phrase 'books, accounts and vouchers' includes all books which have any bearing, or are likely to have any bearing on the accounts, whether these be the usual financial books or the statutory or statistical books; memoranda books, *e.g.*, inventory books, costing records and the like may also be inspected by the auditor. Similarly the term 'voucher' includes all or any of the correspondence which may in any way serve to vouch for the accuracy of the accounts. Thus, the right of access is not restricted to books of account alone and it is for the auditor to determine what record or document is necessary for the purpose of the audit.

The right of access is not limited to those books and records maintained at the registered or head office so that in the case of a company with branches, the right

also extends to the branch records, if the auditor considers it necessary to have access thereto as per **Section 143(8)**.

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:

- (a) the books of account and other relevant books and papers shall remain accessible in India so as to be usable for subsequent reference.
- (b) 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.
- (c) 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.

- (d) the information in the electronic record of the document shall be capable of being displayed in a legible form.
- (e) 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.
- (f) 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-

- (a) The name of the service provider;
- (b) The internet protocol address of service provider;
- (c) The location of the service provider (wherever applicable);
- (d) 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) Total Quality Management
 - (ii) Accounting Information System
 - (iii) Mobile Communication
 - (iv) Network as a Service (NaaS) in Cloud Computing
 - (v) Network Contention
 - (vi) MODEM
 - (vii) Read Only Memory (ROM)
 - (viii) General Purpose Planning Languages
 - (ix) TALLY
 - (x) Plastic Cards
2. Differentiate between the following:
 - (i) Data Store of DFD and Data Flow of DFD
 - (ii) One-to-Many Relationship (1:N) and Many-to-Many (M:N) Relationship in E-R Diagram
 - (iii) Routing and Resilience
 - (iv) Private Clouds and Community Clouds
 - (v) Public Data Network and Private Data Network
 - (vi) Network Layer and Data Link Layer of OSI Model
 - (vii) Knowledge Level System and Operational Level Systems
 - (viii) Information and Knowledge
 - (ix) Topological Controls and Internetworking Controls
 - (x) Confidentiality and Integrity
3. Write short note on the following:
 - (i) SmartPhone
 - (ii) Information as a Business Asset
 - (iii) Secondary Memory
 - (iv) System Investigation under SDLC
 - (v) Coaxial Cables

- (vi) Centralized Computing
- (vii) Training Management
- (viii) Quality Assurance Management Controls
- (ix) Application areas of Grid Computing
- (x) Computerized Information Processing Cycle

BPM's Principles

4. Discuss Business Process Management (BPM) Principles.

Processing Controls in BPA

5. Discuss Processing Controls and their categories in Application Controls.

System Security

6. (a) Discuss the types of System Security.
(b) Distinguish between Threat and Vulnerability.

Business Intelligence

7. Discuss Business Intelligence and its tools.

Business Process Automation

8. Discuss the steps involved in implementing Business Process Automation.

Telecommunication Network Model

9. Discuss, in brief, the components of Telecommunication Network Model.

Relational Database Model

10. Discuss Relational Database Model.

Cloud Computing

11. Discuss Cloud Computing architecture.
12. Discuss advantages and disadvantages of Cloud Computing.

Network Protocols

13. Discuss Network Protocols in detail.

Executive Information Systems

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

Mapping Systems

15. (a) Discuss advantages and limitations of using Data Flow Diagram.
 (b) Discuss the concept of Decision Table in brief.

SUGGESTED ANSWERS/HINTS

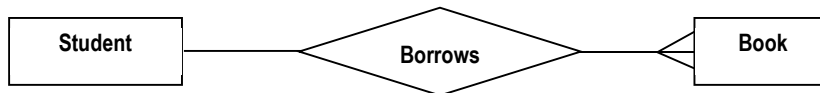
1. (i) **Total Quality Management:** Total Quality Management (TQM) is a comprehensive and structured approach to organizational management that seeks to improve the quality of products and services through ongoing refinements in response to continuous feedback. TQM can be applied to any type of organization; it originated in the manufacturing sector. TQM is based on quality management from the customer's point of view. TQM processes are divided into four sequential categories: Plan, Do, Check, and Act (PDCA).
- (ii) **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. An AIS is generally a computer-based method for tracking accounting activity in conjunction with information technology resources. The resulting statistical reports can be used internally by management or externally by other interested parties including investors, creditors and tax authorities.
- (iii) **Mobile Communication:** Mobile Communication refers to the infrastructure put in place to ensure that seamless and reliable communication goes on. These would include devices such as Protocols, Services, Bandwidth and Portals necessary to facilitate and support the stated services. The data format is also defined at this stage. The signals are carried over the air to intended devices that can receive and sending similar kinds of signals. It will incorporate all aspects of wireless communication.
- (iv) **Network as a Service (NaaS) in Cloud Computing:** It is a category of cloud services where the capability provided to the cloud service user is to use network/transport connecting services. NaaS involves optimization of resource allocation by considering network and computing resources. Some of the examples are Virtual Private Network, Mobile Network Virtualization etc.
- (v) **Network Contention:** Network Contention refers to the situation that arises when there is a conflict for some common resource in a network. For example, network contention could arise when two or more computer systems try to communicate at the same time.

- (vi) **MODEM:** A MODEM is a device that converts a digital computer signal into an analog telephone signal (i.e. it modulates the signal) and converts an analog telephone signal into a digital computer signal (i.e. it demodulates the signal) in a data communication system. The word "modem" is a contraction of modulate and demodulate. Modems are required to send computer data with ordinary telephone lines because computer data is in digital form but telephone lines are analog.
- (vii) **Read Only Memory (ROM):** This is non-volatile in nature that means contents remain even in absence of power. Usually, these are used to store small amount of information for quick reference by CPU. Information can be read not modified. It is generally used by manufacturers to store data & programs like translators that is used repeatedly.
- (viii) **General-purpose planning languages:** These 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.
- (ix) **TALLY:** It is an accounting application that helps entity to automate processes relating to accounting of transactions. It also helps to achieve automation of few processes in inventory management. The latest version has been upgraded to help user achieve TAX compliances also. It has features such as Remote Access Capabilities, Tax Audit and Statutory Compliance, Payroll, Excise for Manufacturers, Multilingual Support, VAT Composition Returns, TDS, VAT (Value Added Tax), Rapid Implementation, Real Time Processing, Dynamic Interactive Reports and Unique Drill-Down Facility, Unlimited Companies and Periods of Accounting.
- (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) **Data Store of DFD:** A data store is where a process stores data between processes for later retrieval by that same process or another one. Files and tables are considered data stores. Data store names (plural) are simple but meaningful, such as "customers", "orders" and "products." Data stores are usually drawn as a rectangle with the right hand side missing and labeled by the name of the data storage area it represents, though different notations do exist.

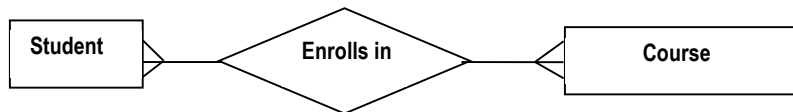
Data Flow of DFD: Data flow is the movement of data between the entity, the process and the data store. Data flow portrays the interface between the components of the DFD. The flow of data in a DFD is named to reflect the nature of the data used (these names should also be unique within a specific DFD). Data flow is represented by an arrow, where the arrow is annotated with the data name.

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

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



Many-to-Many relationships (M:N) - A Many-to-Many relationship is shown on the diagram by a line connecting the two entities with 'crow's foot' symbols at both ends. For example: A student enrolls in at least one course. A course is enrolled by at least one student.



- (iii) **Routing:** It refers to the process of deciding on how to communicate the data from source to destination in a network.

Resilience: It refers to the ability of a network to recover from any kind of error like connection failure, loss of data etc.

- (iv) **Private Clouds:** This cloud computing environment resides within the boundaries of an organization and is used exclusively for the organization’s benefits. These are also called internal clouds. They are built primarily by IT departments within enterprises who seek to optimize utilization of infrastructure resources within the enterprise by provisioning the infrastructure with applications using the concepts of grid and virtualization. The benefit of a Private Cloud is that it enables an enterprise to manage the infrastructure and have more control, but this comes at the cost of IT department creating a secure and scalable cloud.

Community Clouds: 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.

- (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.

Private Data Network: Private Data Networks provide businesses, government agencies and organizations of all sizes as a dedicated network to continuously receive and transmit data critical to both the daily operations and mission critical needs of an organization.

- (vi) **Network Layer:** The Network Layer provides the functional and procedural means of transferring variable length data sequences from a source to a destination via one or more networks, while maintaining the quality of service requested by the Transport Layer. The Network Layer makes a choice of the physical route of transmission, creates a virtual circuit for upper layers to make them independent of data transmission and switching, establishes, maintains, terminates connections between the nodes and ensure proper routing of data.

Data Link Layer: The Data Link Layer responds to service requests from the Network Layer and issues service requests to the Physical Layer. The Data Link Layer is the protocol layer which transfers data between adjacent network nodes in a wide area network or between nodes on the same local area network segment. This layer is also a hardware layer which specifies channel access control method and ensures reliable transfer of data through the transmission medium. It provides the functional and procedural means to transfer data between network entities and to detect and possibly correct errors that may occur in the Physical Layer.

- (vii) **Knowledge Level Systems:** These include knowledge and data workers who are selected, recruited and trained in a special manner than the non-knowledge workers. The knowledge resides in the heads of knowledge workers and these are the most precious resource an organization possesses.

Operational Level System: These include Operational Managers or supervisors that are responsible for the daily management of the line workers who actually produce the product or offer the service. There are First-line Managers in every work unit in the organization. Although First-line Managers typically do not set goals for the organization, they have a very strong influence on the company. These are the managers that most employees interact with on a daily basis, and

if the managers perform poorly, employees may also perform poorly, may lack motivation, or may leave the company.

(viii) Differences between Information and Knowledge are as follows:

Information	Knowledge
Information is piecemeal, fragmented, particular.	knowledge is structured, coherent, and often universal.
Information is timely, transitory, perhaps even short-lived.	Knowledge is of enduring significance.
Information is a flow of messages.	Knowledge is a stock, largely resulting from the flow, in the sense that the “input” of information may affect the stock of knowledge by adding to it, restructuring it, or changing it in any way.
Information is acquired by being told.	Knowledge can be acquired by thinking. Thus, new knowledge can be acquired without new information being received.

(ix) **Topological Controls:** A communication network topology specifies the location of nodes within a network, the ways in which these nodes will be linked, and the data transmission capabilities of the links between the nodes. Some of the four basic topologies include Bus, Ring, Star and Tree Topology.

Internetworking Controls: Internetworking is the process of connecting two or more communication networks together to allow the users of one network to communicate with the users of other networks. Three types of devices are used to connect sub-networks in an Internet: Bridge, Router and Gateway.

(x) **Confidentiality:** This feature in Business Process Automation ensures that data is only available to persons who have right to see the same.

Integrity: This feature in Business Process Automation ensures that no unauthorized amendments can be made in the data.

3. (i) **SmartPhone:** A SmartPhone is a mobile phone built on a mobile operating system, with more advanced computing capability connectivity than a feature phone. A smart phone could be considered to be the combination of the traditional PDA and cellular phone, with a bigger focus on the cellular phone part. These handheld devices integrate mobile phone capabilities with the more common features of a handheld computer or PDA. Smartphone’s allow users to store information, e-mail and install

programs, along with using a mobile phone in one device. A smart phone's features are usually more oriented towards mobile phone options than the PDA-like features. Modern smart phones also include high-resolution touch screens and web browsers that display standard web pages as well as mobile-optimized sites. High-speed data access is provided by Wi-Fi and mobile broadband.

- (ii) **Information as a Business Asset:** Information becomes an asset for an organization if it is useful, digital, accessible, relevant, accurate, trust-worthy, searchable, understandable, spatially enabled and shareable at the time when required. Information can be treated as a valuable commodity if it can be used effectively. Information that is accurate and encompassing will allow decision-makers to better an organization's performance. Without reliable information, the decision-making process can be badly hampered and an informed decision impossible to make. Where a business is geographically dispersed, with servers hosted in different locations, or a business has a network of applications, there can also be the obstacle of replicating data across the network. In short, without effectively management of information the result can be information chaos.
- (iii) **Secondary Memory:** Secondary storage differs from primary storage in that it is not directly accessible by the CPU. The secondary memories are available in bigger sizes; thus, programs and data can be stored on secondary memories. The computer usually uses its input/output channels to access secondary storage and transfers the desired data using intermediate area in primary storage. Secondary storage does not lose the data when the device is powered down: it is non-volatile. The features of secondary memory devices are non-volatility, greater capacity, greater economy and slow speed. Storage devices could differ amongst each other in terms of speed and access time, cost/ portability, capacity and type of access. Based on these parameters most common forms of secondary storage are: USB Pen Drives, Floppy drive, Hard Drive, CD, DVD, Blue ray Disks and Smart cards.
- (iv) **System Investigation under SDLC:** This phase examines that 'What is the problem and is it worth solving'? Feasibility study is done under the following dimensions:
- ◆ **Technical feasibility:** Does the technology exist to implement the proposed system or is it a practical proposition?
 - ◆ **Economic feasibility:** Is proposed system cost-effective: if benefits do not outweigh costs, it's not worth going ahead?
 - ◆ **Legal feasibility:** Is there any conflict between the proposed system and legal requirements?

- ◆ **Operational feasibility:** Are the current work practices and procedures adequate to support the new system?
 - ◆ **Schedule feasibility:** How long will the system take to develop, or can it be done in a desired time-frame?
- (v) **Coaxial Cables:** This telecommunications media consists of copper or aluminium wire wrapped with spacers to insulate and protect it. Insulation minimizes interference and distortion of the signals the cable carries. Coaxial cables can carry a large volume of data and allows high-speed data transmission used in high-service metropolitan areas for cable TV systems, and for short-distance connection of computers and peripheral devices. These cables can be bundled together into a much larger cable for ease of installation and can be placed underground and laid on the floors of lakes and oceans. It is used extensively in office buildings and other work sites for local area networks. The only disadvantage of coaxial cable is that it is more expensive than twisted pair.
- (vi) **Centralized Computing:** Centralized computing is computing done at a central location, using terminals that are attached to a central computer. The computer itself may control all the peripherals directly (if they are physically connected to the central computer), or they may be attached via a terminal server. It offers greater security over decentralized systems because all the processing is controlled in a central location. In addition, if one terminal breaks down, the user can simply go to another terminal and log in again, and all their files will still be accessible. Depending on the system, they may even be able to resume their session from the point they were at before, as if nothing had happened.
- (vii) **Training Management:** Training programs can be entered with future dates which allow managers to track progress of employees through these programs, examine the results of courses taken and reschedule specific courses when needed. The module tracks the trainer or training organization, costs associated with training schedules. The module also tracks training locations, required supplies and equipment and registered attendees. All employees are linked to a skills profile. The skill profile lists the skills brought with them and acquired through training after they were hired. The skills profile is updated automatically through the training module.
- (viii) **Quality Assurance Management Controls:** 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.

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

- ◆ Civil engineers collaborate to design, execute, & analyze 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.

(x) **Computerized Information Processing Cycle:** These are systems where computers are used at every stage of transaction processing. The components of a computerized information processing cycle include the following:

- ◆ **Input:** Entering data into the computer;
- ◆ **Processing:** Performing operations on the data;
- ◆ **Storage:** Saving data, programs, or output for future use; and
- ◆ **Output:** Presenting the results.

4. BPM's Principles are as follows:

- **Processes are assets:** BPM's first principle is **processes are assets** that create value for customers. They are to be managed and continuously improved. Because processes are assets, core processes and processes that generate the most value to customers should be carefully managed.
- **Value to customers:** A managed process produces consistent **value to customers** that entails the tasks of measuring, monitoring, controlling, and analyzing business processes. Measuring of business processes provides information regarding these business processes. Process information allows organizations to predict, recognize, and diagnose process deficiencies, and it suggests the direction of future improvements.
- **Continuous improvement:** The third principle is **continuous improvement** of processes. This is a natural result of process management. Process improvement

is facilitated by the availability of process information. The business environment usually dictates that organizations need to improve to stay competitive. Business processes are central to an organization's value creation. It follows that processes should be continuously improved.

5. **Processing Controls:** Data processing controls perform validation checks to identify errors during processing of data. They are required to ensure both the completeness and accuracy of the data being processed. However, adequate controls should be enforced through the front end application system also, to have consistency in the control process. Some of them are as follows:
 - **Run-to-Run Totals:** These help in verifying data that is subject to process through different stages. A specific record (probably the last record) can be used to maintain the control total.
 - **Reasonableness Verification:** Two or more fields can be compared and cross verified to ensure their correctness.
 - **Edit Checks:** Edit checks similar to the data validation controls can also be used at the processing stage to verify accuracy and completeness of data.
 - **Field Initialization:** Data overflow can occur, if records are constantly added to a table or if fields are added to a record without initializing it, i.e., setting all values to zero before inserting the field or record.
 - **Exception Reports:** Exception reports are generated to identify errors in data processed.
 - **Existence/Recovery Controls:** The check-point/restart logs, facility is a short-term backup and recovery control that enables a system to be recovered if failure is temporary and localized.
6. (a) There are two types of Systems Security.
 - ◆ **Physical Security:** A Physical security is implemented to protect the physical systems assets of an organization like the personnel, hardware, facilities, supplies and documentation.
 - ◆ **Logical Security:** A Logical security is intended protect data/information and software. Security administrators tend to have responsibility for controls over malicious and non-malicious threats to physical security, and malicious threats to logical security itself.
- (b) **Threat:** A Threat is a possible danger that can disrupt the operation, functioning, integrity, or availability of a network or system. Network security threats can be

categorized into four broad themes - Unstructured Threats, Structured Threats, External Threats and Internal Threats.

Vulnerability: Vulnerability is an inherent weakness in the design, configuration, or implementation of a network or system that renders it susceptible to a threat. The facts that are responsible for occurrence of vulnerabilities in the software are software bugs, timing windows, insecure default configurations, trusting untrustworthy information, and end users.

7. **Business Intelligence:** Business Intelligence (BI) may be defined as the delivery of accurate, useful information to the appropriate decision makers within the necessary time frame to support effective decision making for business processes. BI is comprised of information that contains patterns, relationships, and trends about customers, suppliers, business partners and employees. BI is essentially timely, accurate, high-value, and actionable business insights, and the work processes and technologies used to obtain them. Business intelligence systems process, store and provide useful information to the user who need it, when they need it. BI can handle large amounts of information to help identify and develop new opportunities. Making use of new opportunities and implementing an effective strategy can provide a competitive market advantage and long-term stability.

Business Intelligence Tools

Business Intelligence tools are a type of software that is designed to retrieve, analyze and report data. Some of the key Business Intelligence tools are given as follows:

- **Simple Reporting and Querying:** This involves using the data warehouse to get response to the query: "Tell me what happened." The objective of a BI implementation is to turn operational data into meaningful knowledge. This requires that BI must be connected with the enterprise data and all the necessary data is available in one place, in one common format. Data warehousing (DW) provides the perfect architecture to combine all the data dispersed throughout the enterprise in different applications in a variety of formats, on a range of hardware, which could be anywhere to be cleaned up, summarized, converted and integrated into one common format and available centrally for further processing. There are reporting tools used to arrange information into a readable format and distribute it to the people who need it.
- **Business Analysis:** This involves using the data to get response to the query: "Tell me what happened and why." Business analysis refers to presenting visualizing data in a multidimensional manner. Business analysis allows the user to plot data in row and column coordinates to further understand the intersecting

points. ETL (Extract, Transform, Load) tools bring in data from outside sources, transform it to meet business specified operational needs, and then load the results into the company database. Metadata tools gather and analyze metadata, helping to increase data quality.

- **Dashboards:** This involves using the information gathered from the data warehouse and making it available to users as snapshots of many different things with the objective of getting response to the query: “Tell me a lot of things, but without too much effort”. Dashboards are flexible tools that can be bent into as many different shapes as per user requirements. It includes a collection of graphs, reports, and KPIs that can help monitor such business activities as progress on a specific initiative.
 - **Scorecards:** This involves providing a visual representation of the enterprise strategy by taking critical metrics and mapping them to strategic goals throughout the enterprise. Scorecards offer a rich, visual gauge to display the performance of specific initiatives, business units, or the enterprise as a whole and the individual goals in the context of larger enterprise strategy. Scorecards distil information into a small number of metrics and targets and provide users with an at-a-glance perspective of information. A scorecard has a graphical list of specific, attainable strategic milestones, combined with metrics that serve as benchmarks. Specific measures on how well the company has actually performed specified activities are linked in the scorecard with graphical display highlighting the status of each goal.
 - **Data Mining or Statistical Analysis:** This involves using statistical, artificial intelligence, and related techniques to mine through large volumes of data and providing knowledge without users even having to ask specific questions. The objective is to provide interesting and useful information to users by design even without their querying. Data Mining involves data analysis for discovering useful patterns that are “hidden” in large volume of diverse data.
8. The steps in implementing Business Process Automation are discussed as below:
- (i) **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 any or combination of the following:
- ◆ Errors in manual processes leading to higher costs.
 - ◆ Payment processes not streamlined, due to duplicate or late payments, missing early pay discounts, and losing revenue.

- ◆ Paying for goods and services not received.
- ◆ Poor debtor management leading to high invoice aging and poor cash flow.
- ◆ Not being able to find documents quickly during an audit or lawsuit or not being able to find all documents.
- ◆ Lengthy or incomplete new employee or new account on-boarding.
- ◆ Unable to recruit and train new employees, but where employees are urgently required.
- ◆ Lack of management understanding of business processes.
- ◆ Poor customer service.

(ii) Step 2: Understand the rules / regulation under which enterprise needs to comply with?

One of the 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. Regardless of the source, it is important to be aware of their existence and how they affect the documents that drive the processes. It is important to understand that laws may require documents to be retained for specified number of years and in a specified format. Entity needs to ensure that any BPA adheres to the requirements of law.

(iii) 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 following aspects need to be kept in mind while documenting the present process:

- ◆ 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?
- ◆ How are exceptions in the process handled?

The benefit of the above process for user and entity being that it provides clarity on the process, helps to determine the sources of inefficiency, bottlenecks, and problems and allows to re-design the process to focus on the desired result with workflow automation.

(iv) 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 – **SMART** (Specific: Clearly defined, Measurable: Easily quantifiable in monetary terms, Attainable: Achievable through best efforts, Relevant: Entity must be in need of these, and Timely: Achieved within a given time frame.)

(v) 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 is capable of recommending 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?

(vi) Step 6: Calculate the Return on Investment (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 have to be convinced so as to justify the benefits of BPA and get approval from senior management. Some of the methods for justification of a BPA proposal may include cost savings in terms of eliminating fines to be paid by entity due to delays, cost of audits and lawsuits and reduced cost of space regained from paper, file cabinets; reduction in required manpower leading to no new recruits; ensuring complete documentation for all new accounts; taking advantage of early payment discounts and eliminating duplicate payments; ensuring complete documentation for all new discounts; ensuring complete documentation for all new accounts; building

business by providing superior levels of customer service and charging for instant access to records etc.

(vii) 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.

(viii) 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. Documenting the final version of the process will help to capture all of this hard work, thinking and experience which can be used to train new people.

9. Telecommunication Network Model: Generally, a communication network is any arrangement where a sender transmits a message to a receiver over a channel consisting of some type of medium. The model consists of five basic categories of components:

- (i) Terminals:** Terminals are the starting and stopping points in any telecommunication network environment. Any input or output device that is used to transmit or receive data can be classified as a terminal component. These include Video Terminals, Microcomputers, Telephones, Office Equipment, Telephone and Transaction Terminals.
- (ii) Telecommunications Processors:** Telecommunications Processors support data transmission and reception between terminals and computers by providing a variety of control and support functions. They include Network Interface Card, Modem, Multiplexer and Internetworked Processors such as switches, routers, hubs, bridges, repeaters and gateways.
- (iii) Telecommunications Media/Channels:** Telecommunications channels are the part of a telecommunications network that connects the message source with the message receiver. Data are transmitted and received over channels, which use a variety of telecommunications media. Telecommunications media are grouped into Guided Media and Unguided Media. Some of the common examples of guided

media are Twisted Pair, Coaxial cable and Fiber optics. Some of the common examples of unguided media are Terrestrial Microwave, Radio waves, Micro Waves, Infrared Waves and Communications Satellites.

- (iv) **Computers:** In a telecommunications networks, computers of all sizes and types are connected through media to perform their communication assignments. They include Host Computers (mainframes), Front-End Processors (minicomputers) and Network Servers (microcomputers).
- (v) **Telecommunications Control Software:** This consists of programs that control telecommunications activities and manage the functions of telecommunications networks. They include Telecommunication Monitors, Network Operating Systems for network servers, Network Management Components and Communication Packages. This software can reside on almost any component of the network and can provide such features as performance monitoring, activity monitoring, priority assigning, transmission error correction and network problem mitigation.

- 10. Relational Database Model:** A relational database allows the definition of data and their structures, storage and retrieval operations and integrity constraints that can be organized in a table structure. A table is a collection of records and each record in a table contains the same fields. Both the hierarchical and network data structures require explicit relationships, or links, between records in the database. Both structures also require that data be processed one record at a time. The relational database structure departs from both these requirements. Three key terms are used extensively in relational database models: **relations**, **attributes**, and **domains**. A Relation is a table with columns and rows. The named columns of the relation are called Attributes, and the Domain is the set of values the attributes are allowed to take.

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

- 11. Cloud Computing Architecture:** Cloud Computing Architecture refers to the components and subcomponents that typically consist of a front end platform (fat client, thin client, mobile device), back end platforms (servers, storage), a cloud based delivery, and a network (Internet, Intranet, Intercloud). Combined, these components make up cloud computing architecture. Cloud architecture typically involves multiple cloud components communicating with each other over a tight or loose coupling of cloud resources, services, middleware, and software components.

A cloud computing architecture consists of two parts - **Front End** and a **Back End** that connect to each other through a network, usually the Internet. The front end is the side the computer user, or client, sees. The back end is the “cloud” section of the system.

- **Front End:** The **Front End** of the cloud computing system comprises of the client's devices (or it may be a computer network) and some applications are needed for accessing the cloud computing system. All the cloud computing systems do not give the same interface to users. For example-Web services like electronic mail programs use some existing web browsers such as Firefox, Microsoft's internet explorer or Apple's Safari. Other types of systems have some unique applications which provide network access to its clients.
- **Back End:** Back End refers to some physical peripherals. In cloud computing, the back end is cloud itself which may encompass various computer machines, data storage systems and servers. Groups of these clouds make a whole cloud computing system. Theoretically, a cloud computing system can include practically any type of web application program such as video games to applications for data processing, software development and entertainment residing on its individual dedicated server for services. There are some set of rules, generally called as **Protocols** which are followed by this server and it uses a special type of software known termed as **Middleware** that allow computers that are connected on networks to communicate with each other. If any cloud computing service provider has many customers, then there's likely to be very high demand for huge storage space. Many companies that are service providers need hundreds of storage devices.

12. Some advantages of Cloud Computing are as follows:

- **Cost Efficient:** Cloud computing is probably the most cost efficient method to use, maintain and upgrade.
- **Almost Unlimited Storage:** Storing information in the cloud gives us almost unlimited storage capacity.
- **Backup and Recovery:** Since all the data is stored in the cloud, backing it up and restoring the same is relatively much easier than storing the same on a physical device. Furthermore, most cloud service providers are usually competent enough to handle recovery of information.
- **Automatic Software Integration:** In the cloud, software integration is usually something that occurs automatically. Not only that, cloud computing allows us to customize the options with great ease. Hence, we can handpick just those services and software applications that we think will best suit the particular enterprise.

- **Easy Access to Information:** Once we register ourselves in the cloud, we can access the information from anywhere, where there is an Internet connection.
- **Quick Deployment:** Once we opt for this method of functioning, the entire system can be fully functional in a matter of a few minutes. Of course, the amount of time taken here will depend on the exact kind of technology that we need for our business.

Disadvantages of Cloud Computing are as follows:

In spite of its many benefits, as mentioned above, cloud computing also has its disadvantages. Some of the major disadvantages are given as follows:

- **Technical Issues:** This technology is always prone to outages and other technical issues. Even the best cloud service providers run into this kind of trouble, in spite of keeping up high standards of maintenance. We will invariably be stuck in case of network and connectivity problems.
 - **Security in the Cloud:** Surrendering all the company's sensitive information to a third-party cloud service provider could potentially put the company to great risk.
 - **Prone to Attack:** Storing information in the cloud could make the company vulnerable to external hack attacks and threats. Nothing on the Internet is completely secure and hence, there is always the lurking possibility of stealth of sensitive data.
13. **Network Protocols:** Protocols are software that performs a variety of actions necessary for data transmission between computers. Stated more precisely, protocols are a set of rules for inter-computer communication that have been agreed upon and implemented by many vendors, users and standards bodies to ensure that the information being exchanged between the two parties is received and interpreted correctly. Ideally, a protocol standard allows heterogeneous computers to talk to each other.

At the most basic level, protocols define the physical aspects of communication, such as how the system components will be interfaced and at what voltage levels will be transmitted.

At higher levels, protocols define the way that data will be transferred, such as the establishment and termination of "sessions" between computers and the synchronization of those transmissions. At still higher levels, protocols can standardize the way data itself is encoded and compressed for transmission.

A protocol defines the following three aspects of digital communication.

- (a) **Syntax:** The format of data being exchanged, character set used, type of error correction used, type of encoding scheme (e.g., signal levels) being used.
- (b) **Semantics:** Type and order of messages used to ensure reliable and error free information transfer.
- (c) **Timing:** Defines data rate selection and correct timing for various events during data transfer.

At the sending computer, protocols –

- (i) Break data down into packets;
- (ii) Add destination address to the packet; and
- (iii) Prepares data for transmission through Network Interface Card (NIC)

At the receiving computer, protocols –

- (i) Take data packets off the cable;
- (ii) Bring packets into computer through Network Interface Card (NIC);
- (iii) Strip the packets off any transmitting information;
- (iv) Copy data from packet to a buffer for reassembly; and
- (v) Pass the reassembled data to the application.

14. **Executive Information Systems (EIS):** An Executive Information System (EIS) is the nature of Information System used by executives to access and administer the data they entail to make informed business decisions. In the hierarchical structure of information systems, the EIS is at the pinnacle and is designed to renovate all significant data (from project to process to budget) into aggregated information that makes sense and brings value to the by and large business strategy. EIS is able to link data from various sources both internal and external to provide the amount and kind of information executives find useful. These systems are designed for top management; easy to use; present Information in condensed view; access organization's databases and data external to the organization.

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

Component	Description
Hardware	Includes Input data-entry devices, CPU, Data Storage files and Output Devices.

Software	Includes Text base software, Database, and Graphic types such as time series charts, scatter diagrams, maps, motion graphics, sequence charts, and comparison-oriented graphs (i.e., bar charts) Model base.
User Interface	Includes hardware (physical) and software (logical) components by which people (users) interact with a machine. Several types of interfaces can be available to the EIS structure, such as scheduled reports, questions/answers, menu driven, command language, natural language, and input/output.
Telecommunication	Involves transmitting data from one place to another in a reliable networked system.

15. (a) Advantages of using Data Flow Diagram (DFD) are as follows:

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

Limitations of using Data Flow Diagram are as follows:

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

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

- (i) **Condition Stub** - which comprehensively lists the comparisons or conditions;
- (ii) **Action Stub**- which comprehensively lists the actions to be taken along the various program branches;

- (iii) **Condition Entries** - which list in its various columns the possible permutations of answer to the questions in the conditions stub; and
- (iv) **Action Entries** - which lists, in its columns corresponding to the condition entries the actions contingent upon the set of answers to questions of that column.

A Decision Table is divided into four quadrants:

Condition Stub	Condition Entries
Action stub	Action Entries

SECTION – B: STRATEGIC MANAGEMENT

Correct/Incorrect with reasoning

1. State with reasons which of the following statements are correct/incorrect:
 - (a) Successful businesses have to recognize different elements of environment.
 - (b) Strategic actions are always in reaction to the changes in environment.
 - (c) An opportunity is an inherent capacity which an organization can use to gain strategic advantage over its competitors.
 - (d) Corporate-level managers can be viewed as the guardians of shareholders.
 - (e) SBU concepts facilitate multi business operations.
 - (f) Production strategy implements, supports and drives higher strategies.
 - (g) E-commerce technology opens up a host of opportunities for reconfiguring industry and company value chains.
 - (h) Good strategy and proper implementation ensures organisational success.
 - (i) A match between strategy and structure may create competitive advantage.
 - (j) Network structure brings flexibility and adaptability in an organization.

Differences between the two concepts

2. Distinguish between the following:
 - (a) Vertically integrated diversification and Horizontally integrated diversification.
 - (b) Top-down and bottom-up strategic planning.
 - (c) Strategy formulation and Strategy implementation.
 - (d) Synchro Marketing and Demarketing.

Short notes

3. Write short notes on the following:
 - (a) Implementation steps in BPR
 - (b) Experience Curve
 - (c) Product Life Cycle (PLC) and its significance in portfolio diagnosis
 - (d) 'Keiretsu', a cooperative network of business in Japan

Brief answers

4. Briefly answer the following questions:
 - (a) "A Manager working on a strategic decision has to balance socio-cultural

opportunities, influences and constraints". Discuss.

- (b) "A strategic vision is a road map of a company's future." Comment. Draft a strategic vision statement of any well known national level Educational Institution you are familiar with.
- (c) "Firms can use benchmarking process to achieve improvement in diverse range of management functions." Elucidate.

Descriptive answers

Chapter 1-Business Environment

- 5. It is difficult to determine exactly what business should do in response to a particular situation in the environment. Explain the various strategic approaches for it.
- 6. What is Environment? Briefly explain macro environmental factors that affect an organization's strategy.

Chapter 2-Business Policy and Strategic Management

- 7. What do you understand by strategic management? Discuss its framework.
- 8. What is Corporate Strategy? How would you argue that 'corporate strategy' ensures the correct alignment of the firm with its environment'?

Chapter 3-Strategic Analysis

- 9. Strategists need to assess the industry outlook carefully to decide on attractiveness of business. Discuss the factors to base such assessment and decisions.
- 10. Explain how TOWS matrix can generate strategic options within external and internal environment.

Chapter 4-Strategic Planning

- 11. Discuss how mergers and acquisitions are used for business growth. What are the various types of mergers?
- 12. A large Textile Mill, which is in the verge of collapse, has approached you to suggest turnaround strategies. What can be the action plan while recommending turnaround strategies for such a firm?

Chapter 5-Formulation of Functional Strategy

- 13. What are strategic roles of a human resource manager in a large manufacturing and distribution company?
- 14. What are functional strategies? How important are they for the business?

Chapter 6-Strategic Implementation and Control

- 15. "Management of internal linkages in the value chain could create competitive advantage in a number of ways". Briefly explain.

16. Explain the various types of strategic control.

Chapter 7-Reaching Strategic Edge

17. Define each of the following and analyse its role in strategic implementation:

- (1) B.P.R.
- (2) ERP
- (3) Benchmarking

18. Define TQM? Explain the various principles that guide success of TQM.

SUGGESTED ANSWERS / HINTS

- 1 (a) **Correct:** Various elements of environment significantly impact businesses and need to be recognized for success. Businesses have to respect, adapt, manage and sometimes influence these elements. They must continuously monitor and adapt to the environment to survive and prosper.
- (b) **Incorrect:** Strategic actions are typically a blend of (1) proactive actions on the part of managers to improve the company's market position and financial performance and (2) as needed reactions to unanticipated developments and emerging market conditions and developments.
- (c) **Incorrect:** An opportunity is not an inherent capacity of any organization. It is a favourable condition in the organization's environment which enables it to consolidate and strengthen its position. An example of an opportunity is growing demand for the products or services that a company provides.
- (d) **Correct:** Corporate-level managers provide a link between the people who oversee the strategic development of a firm and those who own it (the shareholders). Corporate-level managers, and particularly the CEO, can be viewed as the guardians of shareholder welfare. It is their responsibility to ensure that the corporate and business strategies that the company pursues are consistent with maximizing shareholder wealth.
- (e) **Correct:** Organizing business along SBU lines and creating strategic business units has become a common practice for multi-product/service and global organizations. It is a convenient and intelligent grouping of activities along distinct businesses and has replaced the conventional groupings. SBU facilitates strategic planning, gaining product-related/market-related specialization, gaining cost-economies and more rational organizational structure.
- (f) **Correct:** For effective implementation of higher level strategies, strategists need to provide direction to functional managers, including production, regarding the plans and policies to be adopted. Production strategy provides a path for transmitting

corporate and business level strategy to the production systems and makes it operational. It may relate to production planning, operational system, control and research & development.

- (g) **Correct:** The impact of e-commerce technology on industry and company value chains is profound, paving the way for fundamental changes in the ways business is conducted both internally, and with suppliers and customers. Using the network to link the customers and the suppliers enables just-in-time delivery, reducing inventory costs and allowing production to match demand.
 - (h) **Incorrect:** A sound strategy with excellent implementation would lead to organisational success but cannot ensure it. Organisational environment is dynamic and can be hostile jeopardising best of the strategies. It is not feasible to accurately predict the future environmental conditions that have bearing on the success of strategy.
 - (i) **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.
 - (j) **Correct:** 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.
2. (a) In vertically integrated diversification, firms opt to engage in businesses that are related to their existing businesses. The firm remains vertically within the same process. The firms move sequentially forward or backward in the product process chain. They enter specific product/process steps with the intention of making them into new businesses for the firm.

On the other hand, horizontal integrated diversification involves entry into or acquisition of one or more similar business operating at the same stage of the production-marketing chain that is going into complementary products, by-products or taking over competitors' businesses.

(b) Top-Down and Bottom-Up Strategic Planning

Strategic planning determines where an organization is going over the next year or more and the ways for going there. The process is organization-wide, or focused on a major function such as a division. There are two approaches for strategic planning - top down or bottom up.

Top down strategic planning describes a centralized approach to strategy formulation

in which the corporate centre or head office determines mission, strategic intent, objectives and strategies for the organization as a whole and for all parts. Unit managers are seen as implementers of pre-specified corporate strategies.

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

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

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

(d) **Synchro-marketing:** When the demand for any product is irregular due to season, some parts of the day, or on hour basis, causing idle capacity or overworked capacities, synchro-marketing can be used to find ways to alter the same pattern of demand through flexible pricing, promotion, and other incentives. For example, products such as movie tickets can be sold at lower price over week days to generate demand.

Demarketing: Marketing strategies to reduce demand temporarily or permanently-the aim is not to destroy demand, but only to reduce or shift it. This happens when there is overfull demand. For example, buses are overloaded in the morning and evening, roads are busy for most of times, zoological parks are over-crowded on Saturdays, Sundays and holidays. Here demarketing can be applied to regulate demand.

3. (a) Companies begin business process re-engineering by creating a plan of action based on the gap between the current and proposed processes, technologies and structures. Steps usually followed to implement BPR are as follows:

- (i) **Determining objectives and framework:** Objectives are the desired end results of the redesign process which the management and organization attempts to achieve. It helps in building a comprehensive foundation for the reengineering process.
- (ii) **Identify customers and determine their needs:** The designers have to understand customers – their profile, their steps in acquiring, using and disposing a product. The purpose is to redesign business process that clearly provides added value to the customer.
- (iii) **Study the existing process:** The existing processes will provide an important base for the redesigners.
- (iv) **Formulate a redesign process plan:** Formulation of redesign plan is the real crux of the reengineering efforts. Customer focused redesign concepts are identified and formulated.
- (v) **Implement the redesign:** Implementation of the redesigned process and application of other knowledge gained from the previous steps is key to achieve dramatic improvements.

- (b) Experience curve is similar to learning curve which explains the efficiency gained by workers through repetitive productive work. Experience curve is based on the commonly observed phenomenon that unit costs decline as a firm accumulates experience in terms of a cumulative volume of production.

The implication is that larger firms in an industry would tend to have lower unit costs as compared to those of smaller organizations, thereby gaining a competitive cost advantage. Experience curve results from a variety of factors such as learning effects, economies of scale, product redesign and technological improvements in production.

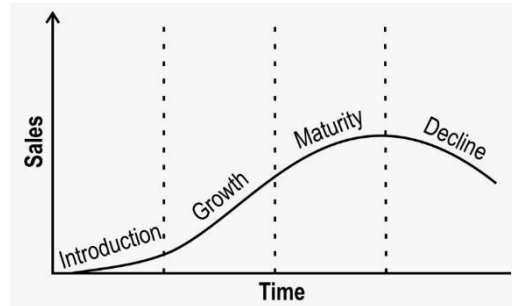
- (c) Product Life Cycle is an important concept in strategic choice and S-shaped curve which exhibits the relationship of sales with respect of time for a product that passes through the four successive stages.

The first stage of PLC is the introduction stage in which competition is almost negligible, prices are relatively high and markets are limited. The growth in sales is also at a lower rate.

The second stage of PLC is the growth stage, in which the demand expands rapidly, prices fall, competition increases and market expands.

The third stage of PLC is the maturity stage, where in the competition gets tough and market gets stabilized. Profit comes down because of stiff competition.

The fourth stage is the declining stage of PLC, in which the sales and profits fall down sharply due to some new product replaces the existing product.



Product Life Cycle

PLC can be used to diagnose a portfolio of products (or businesses) in order to establish the stage at which each of them exists. Particular attention is to be paid on the businesses that are in the declining stage. Depending on the diagnosis, appropriate strategic choice can be made. For instance, expansion may be a feasible alternative for businesses in the introductory and growth stages. Mature businesses may be used as sources of cash for investment in other businesses which need resources. A combination of strategies like selective harvesting, retrenchment, etc. may be adopted for declining businesses. In this way, a balanced portfolio of businesses may be built up by exercising a strategic choice based on the PLC concept.

- (d) The benefits of cooperation are also seen in Japan, where large cooperative networks of businesses are known as *keiretsu*. These are formed in order to enhance the abilities of individual member businesses to compete in their respective industries. A *keiretsu* is a loosely-coupled group of companies, usually in related industries. *Keiretsu* members are peers and may own significant amounts of each other's stock and have many board members in common.

Keiretsus are different from conglomerates (common in western countries and also found in India) wherein all members are lineated through ownership pattern. A *keiretsu* also differs from a consortium or an association, as the primary purpose of a *keiretsu* is not to share information or agree industry standards, but to share purchasing, distribution or any other functions. In *keiretsu* members remain independent companies in their own right: the only strategy they have in common is to prefer to do business with other *keiretsu* members, both when buying and when selling.

4. (a) It is true that a manager working on a strategic decision has to balance opportunities, influences and constraints. The opportunities emanate from various sources including the socio-cultural elements of environment. Socio-cultural factors consist of factors such as traditions, values and beliefs, literacy and education, the ethical standards, stratification, conflict, cohesiveness and so forth. These factors are also evolving in the sense that there are changes in the preferences, value systems, education level

and so on. Managers must segregate the factors that have a bearing on the organisation and consider them while taking strategic decisions. Some of these factors can be managed to an extent, however, there will be several others that are beyond the control of a manager.

- (b) A Strategic vision is a roadmap of a company's future – providing specifics about technology and customer focus, the geographic and product markets to be pursued, the capabilities it plans to develop, and the kind of company that management is trying to create.

The vision of ICAI is - World's leading accounting body, a regulator and developer of trusted and independent professionals with world class competencies in accounting, assurance, taxation, finance and business advisory services.

- (c) Benchmarking is a process of finding the best practices within and outside the industry to which an organisation belongs. Knowledge of the best practices helps in setting standards and finding ways to match or even surpass own performances with the best performances.

Benchmarking is a process of continuous improvement in search for competitive advantage. Firms can use benchmarking process to achieve improvement in diverse range of management function such as mentioned below:

1. maintenance operations,
2. assessment of total manufacturing costs,
3. product development,
4. product distribution,
5. customer services,
6. plant utilisation levels; and
7. human resource management.

5. The business organization and its many environments have innumerable interrelationship that at times it becomes difficult to determine exactly where the organization ends and where its environment begins. It is also difficult to determine exactly what business should do in response to a particular situation in the environment. Strategically, the businesses should make efforts to exploit the opportunity and avoid the threats.

In this context following are the approaches:

- (i) **Least resistance:** Some businesses just manage to survive by way of coping with their changing external environments. They are simple goal-maintaining units. They are very passive in their behaviour and are solely guided by the signals of the external environment. They are not ambitious but are content with taking simple paths of least resistance in their goal-seeking and resource transforming behaviour.

- (ii) **Proceed with caution:** At the next level, are the businesses that take an intelligent interest to adapt with the changing external environment. They seek to monitor the changes in that environment, analyse their impact on their own goals and activities and translate their assessment in terms of specific strategies for survival, stability and strength. This is a sophisticated strategy than to wait for changes to occur and then take corrective-adaptive action.
- (iii) **Dynamic response:** At a still higher sophisticated level, are those businesses that regard the external environmental forces as partially manageable and controllable by their actions. Their feedback systems are highly dynamic and powerful. They not merely recognise and ward off threats; they convert threats into opportunities. They are highly conscious and confident of their own strengths and the weaknesses of their external environmental 'adversaries'. They generate a contingent set of alternative courses of action to be picked up in tune with the changing environment.

At the same time, very dominating behaviour of some command organizations may generate powerful countervailing pressures and forces in the environment. Within certain limits, an organization can shape part of its relevant external environment on a reciprocal basis.

6. Environment is sum of several external and internal forces that affect the functioning of business. Businesses function as a part of broader environment. The inputs in the form of human, physical, financial and other related resources are drawn from the environment. The business converts these resources through various processes into outputs of products and/or services. Macro environment is explained as one which is largely external to the enterprise and thus beyond the direct influence and control of the organization, but which exerts powerful influence over its functioning. Important elements of macro environment are:

- ◆ **Demographic environment:** The term demographics denote characteristics of population in an area, district, country or in world. It includes factors such as race, age, income, educational attainment, asset ownership, home ownership, employment status and location. Marketers and other social scientists often group populations into categories based on demographic variables. Some of the demographic factors have great impact on the business. Factors such as general age profile, sex ratio, education, growth rate affect the business with different magnitude.
- ◆ **Economic environment:** The economic environment refers to the nature and direction of the economy in which a company competes or may compete. The economic environment includes general economic situation in the region and the nation, conditions in resource markets which influence the supply of inputs to the enterprise, their costs, quality, availability and reliability of supplies.
- ◆ **Political-Legal Environment:** This is partly general to all similar enterprises and

partly specific to an individual enterprise. There are three important elements in political-legal environment are Government, legal and political.

- ◆ **Socio-Cultural environment:** Socio-cultural environment consist of factors related to human relationships and the impact of social attitudes and cultural values which has bearing on the business of the organization. The beliefs, values and norms of a society determine how individuals and organizations should be interrelated. The core beliefs of a particular society tend to be persistent. It is difficult for businesses to change these core values, which becomes a determinant of its functioning.
 - ◆ **Technological environment:** The most important factor, which is controlling and changing people's life, is technology. Technology has changed the ways of how business operates now. This is leading to many new business opportunities as well as making obsolete many existing systems. Technology can act as both opportunity and threat to a business.
 - ◆ **Global environment:** Today's competitive landscape requires that companies must analyse global environment as it is also rapidly changing. The new concept of global village has changed how individuals and organizations relate to each other. Further, new migratory habits of the workforce as well as increased offshore operation are changing the dynamics of business operation.
7. The term strategic management refers to the managerial process of forming a strategic vision, setting objectives, crafting a strategy, implementing and executing the strategy, and then initiating whatever corrective adjustments in the vision, objectives, strategy, and execution are deemed appropriate. The basic framework of strategic process can be described in a sequence of five stages as follows:
- Stage one** - Where are we now? (Beginning): This is the starting point of strategic planning and consists of doing a situational analysis of the firm in the environmental context.
- Stage two** - Where we want to be? (Ends): This is a process of goal setting for the organization after it has finalised its vision and mission.
- Stage three** - How might we get there? (Means): Here the organization deals with the various strategic alternatives it has.
- Stage four** - Which way is best? (Evaluation): Out of all the alternatives generated in the earlier stage the organization selects the best suitable alternative in line with its SWOT analysis.
- Stage five** - How can we ensure arrival? (Control): This is a implementation and control stage of a suitable strategy. Here again the organization continuously does situational analysis and repeats the stages again.

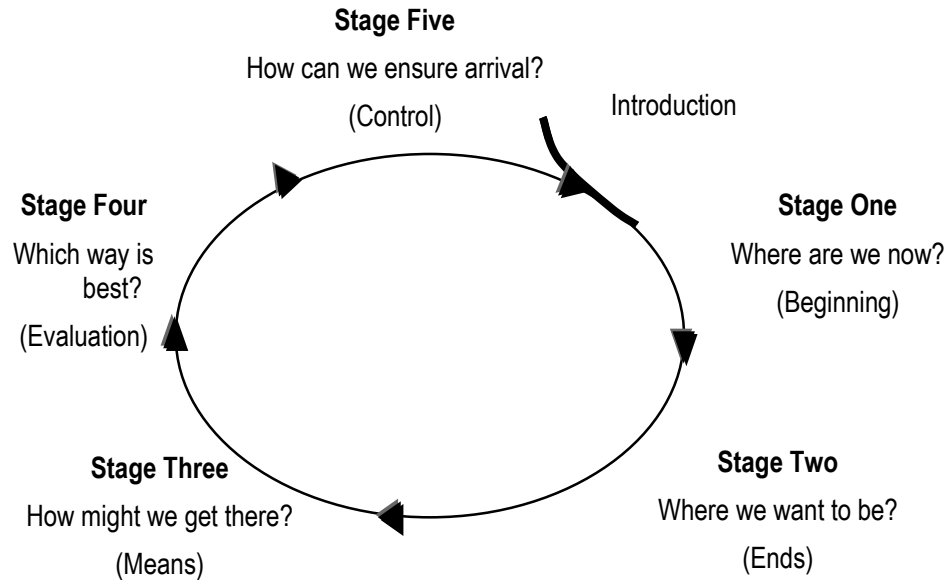


Figure - Framework of strategic management

8. Corporate strategy helps an organisation to achieve and sustain success. It is basically concerned with the choice of businesses, products and markets. It is often correlated with the growth of the firm.

Corporate strategy in the first place ensures the growth of the firm and its correct alignment with the environment. Corporate strategies are concerned with the broad and long-term questions of what businesses the organization is in or wants to be in, and what it wants to do with those businesses. They set the overall direction the organization will follow. It serves as the design for filling the strategic planning gap. It also helps to build the relevant competitive advantages. A right fit between the firm and its external environment is the primary contribution of corporate strategy. Basically the purpose of corporate strategy is to harness the opportunities available in the environment and countering the threats embedded therein. With the help of corporate strategy, organizations match their unique capabilities with the external environment so as to achieve their vision and mission.

9. The final step of industry and competitive analysis is to draw conclusions about the relative attractiveness or unattractiveness of the industry, both near-term and long-term. Company strategists are obligated to assess the industry outlook carefully, deciding whether industry and competitive conditions present an attractive business opportunity for the organisation or whether its growth and profit prospects are gloomy. The important factors on which to base such conclusions include:
- ◆ The industry's growth potential.
 - ◆ Whether competition permits adequate profitability?

- ◆ Whether industry profitability will be favourable?
- ◆ Strength of competitive position in the industry.
- ◆ Potential to capitalize on weaknesses of rivals
- ◆ Ability to defend against counteracting industrial factors.
- ◆ Degree of future risk and uncertainty in industry.
- ◆ Severity of problems confronting industry.
- ◆ Synergistical benefits of remaining in industry.

As a general proposition, if an industry's overall profit prospects are above average, the industry can be considered attractive; if its profit prospects are below average, it is unattractive. However, it is a mistake to think of industries as being attractive or unattractive to all industry participants and all potential entrants. Attractiveness is relative, not absolute.

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

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

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

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

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

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

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

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

Used after detailed analysis of threats, opportunities, strength and weaknesses, TOWS helps one to consider how to use the external environment to strategic advantage, and so one can identify some of the strategic options that are available.

11. Many organizations in order to achieve quick growth, expand or diversify use mergers and acquisitions strategies. Merger 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.

Merger is considered to be a process when two or more organizations join together to expand their business operations. In such a case the deal gets finalized on friendly terms. Owners of pre-merged entities have right over the profits of new entity. In a merger two organizations combine to increase their strength and financial gains.

When one organization takes over the other organization and controls all its business operations, it is known as acquisition. In the process of acquisition, one financially strong organization overpowers the weaker one. Acquisitions often happen during economic recession or during declining profit margins. In this process, one that is financially stronger and bigger establishes its power. 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.

Types of Mergers

1. **Horizontal merger:** Horizontal mergers are combinations of firms engaged in the same industry. It is a merger with a direct competitor. The principal objective behind this type of mergers is to achieve economies of scale in the production process by shedding duplication of installations and functions, widening the line of products, decrease in working capital and fixed assets investment, getting rid of competition and so on.
2. **Vertical merger:** It is a merger of two organizations that are operating in the same industry but at different stages of production or distribution system. This often leads to increased synergies with the merging firms. If an organization takes over its supplier/producers of raw material, then it leads to backward integration. On the other hand, forward integration happens when an organization decides to take over its buyer organizations or distribution channels. Vertical merger results in operating and financial

economies. Vertical mergers help to create an advantageous position by restricting the supply of inputs or by providing them at a higher cost to other players.

3. **Co-generic merger:** In co-generic merger two or more merging organizations are associated in some way or the other related to the production processes, business markets, or basic required technologies. Such merger include the extension of the product line or acquiring components that are required in the daily operations. It offers great opportunities to businesses to diversify around a common set of resources and strategic requirements. For example, an organization manufacturing refrigerators can diversify by merging with another organization having business in kitchen appliances.
 4. **Conglomerate merger:** Conglomerate mergers are the combination of organizations that are unrelated to each other. There are no linkages with respect to customer groups, customer functions and technologies being used. There are no important common factors between the organizations in production, marketing, research and development and technology. In practice, however, there is some degree of overlap in one or more of these factors.
12. A textile mill which is on the verge of collapse should carefully analyse its present position, gravity of problems, whether there exist ways to overcome these problems, available resources and so on. The action plan for turnaround strategy can be as follows:

Stage One – Assessment of current problems: The first step is to assess the current problems and get to the root causes and the extent of damage the problem has caused. Once the problems are identified, the resources should be focused toward those areas essential to efficiently work on correcting and repairing any immediate issues. The problems can be internal such as low morale of workers in the textile or environment driven such as huge influx of cheap cloth from foreign markets.

Stage Two – Analyze the situation and develop a strategic plan: Before you make any major changes; determine the chances of the business's survival. Identify appropriate strategies and develop a preliminary action plan. For this one should look for the viable core businesses, adequate bridge financing and available organizational resources. Analyze the strengths and weaknesses in the areas of competitive position. Once major problems and opportunities are identified, develop a strategic plan with specific goals and detailed functional actions.

Stage Three – Implementing an emergency action plan: If the organization is in a critical stage, an appropriate action plan must be developed to stop the bleeding and enable the organization to survive. The plan typically includes human resource, financial, marketing and operations actions to restructure debts, improve working capital, reduce costs, improve budgeting practices, prune product lines and accelerate high potential products. A positive operating cash flow must be established as quickly as possible and enough funds to implement the turnaround strategies must be raised.

Stage Four – Restructuring the business: The financial state of the organization's core

business is particularly important. If the core business is irreparably damaged, then the outlook for the entire organization may be bleak. Prepare cash forecasts, analyze assets and debts, review profits and analyze other key financial functions to position the organization for rapid improvement.

During the turnaround, the “product mix” may be changed, requiring the organization to do some repositioning. The ‘people mix’ is another important ingredient in the organization’s competitive effectiveness.

Stage Five – Returning to normal: In the final stage of turnaround strategy process, the organization should begin to show signs of profitability, return on investments and enhancing economic value-added. Emphasis is placed on a number of strategic efforts such as carefully adding new products and improving customer service, creating alliances with other organizations, increasing the market share, etc.

13. The prominent areas where the human resource manager can play strategic role are:
1. **Providing purposeful direction:** The human resource management must be able to lead people and the organization towards the desired direction involving people. The management has to ensure harmony between organisational objectives and individual objectives. Objectives are specific aims which must be in the line with the goal of the organization and the all actions of each person must be consistent with them.
 2. **Creating competitive atmosphere:** In the present business environment, maintaining competitive position or gains is an important objective of any business. Having a highly committed and competent workforce is very important for getting a competitively advantageous position.
 3. **Facilitation of change:** The human resource manager will be more concerned about furthering the organization not just maintaining it. He has to devote more time to promote acceptance of change rather than maintaining the status quo.
 4. **Workforce diversity:** In a modern organization, management of diverse workforce is a great challenge. Workforce diversity can be observed in terms of male and female, young and old, educated and uneducated and so on. Maintaining a congenial healthy work environment is a challenge for HR Manager. Motivation, maintaining morale and commitment are some of the key task that a HR manager has to perform.
 5. **Empowerment of human resources:** Empowerment involves giving more power to those who, at present, have little control what they do and little ability to influence the decisions being made around them.
 6. **Building core competency:** The human resource manager has an important 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. Organization of business around core competence implies leveraging the limited resources of a firm. It needs creative, courageous and dynamic leadership having faith in organization’s human resources.

7. **Development of works ethics and culture:** 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.
14. Once higher level corporate and business strategies are developed, management need to formulate and implement strategies for each functional area. For effective implementation, strategists have to provide direction to functional managers regarding the plans and policies to be adopted. In fact, the effectiveness of strategic management depends critically on the manner in which strategies are implemented. Functional area strategy such as marketing, financial, production and Human Resource are based on the functional capabilities of an organisation. For each functional area, first the major sub areas are identified and then for each of these sub functional areas, contents of functional strategies, important factors, and their importance in the process of strategy implementation is identified.

In terms of the levels of strategy formulation, functional strategies operate below the SBU or business-level strategies. Within functional strategies there might be several sub-functional areas. Major strategies need to be translated to lower levels to give holistic strategic direction to an organisation. Functional strategies provide details to business strategy & govern as to how key activities of the business will be managed.

Functional strategies play two important roles. Firstly, they provide support to the overall business strategy. Secondly, they spell out as to how functional managers will work so as to ensure better performance in their respective functional areas. The reasons why functional strategies are really important and needed for business can be enumerated as follows:

1. The development of functional strategies is aimed at making the strategies-formulated at the top management level-practically feasible at the functional level.
 2. Functional strategies facilitate flow of strategic decisions to the different parts of an organisation.
 3. They act as basis for controlling activities in the different functional areas of business.
 4. The time spent by functional managers in decision-making is reduced as plans lay down clearly what is to be done and policies provide the discretionary framework within which decisions need to be taken.
 5. Functional strategies help in bringing harmony and coordination as they remain part of major strategies.
 6. Similar situations occurring in different functional areas are handled in a consistent manner by the functional managers.
15. 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, an assessment needs to be made whether the value added to the customer by this faster response through holding stocks is greater than the added cost.

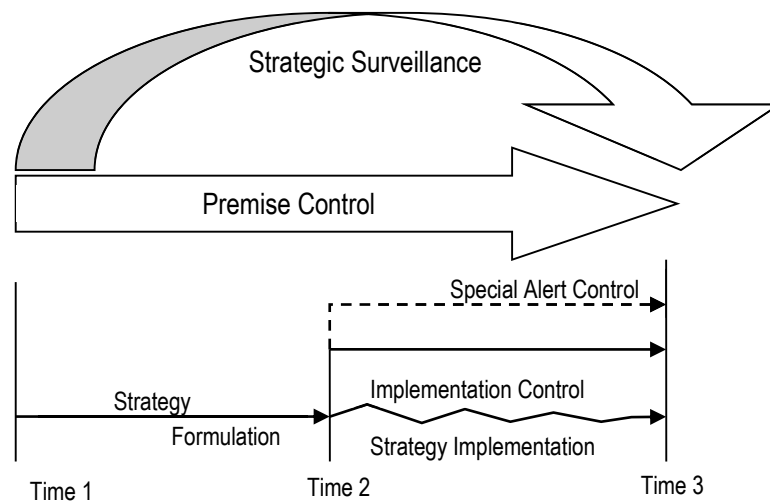
- ◆ It is easy to miss this issue of managing linkages between primary activities in an analysis if, for example, the organization's competences in marketing activities and operations are assessed separately. The operations may look good because they are geared to high-volume, low-variety, low-unit-cost of production. However, at the same time, the marketing team may be selling speed, flexibility and variety to the customers. So competence in separate activities need to be compatible.
- ◆ 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. For example, the extent to which human resource development is in tune with new technologies has been a key feature in the implementation of new production and office technologies. Many companies have failed to become competent in managing this linkage properly and have lost out competitively.

16. Types of Strategic Control: There are four types of strategic control as follows:

- ◆ **Premise control:** A strategy is formed on the basis of certain assumptions or premises about the environment. Premise control is a tool for systematic and continuous monitoring of the environment to verify the validity and accuracy of the premises on which the strategy has been built. It primarily involves monitoring two types of factors:
 - (i) Environmental factors such as economic (inflation, liquidity, interest rates), technology, social and regulatory.
 - (ii) Industry factors such as competitors, suppliers, substitutes.
- ◆ **Strategic surveillance:** Contrary to the premise control, the strategic surveillance is unfocussed and loose form of strategic control which is also very helpful. It involves general monitoring of various sources of information to uncover unanticipated information having a bearing on the organizational strategy. It involves casual environmental browsing. Reading financial and other newspapers, business magazines, meetings, conferences, discussions at clubs and so on can help in strategic surveillance.
- ◆ **Special alert control:** At times unexpected events may force organizations to reconsider their strategy. Sudden changes in government, natural calamities, terrorist

attacks, unexpected merger/acquisition by competitors, industrial disasters and other such events may trigger an immediate and intense review of strategy. Organizations to cope up with these eventualities, form crisis management teams.

- ◆ **Implementation control:** Implementation control is directed towards assessing the need for changes in the overall strategy in light of unfolding events and results associated with incremental steps and actions. The two basis forms of implementation control are:
 - (i) *Monitoring strategic thrusts:* Monitoring strategic thrusts help managers to determine whether the overall strategy is progressing as desired or whether there is need for readjustments.
 - (ii) *Milestone Reviews.* All key activities necessary to implement strategy are segregated in terms of time, events or major resource allocation. It normally involves a complete reassessment of the strategy. It also assesses the need to continue or refocus the direction of an organization.



Source: "Strategic management-formulation, Implementation and control" by John A Pearce II, Richard B Robinson, Jr. and Amita Mital.

These four strategic controls steer the organisation and its different sub-systems to the right track. They help the organisation to negotiate through the turbulent and complex environment.

17. (1) **BPR:** BPR stands for business process reengineering. It refers to the analysis and redesign of workflows both within and between the organisation and the external entities. Its objective is to improve performance in terms of time, cost, quality, and responsiveness to customers. It implies giving up old practices and adopting the improved ones. It is an effective tool of realising new strategies.

Improving business processes is paramount for businesses to stay competitive in today's marketplace. New technologies are rapidly bringing new capabilities to businesses, thereby raising the strategical options and the need to improve business processes dramatically. Even the competition has become harder. In today's market place, major changes are required to just stay even.

- (2) **ERP:** ERP stand for enterprise resource planning which is an IT based system linking isolated information centres across the organisation into an integrated enterprise wide structured functional and activity bases. ERP is successor to MRP systems (material requirements and manufacturing resource planning systems). ERP is used for strengthening the procurement and management of input factors.

Modern ERP systems deliver end-to-end capabilities to support the entire performance management of an organisation. It helps in consolidated financial reporting, financial management, planning, budgeting, performance management and so on.

- (3) **Benchmarking:** It is a process of finding the best practices within and outside the industry to which an organisation belongs. Knowledge of the best helps in standards setting and finding ways to match or even surpass own performances with the best performances.

Benchmarking is a process of continuous improvement in search for competitive advantage. Firms can use benchmarking process to achieve improvement in diverse range of management function like maintenance operations, assessment of total manufacturing costs, product development, product distribution, customer services, plant utilisation levels and human resource management

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

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

Principles guiding TQM

Implementing TQM requires organization wide support. There are several principles that guide success of TQM. Various principles that guide the total quality management philosophy are as follows:

- A sustained management commitment to quality

- Focusing on the customer
- Preventing rather than detecting defects
- Universal quality responsibility
- Quality measurement
- Continuous improvement and learning
- Root cause corrective action
- Employee involvement and empowerment
- The synergy of teams
- Thinking statistically
- Inventory reduction
- Value improvement
- Supplier teaming
- Training