

PAPER – 5 : ADVANCED ACCOUNTING

**PART – I: ANNOUNCEMENTS STATING APPLICABILITY & NON-APPLICABILITY
FOR MAY, 2014 EXAMINATION**

A. Applicable for May, 2014 examination

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

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

(ii) Presentation of Foreign Currency Monetary Item Translation Difference Account (FCMITDA)

In the Revised Schedule VI format, no line item has been specified for the presentation of "Foreign Currency Monetary Item Translation Difference Account (FCMITDA)". Therefore, the Council of the Institute at its 324th meeting held on March 24-26, 2013 at New Delhi, decided that debit or credit balance in FCMITDA should be shown on the "Equity and Liabilities" side of the balance sheet under the head 'Reserves and Surplus' as a separate line item.

(iii) Review of the Prudential Guidelines on Restructuring of Advances by Banks/Financial Institutions

Reserve Bank of India has reviewed the prudential guidelines on restructuring of advances by banks/ financial institutions vide circular no. DBOD.No.BP.BC.63/21.04.048/2012-13 applicable for all scheduled commercial banks excluding RRBs dated November 26, 2012. As per paragraph 81 of the Monetary Policy Statement 2013-14 announced on May 3, 2013, 'Prudential guidelines on restructuring of advances by banks / financial institutions' have been revised taking into account the recommendations of the Working Group (Chairman: Shri B. Mahapatra) vide notification no. DBOD.BP.BC.No. /21.04.132/2012-13 dated January 31, 2013. The Major decisions are as follows:

- i) To enhance the provisioning requirement for restructured accounts classified as standard advances from the existing 2.00 per cent to 2.75 per cent in the first two years from the date of restructuring. In cases of moratorium on payment of interest/principal after restructuring, such advances will attract a provision of 2.75 per cent for the period covering moratorium and two years thereafter; and that
- ii) Restructured accounts classified as non-performing advances, when upgraded to standard category will attract a provision of 2.75 per cent in the first year

from the date of upgradation instead of the existing 2.00 per cent.

In accordance with the above, loans to projects under implementation, when restructured due to change in the date of commencement of commercial operations (DCCO) beyond the original DCCO as envisaged at the time of financial closure and classified as standard advances would attract higher provisioning at 2.75 per cent as against the present requirement of 2.00 per cent as per the details given below:

Infrastructure projects

Particulars	Provisioning Requirement
If the revised DCCO is within two years from the original DCCO prescribed at the time of financial closure	0.40 per cent
If the DCCO is extended beyond two years and upto four years or three years from the original DCCO, as the case may be, depending upon the reasons for such delay (Ref.: DBOD.No.BP.BC.85 /21.04.048/2009-10 dated March 31, 2010)	2.75 per cent – From the date of such restructuring till the revised DCCO or 2 years from the date of restructuring, whichever is later.

Non-infrastructure projects

Particulars	Provisioning Requirement
If the revised DCCO is within six months from the original DCCO prescribed at the time of financial closure	0.40 per cent
If the DCCO is extended beyond six months and upto one year from the original DCCO prescribed at the time of financial closure (Ref.: DBOD.No.BP.BC.85 /21.04.048/2009-10 dated March 31, 2010)	2.75 per cent – From the date of such restructuring for 2 years.

All other extant guidelines on Income Recognition, Asset Classification and Provisioning pertaining to advances will remain unchanged.

(iv) Clarification on Debenture Redemption Reserve (DRR)

Ministry of Corporate Affairs vide Circular no. 04/2013 dated 11 February, 2013 has clarified the adequacy of DRR for various institutions/companies as follows:

All India Financial Institutions (AIFIs) regulated by Reserve Bank of India and Banking Companies for both public as well as	Nil
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privately placed debentures	
Other Financial Institutions and NBFCs registered with the RBI under Section 45-IA of the RBI (Amendment) Act, 1997	
if debentures issued through public issue	25%
if privately placed debentures	Nil
Other companies including manufacturing and infrastructure companies (including listed and unlisted companies)	25%

Every company required to create/maintain DRR shall before the 30th day of April of each year, deposit or invest, as the case may be, a sum which shall not be less than fifteen percent of the amount of its debentures maturing during the year ending on the 31st day of March next following year.

(v) Amendment to para 46 of Accounting Standard 11 of the Companies (Accounting Standards) Rules, 2006

Ministry of Corporate Affairs vide its notification number G.S.R 913(E), dated 29th December, 2011, has amended the para 46 of AS 11 of the Companies (Accounting Standards) Amendment Rules, 2011. Through this notification, the MCA has extended the option (for the enterprises) to capitalize the exchange differences arising on reporting of long term foreign currency monetary items till 31st March, 2020 instead of 31st March, 2012.

(vi) Insertion of para 46A in Accounting Standard 11 of the Companies (Accounting Standards) Rules, 2006

Ministry of Corporate Affairs vide its notification number G.S.R 914(E), dated 29th December, 2011, inserted under-mentioned para 46A in AS 11 of the Companies (Accounting Standards) Rules, 2006, now known as Companies (Accounting Standards) (Second Amendment) Rules, 2011.

"46A. (1) In respect of accounting periods commencing on or after the 1st April, 2011, for an enterprise which had earlier exercised the option under paragraph 46 and at the option of any other enterprise (such option to be irrevocable and to be applied to all such foreign currency monetary items), the exchange differences arising on reporting of long-term foreign currency monetary items at rates different from those at which they were initially recorded during the period, or reported in previous financial statements, in so far as they relate to the acquisition of a depreciable capital assets, can be added to or deducted from the cost of the assets and shall be depreciated over the balance life of the assets, and in other cases, can be accumulated in a "Foreign Currency Monetary Item Translation Difference Account" in the enterprise's financial statements and amortized over the balance period of such long term assets or liability, by recognition as income or expense in

each of such periods, with the exception of exchange differences dealt with in accordance with the provisions of paragraph 15 of the said rules.

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

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

Note: The principal regulations were published in the Gazette of India Extraordinary, Part II, Section 3, Sub Section (i) vide G.S.R 739(E), dated the 7th December, 2006 and amended vide notification number G.S.R. 212(E), dated the 27th March, 2008 and subsequently amended by No. G.S.R. 225(E) dated 31st March, 2009 and No. G.S.R. 378(E), dated 11th May, 2011.

(vii) Clarification on Para 46A of notification number G.S.R. 914(E) dated 29.12.2011 on Accounting Standard 11 relating to "The effects of Changes in Foreign Exchange Rates"

The Ministry has received several representations from industry associations that Para 6 of AS 11 and Para 4(e) of AS 16 are posing problems in proper implementation of Para 46A of AS 11 inserted vide notification 914(E) dated 29.12.2011. In order to resolve the problems faced by industry, MCA had further clarified vide Circular No. 25/2012 dated 09.08.2012 that Para 6 of AS 11 and Para 4(e) of the AS 16 shall not apply to a company which is applying clause Para 46A of AS 11.

(viii) Section 24 of the Banking Regulation Act, 1949 Maintenance of Statutory Liquidity Ratio (SLR) - Local Area Banks

In exercise of the powers conferred by sub-section (2A) of Section 24 of Banking Regulation Act, 1949 (10 of 1949) as amended from time to time, RBI vide notification DBOD.No.Ret.BC.48 /12.02.001/2012-13 dated September 28, 2012 has decided that Statutory Liquidity Ratio for Local Area Banks be reduced from 25 per cent to 23 per cent of their Net Demand and Time Liabilities (NDTL) with effect from the fortnight beginning August 11, 2012.

(ix) 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.

(x) **Buy Back of Securities (Amendment) Regulations, 2013**

In exercise of the powers conferred under section 30 of the Securities and Exchange Board of India Act, 1992 read with clause (f) of sub-section (2) of Section 77A of the Companies Act, 1956 SEBI made Securities and Exchange Board of India (Buy-back of Securities) (Amendment) Regulations, 2013 to amend the Securities and Exchange Board of India (Buy back of Securities) Regulations, 1998. The important provisions of the new regulations are: (i) No offer of buy-back for fifteen per cent or more of the paid up capital and free reserves of the company shall be made from the open market. (ii) A company shall not make any offer of buy-back within a period of one year reckoned from the date of closure of the preceding offer of buy-back, if any. (iii) The company shall ensure that at least fifty per cent of the amount earmarked for buy-back is utilized for buying-back shares or other specified securities.

Source: <http://www.sebi.gov.in/sebiweb/home/list/1/3/0/0/Regulations>

B. Not applicable for May, 2014 examination

Ind ASs issued by the Ministry of Corporate Affairs

The MCA has hosted on its website 35 converged Indian Accounting Standards (Ind AS) without announcing the applicability date. These are the standards which are being converged by eliminating the differences of the Indian Accounting Standards vis-à-vis IFRS. These standards shall be applied for all companies falling under Phase I to Phase III as prescribed under the roadmap issued by the core group. **These Ind ASs are not applicable for the students appearing in May, 2014 Examination.**

PART – II : QUESTIONS AND ANSWERS

QUESTIONS

Partnership Accounts

Dissolution of a partnership firm

1. A, V, R and S are partners in a firm sharing profits and losses in the ratio of 4 : 1 : 2 : 3. The following is their Balance Sheet as at 31st March, 2014 :

Liabilities		₹	Assets	₹
Sundry Creditors		6,00,000	Sundry Debtors	7,00,000
Capital A/cs :			Less: Doubtful Debts	<u>(1,00,000)</u>
A	14,00,000			6,00,000

S	6,00,000	20,00,000	Cash in hand	2,80,000
			Stocks	4,00,000
			Other Assets	6,20,000
			Capital A/cs:	
			V	4,00,000
			R	3,00,000
		26,00,000		26,00,000

On 31st March, 2014, the firm is dissolved and the following points are agreed upon:

- A is to takeover sundry debtors at 80% of book value.
- S is to takeover the stocks at 95% of the value.
- R is to discharge sundry creditors.
- Other assets realise ₹ 6,00,000 and the expenses of realisation come to ₹ 60,000.
- V is found insolvent and ₹ 43,800 is realised from his estate.

You are required to prepare Realisation Account and Capital Accounts of the partners. Show also the Cash A/c. The loss arising out of capital deficiency may be distributed following the decision in Garner vs Murray.

Amalgamation of firms

- Ketan Kumar acquires the business of M/s Shiv and Nath on payment of ₹ 1,20,000 on 31st March 2013. The book value of assets and liabilities taken over by him as follows:

	₹
Debtors	52,500
Furniture	4,500
Stock	69,000
Creditors	15,000

There was no change between 1st January, 2013 and 31st March, 2013 in the book value of the assets and liabilities not taken over. The same set of books has been continued after the acquisition and no entries of the acquisition have been passed except for the payment of ₹ 1,20,000 made by Ketan Kumar.

From the following balance sheet and trial balance prepare Business Purchase Account, Profit and Loss Account for the year ended 31st December, 2013 and Balance Sheet at that date.

Balance Sheet as at December, 2012

Liabilities		₹	Assets	₹
Capital Accounts			Furniture	4,500

Shiv	45,000		Investments	7,500
Nath	30,000	75,000	Insurance Policy	3,000
Bank Loan		27,000	Stock	60,000
Creditors		18,000	Debtors	45,000
		1,20,000		1,20,000

On 31st December 2013 the trial balance is:

	₹	₹
Stock	60,000	
Furniture	4,500	
Investment	7,500	
Insurance Policy	3,000	
Business Purchase Account	1,20,000	
Bank Loan		27,000
Capital :		
Shiv		45,000
Nath		30,000
Ketan		45,000
Bank	4,500	
Debtors	72,000	
Creditors		22,500
Purchases	4,80,000	
Expenses	18,000	
Sales		<u>6,00,000</u>
	<u>7,69,500</u>	<u>7,69,500</u>
Closing Stock ₹ 75,000		

Conversion of partnership firm

3. Aman, Baal and Chand share profits and losses of a business as to 3:2:1 respectively. Their balance sheet as at 31st March, 2014 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:

- (i) Motor car, furniture, investments, loose tools, debtors and cash are not to be taken over by the company.
- (ii) Liabilities for bills payable and bank overdraft are to be taken over by the company.
- (iii) 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.
- (iv) 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.

Sale of Partnership firm

4. M, N and O were Partners sharing Profits and Losses in the ratio of 5:3:2 respectively. The Trial Balance of the Firm 31st March, 2014 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/c:		
M		1,36,000
N		90,000
O		46,000
Drawing A/c:		
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> </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 Account at the beginning of the year, was not provided before preparing the above Trial Balance. On the above date, they formed a 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:

- Machinery is to be transferred at ₹ 1,40,000.
- 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.
- 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.

You are required to prepare:

- (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.

Employee Stock Option Plans

5. Siya Ltd. provides you the following information:

No. of employees	2,500
No. of option to be granted to each employee	500
Vesting period	4 Years
No. of employees not expected to fulfill the vesting conditions other than market conditions	
1 st Year	20%
2 nd Year	15%
3 rd Year	10%
4 th Year	10%
Fair value of the option per share	₹ 5
Exercise Price	₹ 50
Exercise Period	3 Years
Face value of each share	₹ 10

At the end of third year it has been re-estimated that all vesting conditions have been fulfilled and no other further conditions are required for options to vest and 600 employees exercise their option at the end of 4th year, 800 employees exercise their option at the end of 5th year and 100 employees exercise their option at the end of 6th year. Rights of 30 employees expire unexercised at the end of the 6th year.

You are required to pass necessary journal entries for first 3 years.

Buy –Back of Shares

6. The following was the Balance Sheet of C Ltd. as on 31st March ,2014.

Equity & Liabilities	₹ Lakhs	Assets	₹ Lakhs
Share Capital:		Fixed Assets	14,000

Equity shares of ₹ 10 each Fully Paid Up	8,000	Investments	3,000
10% Redeemable Pref. Shares of ₹ 10 each Fully Paid Up	2,500	Cash at Bank	1,650
Reserves & Surplus		Other Current Assets	8,250
Capital Redemption Reserve	1,000		
Securities Premium	800		
General Reserve	6,000		
Profit & Loss Account	300		
Secured Loans:			
9% Debentures	5,000		
Current Liabilities:			
Trade payables	2,300		
Sundry Provisions	<u>1,000</u>		
	<u>26,900</u>		<u>26,900</u>

On 1st April, 2014 the Company redeemed all its Preference Shares at a Premium of 10% and bought back 15% of its Equity Shares at ₹ 20 per Share. In order to make cash available, the Company sold all the Investments for ₹ 3,150 lakhs and raised a Bank Loan amounting to ₹ 400 lakh on the Security of the Company's Plant.

You are required to

- (i) pass journal entries for the above and
- (ii) prepare the Company's Balance sheet immediately thereafter.

Underwriting of Shares

7. X Ltd. issued 1,20,000 Equity Shares which were underwritten as follows:

A & Co	72,000 Equity Shares
B & Co.	30,000 Equity Shares
C & Co.	18,000 Equity Shares

The above mentioned underwriters made applications for 'firm' underwritings as follows:

A & Co	9,600 Equity Shares
B & Co	12,000 Equity Shares
C & Co.	3,600 Equity Shares

The total applications excluding 'firm' underwriting, but including marked applications were for 60,000 Equity Shares.

The marked Applications were as under:

A & Co	12,000 Equity Shares
B & Co.	15,000 Equity Shares
C & Co.	6,000 Equity Shares

The underwriting contracts provide that underwriters be given credit for 'firm' applications and that credit for unmarked applications be given in proportion to the shares underwritten. You are required to show the allocation of liability. Workings will be considered as a part of your answer.

Redemption of Debentures

8. On 1st January, 2004 Shyam Ltd. allotted 10,000 9% Debentures of ₹ 100 each at par, the total amount having been received along with applications.
- On 1st January, 2006 the Company purchased in the open market 1,000 of its own debentures @ ₹ 101 each and cancelled them immediately.
 - On 1st January, 2009 the company redeemed at par debentures for ₹ 3,00,000 by draw of a lot.
 - On 1st January, 2010 the company purchased debentures of the face value of ₹ 2,00,000 for 1,97,800 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, 2014 when Securities Premium Account in the company's ledger showed a balance of ₹ 30,000.

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

Amalgamation of companies

9. Hari Ltd. and Narayan Ltd. are to be amalgamated into Hari Narayan Ltd. The new company is to take over all the assets and liabilities of the amalgamating companies.

Assets and Liabilities of Hari Ltd. are to be taken over at book values in exchange of shares in Hari Narayan Ltd. Three shares in the new company are to be issued at a premium of 20% for every two shares of Hari Ltd.

The approved scheme for Narayan Ltd. is as follows:

- 10% Preference shareholders are to be allowed two 15% Preference shares of ₹ 100 each in Hari Narayan Ltd. for three Preference shares held in Narayan Ltd.
- The Debentures of Narayan Ltd. are to be paid off at 5% discount by the issue of debentures of Hari Narayan Ltd. at par.
- The Equity shareholders of Narayan Ltd. are to be allowed as many shares at par in Hari Narayan Ltd. as will cover the balance on their account and for this purpose,

plant and machinery is to be valued less by 15% and obsolete stock forming 10% of the overall stock value is to be treated as worthless.

The summarised Balance Sheets of the two companies prior to amalgamation are as follows:

<i>Liabilities</i>	<i>Hari Ltd.</i>	<i>Narayan Ltd.</i>	<i>Assets</i>	<i>Hari Ltd.</i>	<i>Narayan Ltd.</i>
	₹	₹		₹	₹
Equity Shares of ₹ 10 each	6,40,000	12,50,000	Plant and Machinery	12,80,000	20,00,000
10% Preference Shares of ₹ 100 each	-	7,50,000	Trade receivables	1,52,000	1,25,000
General Reserves	8,80,000	-	Inventory	1,00,000	1,50,000
Secured Debentures	-	5,00,000	Cash and Bank Balance	1,08,000	1,00,000
Trade payables	1,20,000	2,25,000	Profit and Loss Account	-	3,50,000
	<u>16,40,000</u>	<u>27,25,000</u>		<u>16,40,000</u>	<u>27,25,000</u>

You are required to show the Journal Entries and the Balance Sheet of the amalgamated company immediately after amalgamation.

Internal Reconstruction of a Company

10. The Balance Sheet of Moon Limited as on 31st March, 2013 was as follows:

<i>Liabilities</i>	<i>Amount (₹)</i>	<i>Assets</i>	<i>Amount (₹)</i>
2,50,000 Equity Shares of ₹ 10 each fully paid	25,00,000	Goodwill	5,00,000
9% 10,000 Preference shares of ₹ 100 each fully paid	10,00,000	Patent	2,50,000
10% First debentures	3,00,000	Land and Building	15,00,000
10% Second debentures	5,00,000	Plant and Machinery	5,00,000
Debentures interest outstanding	80,000	Furniture and Fixtures	1,00,000
Trade payables	2,50,000	Computers	1,50,000
Directors' loan	50,000	Trade Investment	2,50,000
Bank O/D	50,000	Trade receivables	2,50,000
Outstanding liabilities	20,000	Inventory	5,00,000
Provision for Tax	<u>50,000</u>	Profit and Loss Account (Loss)	8,00,000
	<u>48,00,000</u>		<u>48,00,000</u>

Note: Preference dividend is in arrears for last three years.

A holds 10% first debentures for ₹ 2,00,000 and 10% second debentures for ₹ 3,00,000. He is also creditors for ₹ 50,000. B holds 10% first debentures for ₹ 1,00,000 and 10% second debentures for ₹ 2,00,000 and is also creditors for ₹ 25,000.

The following scheme of reconstruction has been agreed upon and duly approved by the court.

- (i) All the equity shares be converted into fully paid equity shares of ₹ 5 each.
- (ii) The preference shares be reduced to ₹ 50 each and the preference shareholders agree to forego their arrears of preference dividends in consideration of which 9% preference shares are to be converted into 10% preference shares.
- (iii) Mr. 'A' is to cancel ₹ 3,00,000 of his total debt including interest on debentures and to pay ₹ 50,000 to the company and to receive new 12% debentures for the Balance amount.
- (iv) Mr. 'B' is to cancel ₹ 1,50,000 of his total debt including interest on debentures and to accept new 12% debentures for the balance amount.
- (v) Trade creditors (other than A and B) agreed to forego 50% of their claim.
- (vi) Directors to accept settlement of their loans as to 60% thereof by allotment of equity shares and balance being waived.
- (vii) There were capital commitments totalling ₹ 1,50,000. These contracts are to be cancelled on payment of 5% of the contract price as a penalty.
- (viii) The Directors refund ₹ 55,000 of the fees previously received by them.
- (ix) Reconstruction expenses paid ₹ 5,000.
- (x) The taxation liability of the company is settled at ₹ 40,000 and the same is paid immediately.
- (xi) The assets are revalued as under:

	₹
Land and Building	14,00,000
Plant and Machinery	2,00,000
Inventory	3,50,000
Trade receivables	1,50,000
Computers	90,000
Furniture and Fixtures	50,000
Trade Investment	2,00,000

Pass Journal entries for all the above mentioned transactions including amounts to be written off of Goodwill, Patents, Loss in Profit & Loss Account. Prepare Bank Account and working of allocation of Interest on Debentures between A and B.

Liquidation of a company

11. The following particulars relate to V Limited Company which has gone into voluntary liquidation.

Share capital issued:

5,000 Preference shares of ₹ 100 each fully paid up.

25,000 Equity shares of ₹ 10 each fully paid up.

15,000 Equity shares of ₹ 10 each, ₹ 8 paid up.

Assets realized ₹ 10,00,000 excluding the amount realized by sale of securities held by partly secured creditors.

	₹
Preferential creditors	25,000
Unsecured creditors	9,00,000
Partly secured creditors (Assets realized ₹ 1,60,000)	1,75,000
Debentureholders having floating charge on all assets of the company	3,00,000
Expenses of liquidation	5,000

A call of ₹ 2 per share on the partly paid equity shares was duly received except in case of one shareholder owning 500 shares.

You are required to prepare the Liquidator's Statement of Account allowing for his remuneration @ 2½% on all assets realized excluding call money received and 2% on the amount paid to unsecured creditors including preferential creditors. Also calculate the percentage of amount paid to the unsecured creditors to the total unsecured creditors.

Financial Statements of Insurance Companies

12. From the following balances extracted from the books of Priya General Insurance Company Limited as on 31.3.2013, you are required to prepare Revenue Accounts in respect of Fire and marine Insurance business for the year ended 31.3.2013 and a Profit and Loss Account for the same period :

	₹		₹
Directors' Fee	40,000	Interest received	9,500
Dividend received	50,000	Fixed Assets (1.4.2012)	45,000
Provision for Taxation (as on 1.4. 2012)	42,500	Income-tax paid during the year	30,000

	Fire	Marine
	₹	₹
Outstanding Claims on 1.4.2012	14,000	3,500
Claims paid	50,000	40,000
Reserve for Unexpired Risk on 1.4.2012	1,00,000	70,000
Premiums Received	2,25,000	1,65,000
Agent's Commission	20,000	10,000
Expenses of Management	30,000	22,500
Re-insurance Premium (Dr.)	12,500	7,500

The following additional points are also to be taken into account:

- Depreciation on Fixed Assets to be provided at 10% p.a.
- Interest accrued on investments ₹ 5,000.
- Closing provision for taxation on 31.3.2013 to be maintained at ₹ 62,069.
- Claims outstanding on 31.3.2013 were Fire Insurance ₹ 5,000; Marine Insurance ₹ 7,500.
- Premium outstanding on 31.3.2013 were Fire Insurance ₹ 15,000; Marine Insurance ₹ 10,000.
- Reserve for unexpired risk to be maintained at 50% and 100% of net premium in respect of Fire and Marine Insurance respectively.
- Expenses of management due on 31.3.2013 were ₹ 5,000 for Fire Insurance and ₹ 2,500 in respect of marine Insurance.

Financial Statements of Banking Companies

13. The following facts have been taken out from the records of City Bank Ltd. as on 31st March, 2013:

	₹	₹
Rebate on bill discounted (not due on March 31 st , 2012)		91,600
Discount received		4,05,000
Bill discounted	24,50,000	

An analysis of the bills discounted is as follows:

	Amount	Due date	Rate of discount
	₹	2013	
(i)	7,50,000	April 8	12%

(ii)	3,00,000	May 5	14%
(iii)	4,40,000	June 12	14%
(iv)	9,60,000	July 15	15%

You are required to:-

- Calculate Rebate on Bill Discounted as on 31st March, 2013.
- The amount of discount to be credited to the profit and loss account.

Financial Statements of Electricity Company

14. The trial balance of Jyoti Electric Supply Ltd. for the year ended 31st March, 2013 is as below:

Particulars	(₹ '000)	
	Dr.	Cr.
Share Capital :		
7,50,000 Equity Shares of ₹ 10 each		75,00
Patents and trademark	2,50	
14% Debentures		30,00
11% Term Loan		17,50
Land	15,50	
Building	42,50	
Power Plant	75,00	
Electrical Instruments	7,00	
Capital reserve		9,00
Contingency reserves		15,00
Transformers	20,50	
Net revenue account		8,50
Inventories	14,50	
Trade receivables	8,00	
Contingency reserve investments	15,00	
Bank balance	3,00	
Public lamps	4,00	
Depreciation fund		30,00
Trade payables		7,50
Proposed dividend		15,00
	20,750	20,750

Prepare Balance Sheet of Jyoti Electric Supply Ltd as on 31st March, 2013 as per Revised Schedule VI.

Departmental Accounts

15. M/s P and Co., had four departments A,B,C and D. Each department being managed by manager whose commission was 10% of the respective departmental profit, subject to a minimum of ₹ 6,000 in each case. Interdepartmental transfers took place at a 'loaded' price as follows:

From Department A to Department B	10% above cost
From Department A to Department D	20% above cost
From Department C to Department D	20% above cost
From Department C to Department B	20% above cost

For the year ending on 31st March, 2014 the firm had already prepared and closed the departmental Trading and Profit and Loss Account. Subsequently, it was discovered that the closing stocks of departments had included interdepartmentally transferred goods at loaded price instead of cost price. From the following information prepare a statement recomputing the departmental profit or loss:

	<i>Dept. A</i> ₹	<i>Dept. B</i> ₹	<i>Dept. C</i> ₹	<i>Dept D</i> ₹
Final Profit (Loss)	(38,000)	50,400	72,000	1,08,000
Inter departmental transfers included at loaded price in the departmental stock		70,000	-	4,800
		(₹ 22,000 from Dept. A and ₹ 48,000 from Dept. C)		(₹ 3,600 from Dept. C and ₹ 1,200 from Dept. A)

Branch Accounting

16. From the following particulars relating to Pune branch for the year ending December 31, 2013, prepare Branch Account in the books of Head office.

	₹
Stock at Branch on January 1, 2013	10,000
Branch Debtors on January 1, 2013	4,000
Branch Debtors on Dec. 31, 2013	4,900
Petty cash at branch on January 1, 2013	500
Furniture at branch on January 1, 2013	2000
Prepaid fire insurance premium on January 1, 2013	150

Salaries outstanding at branch on January 1, 2013		100
Good sent to Branch during the year		80,000
Cash Sales during the year		1,30,000
Credit Sales during the year		40,000
Cash received form debtors		35,000
Cash paid by the branch debtors directly to the Head Office		2,000
Discount allowed to debtors		100
Cash sent to branch for Expenses:		
Rent	2,000	
Salaries	2,400	
Petty Cash	1,000	
Insurance up to March 31, 2014	<u>600</u>	6,000
Goods returned by the Branch		1,000
Goods returned by the debtors		2,000
Stock on December 31,2013		5000
Petty Cash spent by branch		850
Provide depreciation on furniture 10% p.a.		

Goods costing ₹ 1,200 were destroyed on account of fire and a sum of ₹ 1,000 was received from the Insurance Company.

AS 5

17. (a) X Limited was making provisions up to 31-3-2012 for non-moving inventories based on no issues for the last 12 months. Based on a technical evaluation the company wants to make provisions during the year 31-03-2013 in the following manner:

Total value of inventory ₹ 3 crores.

Provision required based on 12 months ₹ 8 lakhs.

Provision required based on technical evaluation ₹ 7.50 lakhs.

Does this amount to change in accounting policy?

Can the company change the method of provision?

AS 11

- (b) Aman Ltd. borrowed US \$ 5,00,000 on 31-12-2012 which will be repaid (settled) as on 30-6-2013. Aman Ltd. prepares its financial statements ending on 31-3-2013. Rate of exchange between reporting currency (Rupee) and foreign currency (US \$) on different dates are as under:

31-12-2012 1 US \$ = ₹ 44.00

31-3-2013 1 US \$ = ₹ 44.50

30-6-2013 1 US \$ = ₹ 44.75

Calculate borrowings in reporting currency to be recognised in the books on above mentioned dates & also show journal entries for the same.

AS 12

18. (a) Viva Ltd. received a specific grant of ₹ 30 lakhs for acquiring the plant of ₹ 150 lakhs during 2010-11 having useful life of 10 years. The grant received was credited to deferred income in the balance sheet. During 2013-14, due to non-compliance of conditions laid down for the grant, the company had to refund the whole grant to the Government. Balance in the deferred income on that date was ₹ 21 lakhs and written down value of plant was ₹ 105 lakhs.
- (i) What should be the treatment of the refund of the grant and the effect on cost of the fixed asset and the amount of depreciation to be charged during the year 2013-14 in profit and loss account?
- (ii) What should be the treatment of the refund, if grant was deducted from the cost of the plant during 2010-11 assuming plant account showed the balance of ₹ 84 lakhs as on 1.4.2013?

AS-16

- (b) A company capitalizes interest cost of holding investments and adds to cost of investment every year, thereby understating interest cost in profit and loss account. Comment on the accounting treatment done by the company in context of the relevant AS.

AS 19

19. (a) WIN Ltd. has entered into a three year lease arrangement with Tanya sports club in respect of Fitness Equipments 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

(b) No. of equity shares outstanding	30,00,000
Basic earnings per share	₹ 5.00
No. of 12% convertible debentures of ₹ 100 each	50,000
Each debenture is convertible into 10 equity shares.	
Tax Rate	30%

Compute Diluted Earnings per Share. Working note should form part of the answer.

AS 26

20. (a) K. International Ltd. is developing a new production process. During the financial year ending 31st March, 2012, the total expenditure incurred was ₹ 50 lakhs. This process met the criteria for recognition as an intangible asset on 1st December, 2011. Expenditure incurred till this date was ₹ 22 lakhs. Further expenditure incurred on the process for the financial year ending 31st March, 2013 was ₹ 80 lakhs. As at 31st March, 2013, the recoverable amount of know-how embodied in the process is estimated to be ₹ 72 lakhs. This includes estimates of future cash outflows as well as inflows.

You are required to calculate:

- Amount to be charged to Profit and Loss A/c for the year ending 31st March, 2012 and carrying value of intangible as on that date.
- Amount to be charged to Profit and Loss A/c and carrying value of intangible as on 31st March, 2013.

Ignore depreciation.

AS 29

- (b) EXOX Ltd. is in the process of finalizing its accounts for the year ended 31st March, 2013. The company seeks your advice on the following:

The Company's sales tax assessment for assessment year 2010-11 has been completed on 14th February, 2013 with a demand of ₹ 2.76 crore. The company paid the entire due under protest without prejudice to its right of appeal. The Company files its appeal before the appellate authority wherein the grounds of appeal cover tax on additions made in the assessment order for a sum of 2.10 crore.

SUGGESTED ANSWERS/HINTS

1. Realisation A/c

	₹		₹
To Sundry Debtors	7,00,000	By Sundry Creditors	6,00,000
To Stock	4,00,000	By Provision for Doubtful Debts	1,00,000
To Other assets	6,20,000	By A's Capital A/c (Debtors)	5,60,000
To R's Capital A/c (Creditors)	6,00,000	By S's Capital A/c (stock)	3,80,000
To Cash		By Cash (Other assets)	6,00,000
Expenses on realization	60,000	By A's Capital A/c	56,000
		By V's Capital A/c	14,000
		By R's Capital A/c	28,000
		By S's Capital A/c	<u>42,000</u>
		(Loss on realisation)	
	<u>23,80,000</u>		<u>23,80,000</u>

Partners Capital A/cs

	A	V	R	S		A	V	R	S
	₹	₹	₹	₹		₹	₹	₹	₹
To Balance b/f		4,00,000	3,00,000		By Balance b/f	14,00,000	-	-	6,00,000
To Realisation (Debtors)	5,60,000	-	-	-	By Realisation (Creditors)	-	-	6,00,000	-
To Realisation (Stock)	-	-	-	3,80,000	By Balance c/d	-	4,14,000	-	-
To Realisation (loss)	56,000	14,000	28,000	42,000					
To Balance c/d	<u>7,84,000</u>	<u>-</u>	<u>2,72,000</u>	<u>1,78,000</u>					
	<u>14,00,000</u>	<u>4,14,000</u>	<u>6,00,000</u>	<u>6,00,000</u>		<u>14,00,000</u>	<u>4,14,000</u>	<u>6,00,000</u>	<u>6,00,000</u>
To Balance b/d	-	4,14,000	-	-	By Balance b/d	7,84,000	-	2,72,000	1,78,000
To V's A/c	2,59,140	-	-	1,11,060	By Cash	-	43,800	-	-
To Cash	5,24,860	-	2,72,000	66,940	By A	-	2,59,140	-	-
					By S	-	1,11,060	-	-
	<u>7,84,000</u>	<u>4,14,000</u>	<u>2,72,000</u>	<u>1,78,000</u>		<u>7,84,000</u>	<u>4,14,000</u>	<u>2,72,000</u>	<u>1,78,000</u>

Cash A/c

	₹		₹	₹
To Balance b/d	2,80,000	By Realisation A/c (expenses)		60,000
To Realisation A/c	6,00,000	By Capital A/c		
To V's Capital A/c	43,800	A	5,24,860	
		R	2,72,000	
		S	66,940	<u>8,63,800</u>
	<u>9,23,800</u>			<u>9,23,800</u>

Note:

1. Since creditors are taken over by R as per Balance Sheet figures, a direct entry for the same in R's Capital A/c is also correct.
2. A takes over Debtors at 80% of ₹ 7,00,000 i.e. ₹ 5,60,000.
3. V's deficiency will be borne by A and S in the ratio of 7 : 3 i.e. on opening capitals of ₹ 14,00,000 and ₹ 6,00,000. R will not bear any portion of the loss since at the time of dissolution he had a debit balance in his capital account.

2.

Business Purchase Account

2013	₹	2013	₹
To Balance b/d	1,20,000	By Bank Loan	27,000
To Investments	7,500	By Shiv's Capital A/c	45,000
To Insurance Policy	3,000	By Nath's Capital A/c	30,000
		By Goodwill	9,000
		By Profit & Loss A/c (Balancing figure, profit upto 31st March, 2013)	19,500
	1,30,500		1,30,500

Profit & Loss Account of Ketan for the year ended 31st December, 2013

	₹		₹
To Opening Stock	60,000	By Sales	6,00,000
To Purchases	4,80,000	By Closing Stock	75,000
To Expenses	18,000		
To Business Purchase (Profit upto 31st March)	19,500		

To Net Profit			
Ketan's Capital A/c	97,500		
	6,75,000		6,75,000

Balance Sheet of Ketan as on 31st December, 2013

<i>Liabilities</i>	₹	<i>Assets</i>	₹
Ketan's Capital A/c 45,000		Goodwill	9,000
<i>Add</i> : Profit <u>97,500</u>	1,42,500	Furniture	4,500
Sundry Creditors	22,500	Stock in trade	75,000
		Sundry Debtors	72,000
		Cash at Bank	4,500
	1,65,000		1,65,000

Working Notes :

(1) **Goodwill**

	₹
Value of Assets taken over	
Stock	69,000
Debtors	52,500
Furniture	<u>4,500</u>
	1,26,000
<i>Less</i> : Creditors	<u>(15,000)</u>
Net assets	1,11,000
Goodwill (Balancing figure)	<u>9,000</u>
Purchase Consideration	<u>1,20,000</u>

(2) **Increase in net assets upto 31st March 2013 :**

	<i>as on 1st January</i>	<i>as on 31st March</i>
	₹	₹
Debtors	45,000	52,500
Stock	60,000	69,000
Furniture	<u>4,500</u>	<u>4,500</u>
	1,09,500	1,26,000

Less: Creditors	<u>(18,000)</u>	<u>(15,000)</u>
	91,500	1,11,000
Profit, equal to net increase	<u>19,500</u>	<u>—</u>
	<u>1,11,000</u>	<u>1,11,000</u>

3. Realisation 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 (Investment)		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			4,44,500

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	-	-	31,000
	<u>97,000</u>	<u>88,000</u>	<u>78,000</u>		<u>97,000</u>	<u>88,000</u>	<u>78,000</u>

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
	<u>1,20,000</u>		<u>1,20,000</u>

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>1,56,500</u>		<u>1,56,500</u>

Note : Investment Fluctuation Fund Account may be transferred to Realisation Account.

4. (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 (3,32,000 - 2,72,000) (issued in profit sharing ratio)	30,000	18,000	12,000	60,000
	<u>1,66,000</u>	<u>1,08,000</u>	<u>58,000</u>	<u>3,32,000</u>

(b) Partners' Capital Account

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	<u>2,70,300</u>	<u>1,71,420</u>	<u>98,880</u>		<u>2,70,300</u>	<u>1,71,420</u>	<u>98,880</u>

* 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, 2014 (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	₹
1.	Shares capital	
	Authorised shares 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 issued for consideration other than cash, in takeover of partnership firm)	<u>3,32,000</u>

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

Particulars	₹	₹	Particulars	₹
To Interest on Capital:			By Net Profit	2,48,600
M [₹ 1,36,000 x 10%]	13,600		(given)	
N [₹ 90,000 x 10%]	9,000			
O [₹ 46,000 x 10%]	<u>4,600</u>	27,200		
To Profits transferred to Capital				
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>

5. Journal Entries in the books of Siya Ltd.

Particulars		Dr. (₹)	Cr. (₹)
At the end of 1 year			
Employees Compensation Expense A/c	Dr	8,60,625	
To Employee Stock Options Outstanding A/c			8,60,625
(Being the compensation expenses recognized in respect of the ESOP)			
Profit and Loss A/c	Dr	8,60,625	
To Employee Compensation Expense A/c			8,60,625
(Being Expenses of the year transferred to P & L A/c)			
At the end of Year 2			
Employees Compensation Expense A/c	Dr	8,60,625	
To Employee Stock Options Outstanding A/c			8,60,625
(Being expense in respect of ESOP recognized for the year 2)			
Profit and Loss A/c	Dr	8,60,625	
To Employee Compensation Expense A/c			8,60,625
(Being Expenses of the year transferred to P & L A/c)			

At the end of Year 3		
Employees Compensation Expense A/c To Employee Stock Options Outstanding A/c (Being expense in respect of ESOP recognized for the year 3)	Dr 21,03,750	21,03,750
Profit and Loss A/c To Employee Compensation Expense A/c (Being Expenses of the year transferred to P & L A/c)	Dr 21,03,750	21,03,750

Working Note:

- A. No. of Employees expected to take options = $2,500 \times .80 \times .85 \times .90 \times .90 = 1377$
- B. No. of Options to be granted to each employee = 500
- C. Fair Value of each option = ₹ 5
- D. Total Fair Value of Options expected to vest (A x B x C) = ₹ 34,42,500
- E. Amount of Fair Value of Options to be recognized as an expense 1st year
 $(34,42,500/4) = ₹ 8,60,625$
 2nd Year $(34,42,500 \times (2/4) - 8,60,625) = ₹ 8,60,625$
 3rd Year $[(1530 \text{ employees} \times 500 \text{ options} \times ₹ 5) - (8,60,625 + 8,60,625)] = ₹ 21,03,750$

Since vesting period has been revised in 3rd year all the remaining liabilities in respect of employees stock option plan has been recognized at the end of 3rd year and data for the 4th year has been ignored.

6. (i) **Journal Entries in the books of C Ltd. (₹ in lakhs)**

	Particulars			
1	Bank A/c To Investments A/c To Profit and Loss A/c (Being investment sold on profit for the purpose of buy-back)	Dr.	3,150	3,000 150
2	10% Redeemable Preference Share Capital A/c Premium on Redemption of Preference Shares A/c To Preference Shareholders A/c (Being redemption of preference share capital at premium of 10%)	Dr. Dr.	2,500 250	2,750

3	Securities Premium A/c To Premium on Redemption of Preference Shares A/c (Being premium on redemption of preference shares adjusted through securities premium)	Dr	250	250
4	Equity Share Capital A/c Premium on buyback To Equity buy-back A/c (Being Equity Share bought back, Share Capital cancelled, and Premium on Buyback accounted for)	Dr. Dr.	1,200 1,200	2,400
5	Securities Premium A/c (800-250) General Reserve A/c To Premium on Buyback A/c (Being premium on buyback provided first out of securities premium and the balance out of general reserves.)	Dr	550 650	1,200
6	Bank A/c To Bank Loan A/c (Being loan taken from bank to finance buyback and redemption of shares)		400	400
7	Preference Shareholders A/c Equity buy-back A/c To Bank A/c (Being payment made to preference shareholders and equity shareholders)		2,750 2,400	5,150
8	General Reserve Account To Capital Redemption Reserve Account (Being amount transferred to capital redemption reserve account towards face value of preference shares redeemed and equity shares bought back)		3,700	3,700

(ii) Balance Sheet of C Ltd. (after Redemption and Buyback) (₹ Lakhs)

	Particulars	Note No	Amount
	EQUITY AND LIABILITIES		₹
(I)	Shareholders' Funds:		
	(a) Share Capital	1	6,800
	(b) Reserves and Surplus	2	6,800
(2)	Non-Current Liabilities:		
	(a) Long Term Borrowings	3	5,400

(3)	Current Liabilities:		
	(a) Trade payables		2,300
	(b) Short Term Provisions		<u>1,000</u>
	Total		<u>22,300</u>
(II)	ASSETS		
(1)	Non-Current Assets		
	Fixed Assets		14,000
	Current Assets:		
	(a) Cash and Cash equivalents (W N)		50
	(b) Other Current Assets		<u>8,250</u>
			<u>22,300</u>

Notes to Accounts

		₹ in Lakhs		
1.	Share Capital			
	680 lakh Equity Shares of ₹ 10 each Fully Paid up (120 lakh Equity Shares bought back)			6,800
2.	Reserves and Surplus			
	General Reserve	6,000		
	<i>Less:</i> Adjustment for premium paid on buy back	(650)		
	<i>Less:</i> Transfer to CRR	<u>(3,700)</u>	1,650	
	Capital Redemption Reserve	1,000		
	<i>Add:</i> Transfer due to buy-back of shares from Gen. res.	<u>3,700</u>	4,700	
	Securities premium	800		
	<i>Less:</i> Adjustment for premium paid on redemption of preference shares	(250)		
	<i>Less:</i> Adjustment for premium paid on buy back	<u>(550)</u>	-	
	Profit & Loss A/c	300		
	<i>Add:</i> Profit on sale of investment	<u>150</u>	<u>450</u>	6,800
3.	Long-term borrowings			
	Secured			
	9 % Debentures		5,000	
	Term Loans – From Banks		<u>400</u>	5,400

Working Note

Bank Account

Receipts	Amount (₹ Lakhs)	Payments	Amount (₹ Lakhs)
To balance b/d	1,650	By Preference Shareholders A/c	2,750
To Investment A/c (sale Proceeds)	3,150	By Equity Shareholders A/c	2,400
To Bank Loan A/c (Loan received)	400	By Balance c/d (Balancing figure)	50
	<u>5,200</u>		<u>5,200</u>

7. Computation of liabilities of underwriters (No. of shares):

	A & Co.	B & Co.	C & Co.	Total
Gross liability	72,000	30,000	18,000	1,20,000
Less: Marked applications (excluding firm underwriting)	<u>(12,000)</u>	<u>(15,000)</u>	<u>(6,000)</u>	<u>(33,000)</u>
	60,000	15,000	12,000	87,000
Less: Unmarked Applications*(Ratio 72:30:18)	<u>(16,200)</u>	<u>(6,750)</u>	<u>(4,050)</u>	<u>(27,000)</u>
	43,800	8,250	7,950	60,000
Less: Firm underwriting	<u>(9,600)</u>	<u>(12,000)</u>	<u>(3,600)</u>	<u>(25,200)</u>
	34,200	(3,750)	4,350	34,800
Credit for excess of B & Co. (ratio 72:18)	<u>(3,000)</u>	<u>3,750</u>	<u>(750)</u>	
Net liability (excluding firm underwriting)	31,200	-	3,600	
Add: Firm underwriting	<u>9,600</u>	<u>12,000</u>	<u>3,600</u>	
Total liability (No. of shares)	40,800	12,000	7,200	

Working Note:

*	Total Applications	60,000 Shares
	Less: Marked Applications	33,000 Shares
	Unmarked applications	<u>27,000</u> Shares

8. Journal

		(₹) Dr.	(₹) Cr.
2004 Jan	1 Bank To 9% Debenture Applications & Allotment Account (Being application money on 10,000 debentures @ ₹ 100 per debenture received)	10,00,000	10,00,000

		9% Debentures Applications & Allotment Account To 9% Debentures Account (Being allotment of 10,000 9% Debentures of ₹ 100 each at par)	Dr. 	10,00,000	10,00,000
(i)	1	9% Debenture Account Loss on Redemption of Debentures Account To Bank (Being redemption of 1,000 9% Debentures of ₹ 100 each by purchase in the open market @ ₹ 101 each)	Dr. Dr. 	1,00,000 1,000	1,01,000
"	"	Profit & Loss Account/Securities Premium Account 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)	Dr. 	1,000	1,000
(ii)	1	9% Debentures Account To Sundry Debentureholders (Being Amount payable to debentureholders on redemption debentures for ₹ 3,00,000 at par by draw of a lot)	Dr. 	3,00,000	3,00,000
"	"	Sundry Debentureholders To Bank (Being Payment made to sundry debentureholders for redeeming debentures of ₹ 3,00,000 at par)	Dr. 	3,00,000	3,00,000
(iii)	1	Own Debentures To Bank (Being purchase of own debentures of the face value of ₹ 2,00,000 for ₹ 1,97,800)	Dr. 	1,97,800	1,97,800
2011	"	9% Debentures To Own Debentures To Profit on Cancellation of Own Debentures Account (Being Cancellation of own debentures of the face value of ₹ 2,00,000 purchased last year for ₹ 1,97,800)	Dr. 	2,00,000	1,97,800 2,200
"	"	Profit on Cancellation of Own Debentures Account To Capital Reserve Account (Being transfer of profit on cancellation of own debentures to capital reserve)	Dr. 	2,200	2,200
(iv)	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 ₹ 4,00,000 on redemption at a premium of 2% as per resolution of the board of directors)	Dr. Dr. 	4,00,000 8,000	4,08,000
"	"	Sundry Debentureholders	Dr.	4,08,000	

	To Bank Account (Being payment to sundry debentureholders)		4,08,000
"	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.	8,000
			8,000

9. In the books of Hari Narayan Ltd. (Amalgamated Company)

Journal Entries

	Particulars	Debit	Credit
		₹	₹
1.	Business Purchase A/c To Liquidators of Hari Ltd. To Liquidators of Narayan Ltd. (Being purchase of business of Hari Ltd. and Narayan Ltd.- Refer Working Note)	Dr. 25,12,000	11,52,000 13,60,000
2.	Plant and Machinery A/c Trade receivables A/c Inventory A/c Cash and Bank A/c To Trade payables A/c To General Reserve A/c (8,80,000 – 5,12,000) To Business Purchase A/c (Being assets and liabilities of Hari Ltd. taken over)	Dr. Dr. Dr. Dr.	12,80,000 1,52,000 1,00,000 1,08,000 1,20,000 3,68,000 11,52,000
3.	Plant and Machinery A/c Trade receivables A/c Inventory A/c Cash and Bank A/c To Debentureholders A/c (95% of 5,00,000) To Trade payables A/c To Business Purchase A/c (Being assets and liabilities of Narayan Ltd. taken over)	Dr. Dr. Dr. Dr.	17,00,000 1,25,000 1,35,000 1,00,000 4,75,000 2,25,000 13,60,000
4.	Liquidator of Hari Ltd. A/c To Equity Share Capital A/c To Securities Premium A/c (Being equity shares issued at 20% premium to shareholders of Hari Ltd.)	Dr. 11,52,000	9,60,000 1,92,000

5.	Liquidators of Narayan Ltd. A/c To Equity Share Capital A/c To 15% Preference Share Capital A/c (Being issue of shares to discharge purchase consideration)	Dr.	13,60,000	8,60,000 5,00,000
6.	Debentureholders of Narayan Ltd. A/c To Debentures A/c (Being own debentures issued against debentures of Narayan Ltd.)	Dr.	4,75,000	4,75,000

Balance Sheet of Hari Narayan Ltd. after amalgamation

<i>Particulars</i>	<i>Note No.</i>	<i>₹</i>
I. Equity and Liabilities		
(1) Shareholder's Funds		
(a) Share Capital	1	23,20,000
(b) Reserves and Surplus	2	5,60,000
(2) Non-current Liabilities		
Long-term borrowings	3	4,75,000
(3) Current Liabilities		
Trade payables		3,45,000
Total		37,00,000
II. Assets		
(1) Non-current assets		
Fixed assets		
Tangible assets	4	29,80,000
(2) Current assets		
(a) Inventories		2,35,000
(b) Trade receivables		2,77,000
(c) Cash and cash equivalents		2,08,000
Total		37,00,000

Notes to Accounts

		<i>₹</i>
1.	Share Capital Equity shares of ₹ 10 each	18,20,000

	Preference shares of ₹ 10 each	<u>5,00,000</u>
		<u>23,20,000</u>
2.	Reserves and surplus	
	General Reserve	3,68,000
	Securities Premium	<u>1,92,000</u>
		<u>5,60,000</u>
3.	Long-term Borrowings	
	Secured Debentures	<u>4,75,000</u>
4.	Tangible Assets	
	Plant and Machinery	<u>29,80,000</u>

Working Notes:**Computation of Purchase Consideration**

- For Hari Ltd., the Payment Method is applied for determining the Purchase Consideration. Hence, the amalgamation is accounted under Pooling of Interests method.

Number of shares to be issued by Hari Narayan Ltd. for Hari Ltd.'s shareholders = $64,000 \times \frac{3}{2} = 96,000$ shares.

Since, the issue price is ₹ 12 per share, the Purchase Consideration is $96,000 \times 12 = ₹ 11,52,000$.

- For Narayan Ltd. the Net Assets Method is applied for determining the Purchase Consideration. Since, the assets are not taken over at book value, the amalgamation is accounted under Purchase method.

		₹
Assets taken over:		
Plant and Machinery	(20,00,000 less 15%)	17,00,000
Trade receivables		1,25,000
Inventory	(1,50,000 less 10%)	1,35,000
Cash and Bank balance		<u>1,00,000</u>
Total Assets		20,60,000
<i>Less: Liabilities</i>		
Trade payables		(2,25,000)
Secured Debentures		<u>(4,75,000)</u>
Net Purchase Consideration		<u>13,60,000</u>

Discharge:		
Preference Shareholders	(7,50,000 x 2/3)	5,00,000
Equity Shareholders (bal. fig.)	(13,60,000-5,00,000)	<u>8,60,000</u>
		<u>13,60,000</u>

10. **Journal Entries in the Books of Moon Ltd.**

		<i>Dr.</i>	<i>Cr.</i>
		₹	₹
(i)	Equity Share Capital (₹ 10 each) A/c Dr.	25,00,000	
	To Equity Share Capital (₹ 5 each) A/c		12,50,000
	To Reconstruction A/c		12,50,000
	(Being conversion of 2,50,000 equity shares of ₹ 10 each fully paid into same number of fully paid equity shares of ₹ 5 each as per scheme of reconstruction.)		
(ii)	9% Preference Share Capital (₹ 100 each) A/c Dr.	10,00,000	
	To 10% Preference Share Capital (₹ 50 each) A/c		5,00,000
	To Reconstruction A/c		5,00,000
	(Being conversion of 9% preference share of ₹ 100 each into same number of 10% preference share of ₹ 50 each and claims of preference dividends settled as per scheme of reconstruction.)		
(iii)	10% First Debentures A/c Dr.	2,00,000	
	10% Second Debentures A/c Dr.	3,00,000	
	Trade payables A/c Dr.	50,000	
	Interest on Debentures Outstanding A/c Dr.	50,000	
	Bank A/c Dr.	50,000	
	To 12% New Debentures A/c		3,50,000
	To Reconstruction A/c		3,00,000
	(Being ₹ 3,00,000 due to A (including creditors) cancelled and 12% new debentures allotted for balance amount as per scheme of reconstruction.)		
(iv)	10% First Debentures A/c Dr.	1,00,000	
	10% Second Debentures A/c Dr.	2,00,000	
	Trade Payable A/c Dr.	25,000	
	Interest on Debentures Outstanding A/c Dr.	30,000	

	To 12% New Debentures A/c		2,05,000	
	To Reconstruction A/c		1,50,000	
	(Being ₹ 1,50,000 due to B (including creditors) cancelled and 12% new debentures allotted for balance amount as per scheme of reconstruction.)			
(v)	Trade Payables A/c	Dr.	87,500	
	To Reconstruction A/c			87,500
	(Being remaining trade payable sacrificed 50% of their claim)			
(vi)	Directors' Loan A/c	Dr.	50,000	
	To Equity Share Capital (₹ 5) A/c			30,000
	To Reconstruction A/c			20,000
	(Being Directors' loan claim settled by issuing 6,000 equity shares of ₹ 5 each as per scheme of reconstruction.)			
(vii)	Reconstruction A/c	Dr.	7,500	
	To Bank A/c			7,500
	(Being payment made for cancellation of capital commitments.)			
(viii)	Bank A/c	Dr.	55,000	
	To Reconstruction A/c			55,000
	(Being refund of fees by directors credited to reconstruction A/c.)			
(ix)	Reconstruction A/c	Dr.	5,000	
	To Bank A/c			5,000
	(Being payment of reconstruction expenses.)			
(x)	Provision for Tax A/c	Dr.	50,000	
	To Bank A/c			40,000
	To Reconstruction A/c			10,000
	(Being payment of tax for 80% of liability in full settlement)			
(xi)	Reconstruction A/c	Dr.	23,60,000	
	To Goodwill A/c			5,00,000
	To Patent A/c			2,50,000
	To Profit and Loss A/c			8,00,000

To Land and Building A/c	1,00,000
To Plant and Machinery A/c	3,00,000
To Furniture & Fixture A/c	50,000
To Computers A/c	60,000
To Trade Investment A/c	50,000
To Inventory A/c	1,50,000
To Trade receivables A/c	1,00,000
(Being writing off of losses and reduction in the value of assets as per scheme of reconstruction.)	

Working Notes:

- (1) Outstanding interest on debentures have been allocated between A and B as follows:

A's Share ₹

10% First Debentures	2,00,000		
10% Second Debentures	<u>3,00,000</u>	<u>5,00,000</u>	
10% on ₹ 5,00,000 i.e.			50,000

B's Share

10% First Debentures	1,00,000		
10% Second Debentures	<u>2,00,000</u>	<u>3,00,000</u>	
10% on ₹ 3,00,000 i.e.			<u>30,000</u>
Total			<u>80,000</u>

- (2) **Bank Account**

		₹			₹
To	A (reconstruction)	50,000	By	Balance b/d	50,000
To	Reconstruction A/c (paid by directors)	55,000	By	Reconstruction A/c (capital commitment penalty paid)	7,500
			By	Reconstruction A/c (reconstruction expenses paid)	5,000
			By	Provision for tax A/c (tax paid)	40,000
			By	Balance c/d	<u>2,500</u>
		<u>1,05,000</u>			<u>1,05,000</u>

11. (i) Liquidator's Statement of Account

	₹			₹
To Assets Realised	10,00,000	By Liquidator's remuneration		
To Receipt of call money on 14,500 equity shares @ 2 per share	29,000	2.5% on 11,60,000*	29,000	
		2% on 25,000	500	
		2% on 6,56,373 (W.N.3)	<u>13,127</u>	42,627
		By Liquidation Expenses		5,000
		By Debenture holders having a floating charge on all assets		3,00,000
		By Preferential creditors		25,000
		By Unsecured creditors		<u>6,56,373</u>
	<u>10,29,000</u>			<u>10,29,000</u>

(ii) Percentage of amount paid to unsecured creditors to total unsecured creditors

$$= \frac{6,56,373}{9,15,000} \times 100 = 71.73\%$$

Working Notes:

1. Unsecured portion in partly secured creditors = ₹ 1,75,000 - ₹ 1,60,000 = ₹ 15,000
2. Total unsecured creditors = 9,00,000 + 15,000 (W.N.1) = ₹ 9,15,000
3. Liquidator's remuneration on payment to unsecured creditors

Cash available for unsecured creditors after all payments including payment to preferential creditors & liquidator's remuneration on it = ₹ 6,69,500

Liquidator's remuneration on unsecured creditors = ₹ 6,69,500 x 2/102 ₹ 13,127

or on ₹ 6,56,373 x 2/100 = ₹ 13,127

* Total assets realised = ₹ 10,00,000 + ₹ 1,60,000 = ₹ 11,60,000

12.

Form B – RA (Prescribed by IRDA)

Priya General Insurance Co. Ltd

Revenue Account for the year ended 31st March, 2013

Fire and Marine Insurance Businesses

	<i>Schedule</i>	<i>Fire Current Year</i>	<i>Marine Current Year</i>
		₹	₹
Premiums earned (net)	1	2,13,750	70,000
Interest, Dividends and Rent – Gross		—	—
Double Income Tax refund		—	—
Profit on sale of motor car		—	—
Total (A)		<u>2,13,750</u>	<u>70,000</u>
Claims incurred (net)	2	41,000	44,000
Commission	3	20,000	10,000
Operating expenses related to Insurance business	4	35,000	25,000
Bad debts		—	—
Indian and Foreign taxes		—	—
Total (B)		<u>96,000</u>	<u>79,000</u>
Profit from Marine Insurance business (A-B)		1,17,750	(9,000)

Schedules forming part of Revenue Account

Schedule –1

<i>Premiums earned (net)</i>	<i>Fire Current Year</i>	<i>Marine Current Year</i>
	₹	₹
Premiums from direct business written	2,40,000	1,75,000
Less: Premium on reinsurance ceded	<u>(12,500)</u>	<u>(7,500)</u>
Total Premium earned	2,27,500	1,67,500
Less: Change in provision for unexpired risk	<u>(13,750)</u>	<u>(97,500)</u>
	<u>2,13,750</u>	<u>70,000</u>
Schedule – 2		
Claims incurred (net)	41,000	44,000

Schedule – 4		
Operating expenses related to insurance business		
Expenses of Management	35,000	25,000

Form B-PL

Priya General Insurance Co. Ltd.

Profit and Loss Account for the year 31st March, 2013

<i>Particulars</i>	<i>Schedule</i>	<i>Current Year</i>	<i>Previous Year</i>
		₹	₹
Operating Profit/(Loss)			
(a) Fire Insurance		1,17,750	
(b) Marine Insurance		(9,000)	
(c) Miscellaneous Insurance		—	
Income From Investments			
(a) Interest, Dividend & Rent–Gross		64,500	
(b) Profit on sale of investments			
<i>Less : Loss on sale of investments</i>			
Other Income (To be specified)			
Total (A)		<u>1,73,250</u>	
Provisions (Other than taxation)			
Depreciation		4,500	
Other Expenses –Director’s Fee		<u>40,000</u>	
Total (B)		<u>44,500</u>	
Profit Before Tax		1,28,750	
Provision for Taxation		<u>49,569</u>	
Profit After Tax		<u>79,181</u>	

Working Notes:

		<i>Fire</i>	<i>Marine</i>
		₹	₹
1.	Claims under policies less reinsurance		
	Claims paid during the year	50,000	40,000
	<i>Add: Outstanding on 31st March, 2013</i>	<u>5,000</u>	<u>7,500</u>

		55,000	4,7500
	<i>Less</i> : Outstanding on 1 st April, 2012	<u>(14,000)</u>	<u>(3,500)</u>
		<u>41,000</u>	<u>44,000</u>
2.	Expenses of management		
	Expenses paid during the year	30,000	22,500
	<i>Add</i> : Outstanding on 31 st March, 2013	<u>5,000</u>	<u>2,500</u>
		<u>35,000</u>	<u>25,000</u>
3.	Premiums less reinsurance		
	Premiums received during the year	2,25,000	1,65,000
	<i>Add</i> : Outstanding on 31 st March, 2013	<u>15,000</u>	<u>10,000</u>
		2,40,000	1,75,000
	<i>Less</i> : Reinsurance premiums	<u>(12,500)</u>	<u>(7,500)</u>
		<u>2,27,500</u>	<u>1,67,500</u>

4. Reserve for unexpired risks is 50% of net premium for fire insurance and 100% of net premium for marine insurance.

5. **Provision for taxation account**

	₹		₹
31.3.2013 To Bank A/c		1.4.2012 By Balance b/d	42,500
(taxes paid)	30,000	31.3.2013 By P & L A/c	49,569
31.3.2013 To Balance c/d	62,069		
	<u>92,069</u>		<u>92,069</u>

13. (i) **Calculation of Rebate on bills discounted**

S.No.	Amount (₹)	Due date 2013	Unexpired portion	Rate of discount	Rebate on bill discounted ₹
(i)	7,50,000	April 8	8 days	12%	1,972
(ii)	3,00,000	May 5	35 days	14%	4,028
(iii)	4,40,000	June 12	73 days	14%	12,320
(iv)	9,60,000	July 15	106 days	15%	<u>4,1820</u>
					<u>60,140</u>

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

	₹
Transfer from Rebate on bills discount as on 31 st March, 2012	91,600
<i>Add</i> : Discount received during the year ended 31 st March, 2013	<u>4,05,000</u>

	4,96,600
Less: Rebate on bills discounted as on 31 st March, 2013	<u>60,140</u>
Discount credited to the Profit and Loss Account	<u>4,36,460</u>

14. Balance Sheet of Jyoti Electric Supply Ltd. as on March 31, 2013

		Particulars	Note No.	₹ ('000)
1		Equity and Liabilities		
		Shareholders' funds		
	a	Share capital	1	75,00
	b	Reserves and Surplus	2	32,50
2		Non-current liabilities		
	a	Long-term borrowings	3	4,750
3		Current liabilities		-
	a	Trade Payables		7,50
	b	Other current liabilities	4	<u>15,00</u>
		Total		<u>17,750</u>
		Assets		-
1		Non-current assets		-
	a	Fixed assets		-
		i		
		Tangible assets	5	13,450
		ii		
		Intangible assets		2,50
	b	Other non-current assets	6	15,00
2		Current assets		-
	a	Inventories		14,50
	b	Trade receivables		8,00
	c	Cash and cash equivalents		<u>3,00</u>
		Total		<u>17,750</u>

Notes to financial statements

		₹ ('000)
1	Share Capital	
	Issued & subscribed	
	Equity share capital	
	7,50,000 Equity shares of ₹ 10 each	75,00
2	Reserves and Surplus	
	Capital reserve	9,00
	Contingency Reserve	15,00

	Balance of net revenue account		<u>850</u>
	Total		<u>3,250</u>
3	Long-term borrowings		
	Secured		
	14% Debentures		30,00
	11% Term Loan (considered secured)		<u>17,50</u>
	Total		<u>47,50</u>
4	Other Current liabilities		-
	Proposed dividend		<u>15,00</u>
	Total		<u>15,00</u>
5	Tangible assets		
	Land		15,50
	Building		42,50
	Plant & Machinery		
	Power Plant	75,00	
	Transformers	20,50	
	Public Lamps	<u>4,00</u>	99,50
	Electrical Instruments		<u>7,00</u>
			16,450
	Less: Depreciation fund		<u>(30,00)</u>
	Total		<u>13,450</u>
6	Other non-current assets		
	Contingency Reserve Investment (assumed as non-current item)		<u>15,00</u>

15. Statement showing the recomputation of Departmental Profit or Loss

	Particulars	A ₹	B ₹	C ₹	D ₹
A	Final Profit/(Loss) (Computed earlier)	(38,000)	50,400	72,000	1,08,000
B	Add: Departmental Manager's Commission @ 10% of Deptt. Profit subject to a minimum of ₹ 6,000 [Working Note (i)]	6,000	6,000	8,000	12,000
C	Profit before Deptt. Manager's commission (A+B)	(32,000)	56,400	80,000	1,20,000

D	Less: Profit earned through transfer of goods at loaded price remaining in stock at transfer department (W.N. 2)	<u>(2,200)</u>	—	<u>(8,600)</u>	—
E	Correct Departmental Profit (before manager's commission)(C-D)	(34,200)	56,400	71,400	1,20,000
F	Less: Manager's commission @ 10% of profit subject to a minimum of ₹ 6,000	<u>(6,000)</u>	<u>(6,000)</u>	<u>(7,140)</u>	<u>(12,000)</u>
G	Departmental Profit after Manager's commission (E-F)	(40,200)	50,400	64,260	1,08,000

Working Note:**1. Manager's Commission:**

	Deptt. Profit/Loss	Commission	
A	(-) 38,000	6,000	
B	50,400	6,000	i.e. (50,400 x 1/9 = ₹ 5,600 less than ₹ 6,000)
C	72,000	8,000	i.e. (72,000 x 1/9 = ₹ 8,000)
D	1,08,000	12,000	i.e. (1,08,000 x 1/9 = ₹ 12,000)

2. Unrealised Profit on stock transfer:

		₹
Dept. A:	₹ 22,000 to Deptt. B @ 110%, Profit thereon 22,000 x 10/110	2,000
	₹ 1,200 to Deptt. D @ 120% Profit thereon 1,200 x 20/120	<u>200</u>
		<u>2,200</u>
Dept. C	₹ 48,000 to Deptt. B 120% Profit thereon 48,000 x 20/120	8,000
	₹ 3,600 to Deptt. D @ 120 % Profit thereon 3,600 x 20/120	<u>600</u>
		<u>8,600</u>

16. Pune Branch Account

Particulars		₹	Particulars	₹	₹
To Opening Balance			By Opening Balance:		
Stock		10,000	Salaries outstanding		100
Debtors		4,000	By Remittances:		
Petty Cash		500	Cash sales	1,30,000	
Furniture		2,000	Cash received from debtors	35,000	
Prepaid Insurance		150	Cash paid by debtors directly to H.O.	2,000	
To Goods sent to Branch Account		80,000	Received from Insurance Company	<u>1,000</u>	1,68,000
To Bank (expenses)			By Goods sent to branch (return of goods by the branch to H.O.)		1,000
Rent	2,000		By Closing Balances:		
Salaries	2,400		Stock		5,000
Petty Cash	1,000		Petty Cash		650
Insurance	<u>600</u>	6,000	Debtors		4,900
To Net Profit		78,950	Furniture (2,000 – 10% depreciation)		1,800
			Prepaid insurance (1/4 x ₹ 600)		150
		1,81,600			1,81,600

*Alternatively, the amount of liabilities could have been deducted from assets.

Working Note:

Calculation of petty cash balance at the end:	₹
Opening balance	500
Add: Cash received from the Head Office	<u>1,000</u>
Total Cash with branch	1,500
Less: Spent by the branch	<u>850</u>
Closing balance	<u>650</u>

17. (a) Basis of provisioning whether on no issues or on technical evaluation is the basis of making estimates and cannot be considered as Accounting Policy. As per AS 5, due to uncertainties inherent in business activities, many financial statement items cannot be measured with precision but can only be estimated. The estimation process involves judgments based on the latest information available. An estimate may have to be revised if changes occur regarding the circumstances on which the estimate was based, or as a result of new information, more experience or subsequent developments.

The basis of change in provisioning is a guideline and the better way of estimating the provision for non-moving inventory on account of change. Hence, it is not a change in accounting policy. Accounting policy is the valuation of inventory on cost or on net realizable value or on lower of cost or net realizable value. Any interchange of this valuation base would have constituted change in accounting policy.

Further, the company should be able to demonstrate satisfactorily that having regard to circumstances provision made on the basis of technical evaluation provides more satisfactory results than provision based on 12 months issue. If that is the case, then the company can change the method of provision.

- (b) (i) As per para 9 of AS 11 "Changes in Foreign Exchange Rates", a foreign currency transaction should be recorded, on initial recognition in the reporting currency, by applying to the foreign currency amount the exchange rate between the reporting currency and the foreign currency at the date of the transaction. Accordingly, on 31.12.2012, borrowings will be recorded at ₹ 2,20,00,000 (i.e. \$ 5,00,000 × ₹ 44.00)

As per para 11(a) of the standard, at each balance sheet date, foreign currency monetary items should be reported using the closing rate. Accordingly, on 31.03.2013, borrowings (monetary items) will be recorded at ₹ 2,22,50,000 (i.e. \$ 5,00,000 × ₹ 44.50).

In the books of Aman Ltd.

Journal Entries

	Date	Particulars	₹	₹
1.	31-12-2012	Bank A/c Dr. To Borrowings	2,20,00,000	2,20,00,000
2.	31.03.2013	P/L A/c (Difference in Dr. exchange) (W.N.1) To Borrowings	2,50,000	2,50,000

3.	30.06.2013	Borrowings A/c	Dr.	2,22,50,000	
		P/L A/c (Difference in exchange) (W.N.2)	in Dr.	1,25,000	
		To Bank A/c			2,23,75,000

Working Notes:

1. The exchange difference of ₹ 2,50,000 is arising because the transaction has been reported at different rate (₹ 44.50 =1 US \$) from the rate initially recorded (i.e. ₹ 44 =1 US \$).
 2. The exchange difference of ₹ 1,25,000 is arising because the transaction has been settled at an exchange rate (₹ 44.75 =1 US \$) different from the rate at which reported in the last financial statement (₹ 44.50= 1 US \$).
18. (a) As per para 21 of AS-12, 'Accounting for Government Grants', "the amount refundable in respect of a grant related to specific fixed asset should be recorded by reducing the deferred income balance. To the extent the amount refundable exceeds any such deferred credit, the amount should be charged to profit and loss statement.
- (i) In this case the grant refunded is ₹ 30 lakhs and balance in deferred income is ₹ 21 lakhs, ₹ 9 lakhs shall be charged to the profit and loss account for the year 2013-14. There will be no effect on the cost of the fixed asset and depreciation charged will be on the same basis as charged in the earlier years.
 - (ii) If the grant was deducted from the cost of the plant in the year 2010-11 then, para 21 of AS-12 states that the amount refundable in respect of grant which relates to specific fixed assets should be recorded by increasing the book value of the assets, by the amount refundable. Where the book value of the asset is increased, depreciation on the revised book value should be provided prospectively over the residual useful life of the asset. Therefore, in this case, the book value of the plant shall be increased by ₹ 30 lakhs. The increased cost of ₹ 30 lakhs of the plant should be amortized over 7 years (residual life). Depreciation charged during the year 2013-14 shall be $(84 + 30)/7$ years = ₹ 16.286 lakhs presuming the depreciation is charged on SLM.
- (b) Investments other than investment properties are not qualifying assets as per AS-16 Borrowing Costs. Therefore, interest cost of holding such investments cannot be capitalized. Further, even interest in respect of investment properties can only be capitalized if such properties meet the definition of qualifying asset, namely, that it necessarily takes a substantial period of time to get ready for its intended use or sale. Also, where the investment properties meet the definition of 'qualifying asset', for the capitalization of borrowing costs, the other requirements of the standard such as that borrowing costs should be directly attributable to the acquisition or

construction of the investment property and suspension of capitalization as per paragraphs 17 and 18 of AS-16 have to be complied with.

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 x 3)	19,30,500
<i>Add:</i> Unguaranteed residual value	<u>1,33,500</u>
Gross investment in the lease	20,64,000.00
<i>Less:</i> 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) Earnings for the year = No. of Shares x Basic EPS

$$= 30,00,000 \text{ shares} \times ₹ 5 \text{ per share} = ₹ 1,50,00,000$$

Adjusted net profit for the current year = Earnings for the year + Interest on debentures net of tax = 1,50,00,000 + (6,00,000 – 1,80,000) = ₹ 1,54,20,000

No. of equity shares resulting from conversion of debentures

$$= 50,000 \times 10 \text{ shares} = 5,00,000 \text{ shares}$$

Total No. of equity shares for diluted EPS = 30,00,000 + 5,00,000 = 35,00,000 shares

Diluted earnings per share = ₹ 1,54,20,000 / 35,00,000 shares = ₹ 4.4 per share.

20. (a) **As per AS 26 'Intangible Assets'**

(i) For the year ending 31.03.2012

(1) Carrying value of intangible as on 31.03.2012:

At the end of financial year 31st March 2012, the production process will be recognized (i.e. carrying amount) as an intangible asset at a cost of

₹ 28 lakhs (expenditure incurred since the date the recognition criteria were met, i.e., from 1st December 2011).

(2) Expenditure to be charged to Profit and Loss account:

The ₹ 22 lakhs is recognized as an expense because the recognition criteria were not met until 1st December 2012. This expenditure will not form part of the cost of the production process recognized in the balance sheet.

(ii) For the year ending 31.03.2013

(1) Expenditure to be charged to Profit and Loss account:

	(₹ in lakhs)
Carrying Amount as on 31.03.2012	28
Expenditure during 2012 – 2013	<u>80</u>
Total book cost	108
Recoverable Amount	<u>(72)</u>
Impairment loss	<u>36</u>

₹ 36 lakhs to be charged to Profit and loss account for the year ending 31.03.2013.

(2) Carrying value of intangible as on 31.03.2013:

	(₹ in lakhs)
Total Book Cost	108
Less: Impairment loss	<u>(36)</u>
Carrying amount as on 31.03.2013	<u>72</u>

(b) Since the company is not appealing against the addition of ₹ 0.66 crore the same should be provided for in its accounts for the year ended on 31st March, 13. The amount paid under protest can be kept in the books as an advance and disclosed along with the contingent liability of ₹ 2.10 crore.

PAPER – 6: AUDITING AND ASSURANCE

QUESTIONS

Nature of Auditing

1. (a) While auditing the accounts of XYZ Ltd., it has come to the notice of the auditor that receipts have been suppressed. Discuss explaining at least five techniques as to how receipts may be suppressed.
(b) "The relationship between auditing and law is very close one." Discuss.
2. (a) "Weaknesses in the design of the internal control system and non-compliance with identified control procedures amongst other conditions or events increase the risk of fraud or error." Discuss.
(b) "If the books of account are not properly maintained and if the control system is weak, the possibility of frauds and errors are enormous and the auditor, even with the best of his efforts, may not be able to detect all of them. The fact is recognised by the Courts as is obvious from a study of the various judgments." Discuss the tests applied by the courts to judicially view the auditor's performance.
3. (a) Discuss with the help of examples how certain characteristics or circumstances may increase the susceptibility of assets to misappropriation.
(b) "In terms of the Revised Preface, the Auditing and Assurance Standards are now renamed based on the type of assurance provided by the engagement undertaken by a member." Discuss.

Basic Concepts in Auditing

4. (a) "Disclosure of significant accounting policies followed is necessary if the view presented is to be properly appreciated." Comment
(b) What do you understand by "Risk of material misstatement"? Describe its two components at the assertion level.
5. (a) Discuss the Objectives of an auditor as stated in SA 570 'Going Concern'.
(b) "Because of the uncertainties inherent in business activities, some financial statement items can only be estimated." Discuss explaining the meaning of accounting estimates according to the SA 540 and also by giving examples.
6. (a) "The Companies Act, 1956 has enacted specific provisions to give concrete shape to the concept of Auditor's Independence." Discuss.
(b) "As an ordinary rule the auditor should try to match internal and external evidence as far as practicable. Where external evidence is not readily available to match, the auditor should see as to what extent the various internal evidence corroborate each other." Discuss explaining the meaning of Internal and external evidence and distinction between them.

Preparation for an Audit

7. (a) How should an auditor proceed if there is a change in the terms of the audit engagement?
 - (b) "For collection and accumulation of audit evidence, certain methods and means are available and these are known as audit techniques." Discuss some of the techniques commonly adopted by the auditors.
8. (a) What is an audit programme ? Discuss the points you should keep in mind for the purpose of programme construction.
 - (b) "The auditor shall establish an overall audit strategy that sets the scope, timing and direction of the audit, and that guides the development of the audit plan." How would you as an auditor establish the overall audit strategy?

Internal Control

9. (a) What do you understand by the Internal Control ? State the objectives of Internal Control.
 - (b) "The division of internal control into the five components provides a useful framework for auditors." Comment and name those components.
10. (a) Discuss the factors relevant to the auditor's judgment, about whether a control, individually or in combination with others, is relevant to the audit.
 - (b) "The auditor should consider the assessed levels of inherent and control risks in determining the nature, timing and extent of substantive procedures required to reduce audit risk to an acceptably low level." Comment.
11. (a) Discuss the information an auditor should gather about the CIS environment that is relevant to the audit plan.
 - (b) Discuss the factors to be considered by the auditor when evaluating the adequacy of the internal audit system.

Vouching & Verification of Assets and Liabilities

12. (a) Explain clearly the meaning of vouching. Also discuss the essential points to be borne in mind while examining a voucher.
 - (b) What are the factors that determine the extent of reliance that the auditor places on results of analytical procedures? Explain with reference to SA 520 on "Analytical Procedures."
13. How will you verify/vouch the following ?
 - (a) Stock lying with Third Party.
 - (b) Purchase of Motor Car.
 - (c) Sales Commission Expenditure.

- (d) Sales Return.
14. Give your comments and observations on the following:
- (a) Balance confirmations from debtors/creditors can only be obtained for balances standing in their accounts at the year-end.
 - (b) The management has obtained a certificate from an actuary regarding provision of gratuity payable to employees.
 - (c) Fixed assets have been revalued and the resulting surplus has been adjusted against the brought forward losses.
15. Answer the following-
- (a) KVT Limited could not recover an amount of ₹ 8 lakhs from a debtor. The company is aware that the Trade receivable is in great financial difficulty. The accounts of the company for the year ended 31-3-2013 were finalized by making a provision @ 25% of the amount due from that Trade receivable. In May 2013, the Trade receivable became bankrupt and nothing is recoverable from him. Do you advise the company to provide for the entire loss of ₹ 8 lakhs in books of account for the year ended 31-3-2013?
 - (b) M Co. Limited purchased goods at the cost of ₹ 40 lakhs in October, 2012. Till March, 2013, 75% of the stocks were sold. The company wants to disclose closing stock at ₹ 10 lakhs. The expected sale value is ₹ 11 lakhs and a commission at 10% on sale is payable to the agent. Accountant has disclosed the value of Stock at ₹ 990000. Give your views as an auditor.
 - (c) X Co. Ltd. charged depreciation on its asset on SLM basis. For the year ended 31.3.2013 it changed to WDV basis. The impact of the change when computed from the date of the asset coming to use amounts to ₹ 20 lakhs being additional charge.
Decide how it must be disclosed in Profit and loss account. Also discuss, when such changes in method of depreciation can be adopted by an enterprise as per AS 6.

The Company Audit

16. As an auditor, comment on the following situations/statements:
- (a) In case the existing auditors reappointed at the Annual General Meeting refused to accept the appointment, whether the Board of Directors could fill up the vacancy?
 - (b) The auditor of T Ltd. did not report on the matters specified in sub-section (1A) of Section 227 of the Companies Act, 1956, as he was satisfied that no comment is required.
 - (c) At the AGM of a company, in which a Nationalised Bank held 25% of the subscribed capital, KRN & Co., Chartered Accountants, were appointed as auditor by passing an ordinary resolution.

- (d) The members of JAINCO. Ltd. preferred a complaint against the auditor stating that he has failed to send the auditors report to them.
 - (e) One of the directors of HITESH Ltd. is attracted by the disqualification under Section 274(1)(g).
17. Discuss in brief the power of Company to purchase its own Securities.
18. How an auditor can audit allotment of debentures?

Special Audits

19. (a) Describe the salient features of Financial Administration of Local Bodies.
(b) Draft an audit programme for conducting audit of accounts of a Local Body.
20. With reference to Government Audit, what do you understand by "Audit of Commercial Accounts"?

SUGGESTED ANSWERS / HINTS

1. (a) Five Techniques of how receipts are suppressed are:
- (i) 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.
 - (ii) Adjusting unauthorised or fictitious rebates, allowances, discounts, etc. to customer accounts and misappropriating amount paid by them.
 - (iii) Writing off as debts in respect of such balances against which cash has already been received but has been misappropriated.
 - (iv) Not accounting for cash sales fully.
 - (v) Not accounting for miscellaneous receipts, e.g., sale of scrap, quarters allotted to the employees, etc.
- (b) The relationship between auditing and law is very close one. Auditing involves examination of various transactions from the view point of whether or not these have been properly entered into. It necessitates that an auditor should have a good knowledge of business laws affecting the entity. He should be familiar with the law of contracts, negotiable instruments, etc. The knowledge of taxation laws is also inevitable as entity is required to prepare their financial statements taking into

account various provisions affected by various tax laws. In analysing the impact of various transactions particularly from the accounting aspect, an auditor ought to have a good knowledge about the direct as well as indirect tax laws.

2. (a) In planning and performing his examination, the auditor should take into consideration the risk of material misstatements of the financial information caused by fraud or error. Weaknesses in the design of the internal control system and non-compliance with identified control procedures amongst other conditions or events which increase the risk of fraud or error are:
 - (i) Weaknesses in the design of internal control system and non-compliance with the laid down control procedures, e.g., a single person is responsible for the receipt of all dak and marking it to the relevant sections or two persons are responsible for receipt of dak but the same is not followed in actual practice, etc.
 - (ii) Doubts about the integrity or competence of the management, e.g., domination by one person, high turnover rate of employees, frequent change of legal counsels or auditors, significant and prolonged understaffing of the accounts department, etc.
 - (iii) Unusual pressures within the entity, for example, industry is doing well but the company is not performing accordingly, heavy dependence on a single line of product, inadequate working capital, entity needs raising share prices to support the market price in the wake of public offer, etc.
 - (iv) Unusual transactions such as transactions with related parties, excessive payment for certain services to lawyers, etc.
 - (v) Problems in obtaining sufficient and appropriate audit evidence, e.g., inadequate documentation, significant differences between the figures as per the accounting records and confirmation received from third parties, etc.
- (b) If the books of account are not properly maintained and if the control system is weak, the possibility of frauds and errors are enormous and the auditor, even with the best of his efforts, may not be able to detect all of them. The fact is recognised by the Courts as is obvious from a study of the various judgments. The auditor's performance is judicially viewed by applying the following tests:
 - (i) whether the auditor has exercised reasonable care and skill in carrying out his work;
 - (ii) whether the errors and frauds were such as could have been detected in the ordinary course of checking without the aid of any special efforts;
 - (iii) whether the auditor had any reason to suspect the existence of the errors and frauds; and
 - (iv) whether the error or fraud was so deep laid that the same might not have been

detected by the application of normal audit procedures.

3. (a) Certain characteristics or circumstances may increase the susceptibility of assets to misappropriation. For example, opportunities to misappropriate assets increase when there are the following:
- Large amounts of cash on hand or processed.
 - Inventory items that are small in size, of high value, or in high demand.
 - Easily convertible assets, such as bearer bonds, diamonds, or computer chips.
 - Fixed assets which are small in size, marketable, or lacking observable identification of ownership.
- (b) The Auditing and Assurance Standards Board, in 2007, adopted the *Revised Preface to Standards on Quality Control, Auditing, Review, Other Assurance and Related Services*. In terms of the Revised Preface, the Auditing and Assurance Standards are now renamed based on the type of assurance provided by the engagement undertaken by a member, viz.,
- (i) *Standards on Auditing (SAs)*- to be applied in the audit of historical financial information
 - (ii) *Standards on Review Engagements (SREs)* - to be applied in the review of historical financial information
 - (iii) *Standards on Assurance Engagements (SAEs)* - to be applied in assurance engagements, engagements dealing with subject matters other than historical financial information
 - (iv) *Standards on Related Services (SRSS)* - to be applied to engagements to apply agreed upon procedures to information and other related services engagements such as compilation engagements
4. (a) **Disclosure of Accounting Policies:** The view presented in the financial statements of an enterprise of its state of affairs and of the profit or loss can be significantly affected by the accounting policies followed in the preparation and presentation of the financial statements.

The accounting policies followed vary from enterprise to enterprise. Disclosure of significant accounting policies followed is necessary if the view presented is to be properly appreciated. The disclosure of some of the accounting policies followed in the preparation and presentation of the financial statements is required by some cases.

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

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

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

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

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

- (b) 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

- (i) **Inherent risk:** The susceptibility of an assertion to a misstatement that could be material before consideration of any related controls.
- (ii) **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.

- 5 (a) The objectives of the auditor as stated in SA 570 'Going Concern' are:
- (i) To obtain sufficient appropriate audit evidence about the appropriateness of management's use of the going concern assumption in the preparation and presentation of the financial statements;
 - (ii) To conclude, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the entity's ability to continue as a going concern; and
 - (iii) To determine the implications for the auditor's report.

- (b) According to the SA 540, "Auditing Accounting Estimates, Including Fair Value Accounting Estimates, and Related Disclosure", accounting estimate means an approximation of a monetary amount in the absence of a precise means of measurement. This term is used for an amount measured at fair value where there is estimation uncertainty, as well as for other amounts that require estimation. SA 540 addresses only accounting estimates involving measurement at fair value, the term "fair value accounting estimates" is used.

Because of the uncertainties inherent in business activities, some financial statement items can only be estimated. Further, the specific characteristics of an asset, liability or component of equity, or the basis of or method of measurement prescribed by the financial reporting framework, may give rise to the need to estimate a financial statement item. Some financial reporting frameworks prescribe specific methods of measurement and the disclosures that are required to be made in the financial statements, while other financial reporting frameworks are less specific.

Some accounting estimates involve relatively low estimation uncertainty and may give rise to lower risks of material misstatements, for example:

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

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

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

Additional examples of accounting estimates are:

- Allowance for doubtful accounts.
- Inventory obsolescence.
- Warranty obligations.
- Depreciation method or asset useful life.
- Provision against the carrying amount of an investment where there is uncertainty regarding its recoverability.
- Outcome of long term contracts.

- Financial Obligations / Costs arising from litigation settlements and judgments.
6. (a) The following points would reflect that the Companies Act, 1956 has enacted specific provisions to give concrete shape to this vital concept of auditor's independence.
- (i) The provisions disqualifying certain types of persons from undertaking audit of limited companies.
 - (ii) Provisions relating to ceiling on the number of audits that can be undertaken by a chartered accountant.
 - (iii) Provisions requiring special resolution for appointing auditors in certain cases.
 - (iv) Other provisions on appointment, re-appointment and removal of auditors, are designed with sufficient independence to carry out the audit in the larger interest of shareholders and other users.
 - (v) Power to qualify his report is yet another weapon in the armoury of the auditor to protect his independence.
- (b) **Internal and External Evidence-** Evidence which originates within the organisation being audited is internal evidence. Example-sales invoice, Copies of sales challan and forwarding notes, goods received note, inspection report, copies of cash memo, debit and credit notes, etc.

External evidence on the other hand is the evidence that originates outside the client's organisation; for example, purchase invoice, supplier's challan and forwarding note, debit notes and credit notes coming from parties, quotations, confirmations, etc.

In an audit situation, the bulk of evidence that an auditor gets is internal in nature. However, substantial external evidence is also available to the auditor. Since in the origination of internal evidence, the client and his staff have the control, the auditor should be careful in putting reliance on such evidence. It is not suggested that they are to be suspected; but an auditor has to be alive to the possibilities of manipulation and creation of false and misleading evidence to suit the client or his staff. The external evidence is generally considered to be more reliable as they come from third parties who are not normally interested in manipulation of the accounting information of others. However, if the auditor has any reason to doubt the independence of any third party who has provided any material evidence e.g. an invoice of an associated concern, he should exercise greater vigilance in that matter. As an ordinary rule the auditor should try to match internal and external evidence as far as practicable. Where external evidence is not readily available to match, the auditor should see as to what extent the various internal evidence corroborate each other.

Preparation for an Audit

7. (a) 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) For collection and accumulation of audit evidence, certain methods and means are available and these are known as audit techniques. Some of the techniques commonly adopted by the auditors are the following:
- (i) Posting checking
 - (ii) Casting checking
 - (iii) Physical examination and count
 - (iv) Confirmation
 - (v) Inquiry
 - (vi) Year-end scrutiny
 - (vii) Re-computation
 - (viii) Tracing in subsequent period
 - (ix) Bank Reconciliation
8. (a) An audit programme consists of a series of verification procedures to be applied to the financial statements and accounts of a given company for the purpose of obtaining sufficient evidence to enable the auditor to express an informed opinion on such statements. For the purpose of programme construction, the following points should be kept in view:
- (i) Stay within the scope and limitation of the assignment.
 - (ii) Determine the evidence reasonably available and identify the best evidence for deriving the necessary satisfaction.
 - (iii) Apply only those steps and procedures which are useful in accomplishing the verification purpose in the specific situation.

- (iv) Consider all possibilities of error.
 - (v) Co-ordinate the procedures to be applied to related items.
- (b) The auditor shall establish an overall audit strategy that sets the scope, timing and direction of the audit, and that guides the development of the audit plan.

In establishing the overall audit strategy, the auditor shall:

- (i) Identify the characteristics of the engagement that define its scope;
 - (ii) Ascertain the reporting objectives of the engagement to plan the timing of the audit and the nature of the communications required;
 - (iii) Consider the factors that, in the auditor's professional judgment, are significant in directing the engagement team's efforts;
 - (iv) Consider the results of preliminary engagement activities and, where applicable, whether knowledge gained on other engagements performed by the engagement partner for the entity is relevant; and
 - (v) Ascertain the nature, timing and extent of resources necessary to perform the engagement.
9. (a) As per SA 315, "Identifying and Assessing the Risk of Material Misstatement Through Understanding the Entity and its Environment" the internal control may be defined as "The process designed, implemented and maintained by those charged with governance, management and other personnel to provide reasonable assurance about the achievement of an entity's objectives with regard to reliability of financial reporting, effectiveness and efficiency of operations, safeguarding of assets, and compliance with applicable laws and regulations. The term "controls" refers to any aspects of one or more of the components of internal control."

Objectives of Internal Control:

- (i) transactions are executed in accordance with management's general or specific authorization;
- (ii) all transactions are promptly recorded in the correct amount in the appropriate accounts and in the accounting period in which executed so as to permit preparation of financial information within a framework of recognized accounting policies and practices and relevant statutory requirements, if any, and to maintain accountability for assets;
- (iii) assets are safeguarded from unauthorised access, use or disposition; and
- (iv) the recorded assets are compared with the existing assets at reasonable intervals and appropriate action is taken with regard to any differences.

- (b) **Division of internal control into components:** The division of internal control into the following five components provides a useful framework for auditors to consider how different aspects of an entity's internal control may affect the audit:
- (i) The control environment;
 - (ii) The entity's risk assessment process;
 - (iii) The information system, including the related business processes, relevant to financial reporting, and communication;
 - (iv) Control activities; and
 - (v) Monitoring of controls.
10. (a) Factors relevant to the auditor's judgment, about whether a control, individually or in combination with others, is relevant to the audit may include such matters as the following:
- ◆ Materiality.
 - ◆ The significance of the related risk.
 - ◆ The size of the entity.
 - ◆ The nature of the entity's business, including its organisation and ownership characteristics.
 - ◆ The diversity and complexity of the entity's operations.
 - ◆ Applicable legal and regulatory requirements.
 - ◆ The circumstances and the applicable component of internal control.
 - ◆ The nature and complexity of the systems that are part of the entity's internal control, including the use of service organisations.
 - ◆ Whether, and how, a specific control, individually or in combination with others, prevents, or detects and corrects, material misstatement.
- (b) The auditor should consider the assessed levels of inherent and control risks in determining the nature, timing and extent of substantive procedures required to reduce audit risk to an acceptably low level. In this regard the auditor would consider:
- (i) the nature of substantive procedures, for example, using tests directed toward independent parties outside the entity rather than tests directed toward parties or documentation within the entity, or using tests of details for a particular audit objective in addition to analytical procedures;
 - (ii) the timing of substantive procedures, for example, performing them at period end rather than at an earlier date; and
 - (iii) the extent of substantive procedures, for example, using a larger sample size.

11. (a) The auditor should gather information about the CIS environment that is relevant to the audit plan, including information as to:
- (i) How the CIS function is organized and the extent of concentration or distribution of computer processing throughout the entity.
 - (ii) The computer hardware and software used by the entity.
 - (iii) Each significant application processed by the computer, the nature of the processing (e.g. batch, on-line), and data retention policies.
 - (iv) Planned implementation of new applications or revisions to existing applications.
 - (v) When considering his overall plan the auditor should consider matters, such as:
 - (vi) Determining the degree of reliance, if any, he expects to be able to place on the CIS controls in his overall evaluation of internal control.
 - (vii) Planning how, where and when the CIS function will be reviewed including scheduling the works of CIS experts, as applicable.
 - (viii) Planning auditing procedures using computer-assisted audit techniques.
- (b) The auditor has to examine whether the internal audit system is commensurate with the size of the company and the nature of its business. The following are some of the factors to be considered in this regard:
- (i) What is the size of the internal audit department?
 - (ii) What are the qualifications of the persons who undertake the internal audit work?
 - (iii) To whom does the internal auditor report?
 - (iv) What are the areas covered by the internal audit?
 - (v) Has the internal auditor adequate technical assistance?
 - (vi) What are the reports which are submitted by the internal auditor or what other evidence is there of his work?
 - (vii) What is the follow-up?
12. (a) The act of examining vouchers is referred to as vouching. It is the practice followed in an audit with the objective of establishing the authenticity of the transactions recorded in the primary books of account. It essentially consists of verifying a transaction recorded in the books of account with the relevant documentary evidence and the authority on the basis of which the entry has been made; also confirming that the amount mentioned in the voucher has been posted to an appropriate account which would disclose the nature of the transaction on its

inclusion in the final statements of account. On these considerations, the essential points to be borne in mind while examining a voucher are:

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

(b) Extent of reliance on analytical procedures (SA 520) : The reliability of data is influenced by its source and nature and is dependent on the circumstances under which it is obtained. Accordingly, the following are relevant when determining whether data is reliable for purposes of designing substantive analytical procedures:

- (i) Source of the information available. For example, information may be more reliable when it is obtained from independent sources outside the entity;
- (ii) Comparability of the information available. For example, broad industry data may need to be supplemented to be comparable to that of an entity that produces and sells specialised products;
- (iii) Nature and relevance of the information available. For example, whether budgets have been established as results to be expected rather than as goals to be achieved; and
- (iv) Controls over the preparation of the information that are designed to ensure its completeness, accuracy and validity. For example, controls over the preparation, review and maintenance of budgets.

The auditor may consider testing the operating effectiveness of controls, if any, over the entity's preparation of information used by the auditor in performing substantive analytical procedures in response to assessed risks. When such controls are effective, the auditor generally has greater confidence in the reliability of the information and, therefore, in the results of analytical procedures. The operating effectiveness of controls over non-financial information may often be tested in conjunction with other tests of controls. For example, in establishing controls over the processing of sales invoices, an entity may include controls over the recording of unit sales. In these circumstances, the auditor may test the operating effectiveness of controls over the recording of unit sales in conjunction with tests of the operating effectiveness of controls over the processing of sales invoices.

Alternatively, the auditor may consider whether the information was subjected to audit testing.

13. (a) Stock lying with third party

- (i) Obtain confirmations from the third party including the time period and reasons thereof.
- (ii) Evaluate condition of goods and see whether adequate provision has been made.
- (iii) Check whether subsequently the goods lying with third party were sold or received back after the expiry of stipulated time period.
- (iv) Ensure that the goods have been included in the closing stock though lying with third party.

(b) Purchase of Motor Car

- (i) Ascertain whether the purchase of car has been properly authenticated.
- (ii) Check invoice of the car dealer to confirm purchase price.
- (iii) Examine registration with Transport Authorities to verify the ownership.
- (iv) Ensure that all expenses relating to purchase of car have been properly capitalized and the same have been disclosed properly in the balance sheet.

(c) Sales Commission Expenditure

- (i) Ascertain agreement, if any, in respect of sales transaction actually occurred during the year carried out by authorized parties on its behalf. If yes the commission should be in accordance with the terms and conditions as specified.
- (ii) Check evidence of services rendered by the party to whom commission is paid with reference to correspondence etc.
- (iii) Ensure that the sales in fact have taken place and the same has been charged to profit and loss account.
- (iv) Compare the amount incurred in previous years with reference to total turnover.

(d) Sales Return

- (i) Examine the accounting basis for such transactions with reference to corresponding Debit Note to Debit Note. The relevant correspondence may also be examined.
- (ii) Verify by reference to relevant corresponding record in good inward book or the stores records. Further, the figures in these documentary evidences

should be compared with the original invoices for rates and other charges and calculation should also be checked.

(iii) Examine in depth to eliminate the possibility of fictitious sales returns for covering bogus sales recorded earlier when such returns outwards are in substantial figure either at the start or end of the accounting year.

(iv) Cross-check with reference to original invoices any rebates in price or allowances if any given by buyers on strength of their Debit Notes.

14. (a) **Confirmation of Balances:** Direct confirmation of balances from debtors/creditors in respect of balances standing in their accounts at the year-end is, perhaps, the best method of ascertaining whether the balances are genuine, accurately stated and undisputed particularly where the internal control system is weak. The confirmation date, method of requesting confirmation, etc. are to be determined by the auditor.

“Guidance Note on Audit of Debtors, Loans and Advances” issued by the ICAI recommends that the debtors may be requested to confirm the balance either:

As at the date of the balance sheet; or

As at any other selected date which is reasonably close to the date of the balance sheet.

The date should be settled by the auditor in consultation with the entity. Where the auditor decides to confirm the debtors at a date other than the balance sheet date, he should examine the movements in debtor balances which occur between the confirmation date and the balance sheet date and obtain sufficient evidence to satisfy himself that debtor balances stated in the balance sheet are not materially misstated.

Therefore, it is not necessary that balances of debtors/creditors should necessarily be verified only at the end of the year only. In fact, in order to incorporate an element of surprise, the auditor may consider different confirmation dates periodically, i.e., Dec, 31 as a cut-off date in one year and June 30 in another year and so on. Therefore, the statement that balance confirmation from debtors/creditors can only be obtained for balances standing in their accounts at the year-end is not correct.

- (b) **Certificate from an Expert:** The computation of gratuity liability payable to employees is dependent upon several factors such as age of the employee, expected span of service in the organisation, life expectancy of the employee, prevailing economic environment, etc. Thus, it gives rise to uncertainty in the determination of provisions of liabilities. Under such circumstances, the management is required to make an assessment and estimate the amount of provision. In view of this, the management may engage an expert in the field to assist them in arriving at fair estimation of the liability. Therefore, it is an accepted

auditing practice to use the work of an expert. SA 620 on "Using the Work of an Expert", also states that an expert may be engaged / employed by the client. It further requires the auditor to assess skill, competence and objectivity of the expert amongst other factors and evaluate the work of an expert independently to conclude whether or not to rely upon such a certificate obtained by the management from the actuary. Therefore, the auditor must follow the requirements of SA 620 before relying upon the certificate obtained by the management from the actuary.

- (c) **Revaluation of Fixed Assets:** The revaluation of fixed assets is a normally accepted practice which involves writing up the book value of fixed assets. AS 10 on 'Accounting for Fixed Assets' requires that "an increase in net book value arising on revaluation of fixed assets is normally credited directly to owner's interests under the heading of revaluation reserves and is regarded as not available for distribution". Thus, creation of revaluation reserves does not result into any cash inflows and represents unrealised gains. However, brought forward losses are in the nature of revenue losses. As a matter of prudence, revenue losses can be adjusted against revenue reserves only and not the capital reserves. Therefore, the accounting treatment followed by the entity is not correct and the auditor should qualify the audit report by mentioning the above fact.
15. (a) As per AS 4, 'Contingencies and Events Occurring after the Balance Sheet Date', adjustments to assets and liabilities are required for events occurring after the balance sheet date if such event provides/relates to additional information to the conditions existing at the balance sheet date and is also materially affecting the valuation of assets and liabilities on the balance sheet date.
- As per the information given in the question, the Trade receivable was already in a great financial difficulty at the time of closing of accounts. Bankruptcy of the Trade receivable in May 2013 is only an additional information to the condition existing on the balance sheet date. Also the effect of a Trade receivable becoming bankrupt is material as total amount of ₹ 8 lakhs will be a loss to the company. Therefore, the company is advised to provide for the entire amount of ₹ 8 lakhs in the books of account for the year ended 31st March, 2013.
- (b) As per AS 2 "Valuation of Inventories", the inventories are to be valued at lower of cost and net realizable value. In this case, the cost of inventory is ₹ 10 lakhs. The net realizable value is $11,00,000 \times 90\% = ₹ 9,90,000$. So, the stock should be valued at ₹ 9,90,000.
- (c) The company should disclose the change in method of depreciation adopted for the accounting year. The impact on depreciation charge due to change in method must be quantified and reported by the enterprise.

Following aspects may be noted in this regard as per AS 6 on Depreciation Accounting.

- (i) The depreciation method selected should be applied consistently from period to period.
 - (ii) A change from one method of providing depreciation to another should be made only if the adoption of the new method is required by statute or for compliance with an accounting standard if it is considered that the change would result in a more appropriate preparation or presentation of the financial statements of the enterprise.
 - (iii) When such a change in the method of depreciation is made, depreciation should be recalculated in accordance with the new method from the date of the asset coming into use. The deficiency or surplus arising from retrospective recomputation of depreciation in accordance with the new method should be adjusted in the accounts in the year in which the method of depreciation is changed.
 - (iv) In case the change in the method results in deficiency in depreciation in respect of past years, the deficiency should be charged in the statement of profit and loss.
 - (v) In case the change in the method results in surplus, the surplus should be credited to the statement of profit and loss. Such a change should be treated as a change in accounting policy and its effect should be quantified and disclosed.
16. (a) **Refusal by Auditors to Accept the Reappointment:** Section 224(3) of the Companies Act, 1956 empowers the Central Government to fill a vacancy in case no auditors are appointed or reappointed at an annual general meeting. Since the appointment of an auditor is complete only on the acceptance of the office by the auditor, it can be deemed that in case an auditor refuses to accept the appointment then in that case no auditor has been appointed and the Central Government may appoint a person to fill the vacancy as provided in Section 224(3). Thus, the non-acceptance of appointment by the auditor does not result in any casual vacancy. Moreover, even if the auditor is existing one would not make any difference since the appointment has to be made at each AGM and the auditor must accept the same. As a general principle, the shareholders have to exercise this power in all cases, except in the case of filling a casual vacancy or appointing the first auditors. Thus, the Board of Directors are not authorised to fill up the vacancy in case the existing auditors appointed at the AGM refuse to accept the appointment.
- (b) **Comment on Matters Contained under Section 227(1A) of the Companies Act, 1956:** Section 227(1A) of the Act deals with duties of an auditors requiring auditor to make an enquiry in respect of specified matters. The matters in respect of which

the enquiry has to be made by the auditor include relating to loans and advances, transactions represented merely by book entries, investments sold at less than cost price, loans and advances shown as deposits, etc. Since the law requires the auditor to make an enquiry, the Institute opined that the auditor is not required to report on the matters specified in sub-section (1A) unless he has any special comments to make on any of the items referred to therein. If the auditor is satisfied as a result of the enquiries, he has no further duty to report that he is so satisfied. Therefore, the auditor of T Ltd. is correct in non-reporting on the matters specified in Section 227(1A).

- (c) **Appointment of Auditor by Passing an Ordinary Resolution:** Section 224A of the Companies Act, 1956, provides that in case of a company in which not less than 25% of the subscribed share capital is held whether singly or in any combination, amongst others, by a public financial institution or government company or central or state government or nationalised bank or an insurance company carrying on general insurance business, the appointment or re-appointment of an auditor or auditors at each annual general meeting shall be made by a special resolution only. In the given case, the nationalised bank held 25% of the subscribed share capital which is equal to the prescribed limit of 25%.

In view of the above provisions, the appointment of KRN & Co., Chartered Accountants, as auditor of the company is not valid, since as per law, special resolution is required in such circumstances. In such cases, it shall be deemed that no auditor has been appointed and thereupon the Central Government's power to appoint the auditor pursuant to Section 224(3) will become operative.

- (d) **Dispatch of Auditor's Report to Shareholders:** Section 227 of the Companies Act, 1956 lays down the powers and duties of auditor. As per provisions of the law, it is no part of the auditor's duty to send a copy of his report to members of the company. The auditor's duty concludes once he forwards his report to the company. It is the responsibility of company to send the report to every member of the company. In *Re Allen Graig and Company (London) Ltd., 1934* it was held that duty of the auditor after having signed the report to be annexed to a balance sheet is confirmed only to forwarding his report to the secretary of the company. It will be for the secretary or the director to convene a general meeting and send the balance sheet and report to the members (or other person) entitled to receive it. Hence in the given case, the auditor cannot be held liable for the failure to send the report to the shareholders.
- (e) **Disqualification of a Director under section 274(1)(g) of the Companies Act, 1956:** Section 227(3)(f) as inserted by the Companies (Amendment) Act, 2000 imposes a specific duty on the auditor to report whether any director is disqualified from being appointed as directors under section 274(1)(g) of the Companies Act, 1956. To this end, the auditor has to ensure that written representation have been obtained by the Board from each director that one is not hit by Section 274(1)(g).

Since in this case, one of the director is attracted by disqualification under section 274(g) of the Act, the auditor shall state in his report under section 227 about the disqualification of the particular director.

17. Power of Company to Purchase its Own Securities: The Companies (Amendment) Act, 1999 contains elaborate provisions enabling a company to buy-back its own securities. The work security includes both equity and preference shares. As per section 77A, a company may purchase its own shares or other specified securities ("buy-back") out of-

- (i) Its free reserves; or
- (ii) The securities premium account; or
- (iii) The proceeds of any earlier issue other than from issue of shares made specifically for buy-back purposes.

No company shall purchase its own shares or other specified securities unless-

- (1) The buy-back is authorized by its Articles;
- (2) A special resolution has been passed in general meeting of the company authorizing the buy-back;
- (3) The buy-back is or less than twenty five per cent of the total paid-up capital (equity shares and preference shares) and free reserves of the company;
- (4) The debt equity ratio is not more than 2:1 after such buy back.
- (5) All the shares and other securities are fully paid up.
- (6) Every buy back shall be completed within 12 months from the date of passing the special resolution.
- (7) The company shall not make further issue of same kind of shares.

The company, after buy-back file with the Registration and SEBI, a return containing such particulars relating to buy-back within 30 days.

Requirements as per Revised Schedule VI: Under the head "Share Capital", a company is required to disclose for the period of five years immediately preceding the date as at which the Balance Sheet is prepared, the aggregate number and class of shares bought back.

18. Allotment of Debentures: Following are the steps to be taken by an auditor while doing the audit of allotment of debentures:

- (i) Verify that the Prospectus or the Statement in lieu of Prospectus had been duly filed with the Registrar before the date of allotment.
- (ii) Check the applications for debentures with the Application and Allotment Book to verify that the name, address of the applicants and the number of debentures applied for are correctly recorded.

- (iii) Verify the allotment of debentures by reference to the Directors' Minute Book.
 - (iv) Vouch the amounts collected as are entered in the Cash Book with the counterfoils of receipts issued to the applicants; also trace the amounts into the Application and Allotment Book.
 - (v) Check postings of allotments of debentures and the amounts received in respect thereof from the Application and Allotment Book, into the Debentures Register.
 - (vi) Verify the entries on the counterfoils of debentures issued with the Debentures Register.
 - (vii) Extract balances in the Debentures Register in respect of amounts paid by the debenture holders and agree their total with the balance in the Debentures Account in the General Ledger.
 - (viii) Examine a copy of the Debenture Trust Deed and note the conditions including creation of Debenture Redemption Reserve contained therein as to issue and repayment.
 - (ix) If the debentures are covered by a mortgage or charge, it should be verified that the charge has been correctly recorded in the Register of Mortgages and Charges and that it has also been registered with the Registrar of Companies. Further, that the charge is clearly disclosed in the Balance Sheet.
 - (x) Compliance with SEBI Guidelines should also be seen.
 - (xi) Where debentures have been issued as fully paid up to vendors as a part of the purchase consideration, the contract in this regard should be referred to.
19. (a) **Salient Features of Financial Administration of Local Bodies**
- (i) **Budgetary Procedure:** The objective of local bodies budgetary procedure are financial accountability, control of expenditure, and to ensure that funds are raised and moneys are spent by the executive departments in accordance with the rules and regulations and within the limits of sanction and authorisation by the legislature or Council. Different aspects covered in budgeting are determining the level of taxation, fees, rates, and laying down the ceiling on expenditure, under revenue and capital heads.
 - (ii) **Expenditure Control:** At the State and Central level, there is a clear demarcation between the legislature and executive. In the local body, legislative powers are vested in the Council whereas executive powers are delegated to the officers, e.g., Commissioners. All matters of regular revenue and expenditures are generally delegated to the executive wing. For special situations like, reduction in property taxes, refund of security deposits, etc., sanction from the legislative wing is necessary.

- (iii) **Accounting System:** Municipal Accounting System has been conventionally prepared under the cash system. In the recent past however, it is being changed to the accrual system of accounting. The accounting system is characterized by (a) subsidiary and statistical registers for taxes, assets, cheques etc., (b) separate vouchers for each type of transaction, (c) compulsory monthly bank reconciliation, (d) submission of summary reports on periodical basis to different authorities at regional and state level.

(b) Audit of Local Bodies :

- (i) The Local Fund Audit Wing of the State Govt. is generally in charge of the audit of municipal accounts. Sometimes bigger municipal corporations e.g. Delhi, Mumbai etc have power to appoint their own auditors for regular external audit. So the auditor should ensure authenticity of his appointment.
- (ii) The auditor while auditing the local bodies should report on the fairness of the contents and presentation of financial statements, the strengths and weaknesses of system of financial control, the adherence to legal and/or administrative requirements; upon whether value is being fully received on money spent. His objective should be to detect errors and fraud and misuse of resources.
- (iii) The auditor should ensure that the expenditure incurred conforms to the relevant provisions of the law and is in accordance with the financial rules and regulations framed by the competent authority.
- (iv) He should ensure that all types of sanctions, either special or general, accorded by the competent authority.
- (v) He should ensure that there is a provision of funds and the expenditure is incurred from the provision and the same has been authorized by the competent authority.
- (vi) The auditor should check that the different schemes, programmes and projects, where large financial expenditure has been incurred, are running economically and getting the expected results.

20. Audit of Commercial Accounts: The government also engages in commercial activities and for the purpose it may incorporate following types of entities:

- (i) Departmental enterprises engaged in commercial and trading operations, which are governed by the same regulations as other Government departments such as defence factories, mints, etc.
- (ii) Statutory corporations created by specific statutes such as LIC, Air India, etc.
- (iii) Government companies, set up under the Companies Act, 1956.

All aforesaid entities are required to maintain accounts on commercial basis. The audit of departmental entities is done in the same manner as any Government department, where commercial accounts are kept. Audit of statutory corporations depends on the nature of the statute governing the corporation. In respect of government companies, the relevant provisions of Companies Act, 1956 are applicable. As per section 619 of the Companies Act, 1956 the statutory auditor of a Government company shall be appointed or re-appointed by the CAG. Such an auditor must be a chartered accountant. Further, the Companies Act, 1956, provides that the CAG shall have the powers:

- (a) to direct the manner in which the company's accounts shall be audited by the auditor, and to give the auditor instructions in regard to any matter relating to the performance of his functions; and
- (b) to conduct a supplementary or test audit of the company's accounts by such person, as he may authorise in this behalf, and for the purposes of such audit to require information or additional information to be furnished to any person or persons, so authorised on such matters by such person or persons, and in such form as the CAG may direct.

The statutory auditor shall submit a copy of his audit report to the CAG, who shall have the right to comment upon or supplement the audit report in such manner he may think fit.

Any such comments upon or supplement to the audit report shall be placed before the company, at the same time, and in the same manner, as the audit report. Thus, it is seen that there is a two layer audit of a Government company, by the statutory auditors, being qualified chartered accountants, and by the CAG. The general standards, principles, techniques and procedures for audit adopted by the C&AG are a mixture of government audit and commercial audit as known and practiced by professional auditors. The concepts of autonomy and accountability of the institution / bodies / corporations / companies have influenced the nature and scope of audit in applying the conventional audit from the angle of economy, efficiency and effectiveness.

PAPER – 7: INFORMATION TECHNOLOGY AND STRATEGIC MANAGEMENT

SECTION – A: INFORMATION TECHNOLOGY

QUESTIONS

1. Define the following terms briefly:
 - (i) Internet Server
 - (ii) Device Drivers
 - (iii) Local Area Network (LAN)
 - (iv) Network Interface Card (NIC)
 - (v) Hub
 - (vi) Repeaters
 - (vii) Internet Browser
 - (viii) ASCII Code
 - (ix) Electronic Funds Transfer (EFT)
 - (x) File Transfer Protocol (FTP)
2. Convert the following from one number system to another number system along with the working notes:
 - (i) $(1001110011)_2 = ()_{10}$
 - (ii) $(1005)_{10} = ()_2$
 - (iii) $(855.05)_{10} = ()_2$
3. Distinguish between the following:
 - (i) Internet and WWW
 - (ii) Transmission Control Protocol and Internet Protocol
 - (iii) Shareware and Open Source Software
 - (iv) ASCII code and ASCII-8 code
 - (v) Repeaters and Gateways

Software

4. Discuss Systems Software.

Data Types

5. (a) What do you understand by the term "Data Type".
(b) Discuss in brief, some of the various types of "Data Types".

Data Base Management Systems

6. (a) What is Database System? Discuss its major parts.
(b) Discuss DBMS structure.

Communication Media

7. What is communication media? Discuss its various types.

Multi-Tier Architecture

8. Discuss multi-tier architecture.

Data Centre

9. Discuss Data Centre protection challenges and best practices solutions.

Flowchart

10. Draw a flow chart to compute and print income-tax and surcharge on the income of a person, where income is to be read from terminal and tax is to be calculated as per the following rates:

Upto ₹ 40,000	No tax
Upto ₹ 60,000	@ 10% of amount above ₹ 40,000
Upto ₹ 1,50,000	₹ 2,000 + 20% of amount above ₹ 60,000
Above ₹ 1,50,000	₹ 20,000 + 30% of amount above ₹ 1,50,000

Charge surcharge @ 2% on the amount of total tax, if the income of a person exceeds ₹ 2,00,000.

World Wide Web

11. What is WWW? Discuss its components.

MODEM

12. What is a MODEM? Discuss its various types in detail.

OSI Model

13. Discuss OSI Model in detail.

Information Systems

14. Discuss the problem areas of the paper based information systems.

Language Translators

15. Discuss Language Translator in detail.

SUGGESTED HINTS/ANSWERS

1. (i) **Internet Server:** An Internet Server is a special computer build up with high quality components and is stored in data centre to ensure better Internet connectivity across the world for sharing of information.
- (ii) **Device Drivers:** Device drivers are small files that act as an interface between hardware in a computer system and the operating system. Hardware requires device drivers so that the operating system can “see” the devices and handle them effectively and efficiently.
- (iii) **Local Area Network (LAN):** A LAN is a computer network covering a small physical area, like a home, office, or small group of buildings, such as a school. The defining characteristics of LANs include usually higher data-transfer rates, smaller geographic range and lack of a need for leased telecommunication lines. A LAN is useful for sharing resources like files, printers, games or other applications.
- (iv) **Network Interface Card (NIC):** Network Interface Card constructs, transmits, receives, and processes data to and from a host to network. Each NIC has 8 bytes permanent and unique MAC (Media Access Control) address which is known as Physical Address and is provided by the manufacturer.
- (v) **Hub:** A hub is a multi port connecting device that is used to interconnect LAN devices and extend the physical length of a network. Each node is connected to the hub by means of simple twisted pair wires. The hub then provides a connection over a higher speed link to other LANs, the company’s WAN, or the Internet.
- (vi) **Repeaters:** Repeaters are devices that solve the snag of signal degradation which results as data is transmitted along the various cables. The repeaters boost or amplify the signal before passing it through to the next section of cable.
- (vii) **Internet Browser:** An Internet Browser or a web browser is a software application that enables a user to display and interact with text, images, and other information typically located on a web page at a website on the World Wide Web or a LAN by means of hyperlinks. Web browsers available for personal computers include Microsoft Internet Explorer, Mozilla Firefox, Apple Safari, Netscape, and Opera.
- (viii) **ASCII Code:** ASCII (American Standard Code for Information Interchange) is a seven-bit code with which up to 128 characters can be coded and is used extensively in small computers, peripherals, instruments and communications devices. This includes both unprintable control codes (0-31) used to control various devices in computer and printable control codes (32-127) that represent lower case and upper case letters, digits, punctuation marks, and other symbols.

- (ix) **Electronic Funds Transfer (EFT):** Electronic Funds Transfer (EFT) represents the way the business can receive direct deposit of all payments from the financial institution to the company bank account. Once the user signs up, money come to him directly and sooner than ever before. EFT is fast, safe and means that the money will be confirmed in user’s bank account quicker.
- (x) **File Transfer Protocol (FTP):** The File Transfer Protocol (FTP) is used widely on the Internet for transferring files to and from a remote host. FTP is commonly used for uploading pages to a Web site and for providing online file archives. An FTP URL has the basic form: ftp://user:pass@host/directory/file.

2. (i) $(1001110011)_2 = (\quad)_{10}$


$$= 1 \times 2^9 + 0 \times 2^8 + 0 \times 2^7 + 1 \times 2^6 + 1 \times 2^5 + 1 \times 2^4 + 0 \times 2^3 + 0 \times 2^2 + 1 \times 2^1 + 1 \times 2^0$$

$$= 512 + 0 + 0 + 64 + 32 + 16 + 0 + 0 + 2 + 1$$

$(1001110011)_2 = (627)_{10}$

(ii) $(1005)_{10} = (\quad)_2$

2	1005	Remainder
2	502	1
2	251	0
2	125	1
2	62	1
2	31	0
2	15	1
2	7	1
2	3	1
2	1	1
2	0	1



$(1005)_{10} = (1111101101)_2$

(iii) $(855.05)_{10} = (\quad)_2$

To convert the given number from Decimal Number System to Binary Number System, first we will convert mantissa part, then the fractional part into Binary Number System.

Step – I

2	855	Remainder
2	427	1
2	213	1
2	106	1
2	53	0
2	26	1
2	13	0
2	6	1
2	3	0
2	1	1
2	0	1

$$(855)_{10} = (1101010111)_2 \quad \dots\dots\dots(i)$$

Step – II

Integer Part

.05 x 2	=	0.10	0
.10 x 2	=	0.20	0
.20 x 2	=	0.40	0
.40 x 2	=	0.80	0
.80 x 2	=	1.60	1
$(.05)_{10}$	=	$(0.00001)_2$	$\dots\dots\dots(ii)$

So, combining equations (i) and (ii), we get -

$$(855.05)_{10} = (1101010111.00001)_2$$

3. (i) Difference between Internet and WWW are listed below:

	Internet	WWW
Nature	Hardware	Software
Comprises of	Network of Computers, copper wires, fiber - optic cables & wireless networks	Files, folders & documents stored in various computers
Governed By	Internet Protocol	Hyper Text Transfer Protocol
Dependency	This is the base platform and is independent of WWW	It depends on the Internet to work

- (ii) **Transmission Control Protocol (TCP):** The TCP provides reliable transmission of data in an Internet Protocol environment. TCP corresponds to the Transport layer (Layer 4) of the OSI reference model that provides stream data transfer, reliability, efficient flow control, full-duplex operation, and multiplexing.

Internet Protocol (IP): The Internet Protocol (IP) is a Network-layer (Layer 3) protocol that contains addressing information and some control information that enables packets to be routed.

- (iii) **Shareware:** Shareware is software developed by individual and small companies that cannot afford to market their software world wide or by a company that wants to release a demonstration version of their commercial product.

Open Source Software: Open Source software is created by generous programmers and released into the public domain for public use. There is usually a copyright notice that must remain with the software product. Many popular Open Source applications are being developed and upgraded regularly by individuals and companies that believe in the Open Source concept.

- (iv) **ASCII Code:** ASCII stands for American Standard Code for Information Interchange and is a seven-bit code. ASCII code is used extensively in small computers, peripherals, instruments and communications devices. This includes both unprintable control codes (0-31) used to control various devices in computer and printable control codes (32-127) that represents lower case and upper case letters, digits, punctuation marks, and other symbols. With 7 bits, up to 128 characters can be coded.

ASCII-8 Code: A newer version of ASCII is the ASCII-8 code, which is an 8-bit code. With 8 bits, the code capacity is extended to 256 characters. This includes graphics, symbols and mathematical representations.

- (v) **Repeaters:** These are devices that solve the snag of signal degradation which results as data is transmitted along the various cables. The repeater boosts or amplifies the signal before passing it through to the next section of cable.

Gateways: Gateways can translate data from one protocol to another and are usually used to link LANs of different topologies, e.g., Ethernet and Token Ring, so enabling the exchange of data.

4. **Systems Software:** Systems software is computer software designed to operate the computer hardware and to provide and maintain a platform for running application software. Therefore, Systems Software may be defined as a set of one or more programs designed to control the operation of computer system. System software helps use the operating system and computer system. It includes diagnostic tools, compilers, servers, windowing systems, utilities, language translator, data communication programs, database systems and more. The purpose of systems software is to insulate the application programmer as much as possible from the details of the computer, especially

memory and other hardware features, and devices like printers, readers, displays, keyboards, etc.

5. (a) **Data Type:** A data type is a classification of various types of data, stating the possible values for that type, the operations that can be done on that type, and the way the values of that type are stored. It is a set of data with values having predefined characteristics. Examples of data types are: Integer, Single and Double Precision, Logical, Character, String, Memo, Index Field, Currency and Date fields.
- (b) Some of the various "Data Types" are as follows:
- **Integer Number:** An integer data type can hold a whole number, but no fraction. Integers may either be signed (allowing negative values) or unsigned (non-negative values only). Various sizes of integer vary from 8 bit to 64 bit word length. Byte, Word, Long and Double are the types of Integer data types.
 - **Single and Double Precision:** Real data values are commonly called single precision data because each real constant is stored in a single memory location. This usually gives seven significant digits for each real value. Further, any programming languages provide the double precision data type which is stored in two memory locations, thus providing twice as many significant digits.
 - **Logical:** The Logical data type is used to store data that has only two Boolean values True (T) or False (F) and holds the size of 1 byte.
 - **Character:** The Character data type includes letters, numbers, spaces, symbols, and punctuation. Character fields or variables store text information such as names, addresses, and numbers that are not used in mathematical calculations. For example, phone numbers or zip codes, though they include mostly numbers, are actually best used as Character values. It holds the size of 1 byte.
 - **String:** A String data type consists of a sequence of contiguous characters that represent the characters themselves rather than their numeric values and can include letters, numbers, spaces, and punctuation. The codes for String characters range from 0–255.
 - **Memo:** The Memo data type is used if we need to store more than 255 characters. A Memo field can store up to 65,536 characters.
 - **Index Field:** Index fields are used to store relevant information along with a document. The data input to an Index Field is used to find those documents when needed. The program provides up to twenty-five user-definable Index Fields in an Index Set. An index field can be one of three types: Drop-Down Look-Up List, Standard, and Auto-Complete History List.
 - **Currency Field:** The currency field accepts data in dollar form by default.
 - **Date Field:** The date field accepts data entered in date format.

6. (a) **Database System:** Both the database and DBMS software collectively is called Database System. A database system has four major parts: Data, Hardware, Software and Users, which coordinate with each other to form an effective database system.

(i) **Data:** The data acts as a bridge between machine parts i.e. hardware and software and the users, who access it directly or through some application programs. The data stored in the system is partitioned onto one or more databases. A database is a repository for stored data. In general, it is both integrated and shared.

By integrated, it is meant that the database is a unification of several otherwise distinct data files. The individual pieces of data in the database may be shared among several different users in the sense that each of them may have access to the same piece of data. Such sharing is really a consequence of the fact that the database is integrated.

(ii) **Hardware:** The hardware consists of the secondary storage devices such as magnetic disks (hard disk, zip disk, floppy disks), optical disks (CD-ROM), magnetic tapes, etc. on which data is stored together with the I/O devices (mouse, keyboard, printers), processors, main memory, etc. for storing and retrieving the data in a fast and efficient manner and the secondary storage volumes, disks, drums, etc. on which the database resides, together with the associated devices, control units, channels, and so forth.

(iii) **Software:** The software part of a DBMS acts as a bridge between user and the database. In other words, software interacts with users, application programs, and database and files system of a particular storage media (hard disk, magnetic tapes etc.) to insert, update, delete and retrieve data.

(iv) **Users:** The broad classes of users are: Application Programmers and System Analysts; End users; DBA & Database engineers.

(b) Structure of DBMS is discussed as follows:

(i) **DDL Compiler –**

(a) It converts data definition statements into a set of tables;

(b) Tables contain meta data (data about the data) concerning the database; and

(c) It gives rise to a format that can be used by other components of database.

(ii) **Data Manager –**

(a) It is the central software component;

(b) It is referred to as the database control system; and

(c) It converts operations in users' queries to physical file system.

(iii) File Manager –

- (a) It is responsible for file structure;
- (b) It is responsible for managing the space;
- (c) It is responsible for locating block containing required record;
- (d) It is responsible for requesting block from disk manager; and
- (e) It is responsible for transmitting required record to data manager.

(iv) Disk Manager –

- (a) It is a part of the Operating System;
- (b) It carries out all physical input / output operations; and
- (c) It transfers block / page requested by file manager.

(v) Query Manager –

- (a) It interprets user's online query;
- (b) It converts to an efficient series of operations;
- (c) In a form it is capable of being sent to data manager;
- (d) It uses data dictionary to find structure of relevant portion of database;
- (e) It uses information to modify query; and
- (f) It prepares an optimal plan to access database for efficient data retrieval.

(vi) Data Dictionary –

- (a) It maintains information pertaining to structure and usage of data and meta data; and
- (b) It is consulted by the database users to learn what each piece of data and various synonyms of data field means.

7. Communication media comprises different types of cables and wireless techniques that are used to connect network devices in a Local Area Network (LAN), Wireless Local Area Network (WLAN) or Wide Area Network (WAN). Choice of correct type of media is very important for the implementation of any network. Communication or Transmission media is divided into two groups:

- (i) Guided Media:** Guided Transmission Media or Bound Media uses a "cabling" system that guides the data signals along a specific path. Some of the common examples of guided media are Twisted Pair, Coaxial cable and Optical fiber.

The types of guided media are described as follows:

- **Twisted-Pair Cables:** Twisted-Pair cables contain pairs of insulated copper wires twisted together to reduce the impact of interferences. There are two types of twisted-pair cables called Unshielded Twisted-Pair (UTP) cable and Shielded Twisted-Pair (STP) cable. Twisted-Pair cables can carry data at a speed of 10 Mbps, 100 Mbps and 1000 Mbps and can transmit data up to 100 meters.
 - **Co-axial cables:** Also called as Coax, these contain central copper wire as its core that is surrounded by two layers of protective shielding that reduces electromagnetic interference. Co-axial cables used in computer networks are of two types - Thick co-axial and Thin co-axial cable. Coax can transmit data at a maximum speed of 10 Mbps up to 500 meters without using repeaters.
 - **Optical Fiber:** An optical fiber (or fiber) is a glass or plastic fiber that carries light along its length. Optical fibers are widely used in fiber-optic communications, which permits transmission over longer distances and at higher data rates (called bandwidth), than other forms of communications. Fibers are used instead of metal wires because signals travel along them with less loss, and they are immune to electromagnetic interference.
- (ii) **Unguided Media:** Unguided transmission media or Unbound Media consists of a means for the data signals to travel but nothing to guide them along a specific path. The data signals are not bound to a cabling media. Some of the common examples of unguided media are Radio wave, Microwave and Infrared wave. These are described as follows:
- **Radio Waves:** Radio waves are an invisible form of electromagnetic radiation that varies in wavelength from around a millimeter to 100,000 km, making it one of the widest ranges in the electromagnetic spectrum. Radio waves are most commonly used transmission media in the wireless Local Area Networks.
 - **Micro Waves:** Microwaves are radio waves with wavelengths ranging from as long as one meter to as short as one millimeter, or equivalently, with frequencies between 300 MHz (0.3 GHz) and 300 GHz. These are used for communication, radar systems, radio astronomy, navigation and spectroscopy.
 - **Infrared Waves:** Infrared light is used in industrial, scientific, and medical applications. Night-vision devices using infrared illumination allow people or animals to be observed without the observer being detected. Infrared tracking, also known as Infrared Homing, refers to a passive missile guidance system which uses the emission from a target of electromagnetic radiation in the infrared part of the spectrum to track it.

8. **Multi-tier Architecture:** Multi-tier architecture (often referred to as n-tier architecture) is a client-server architecture in which an application is executed by more than one distinct software agent. For example, an application that uses middleware to service data requests between a user and a database employs multi-tier architecture. The most widespread use of "multi-tier architecture" refers to three-tier architecture.

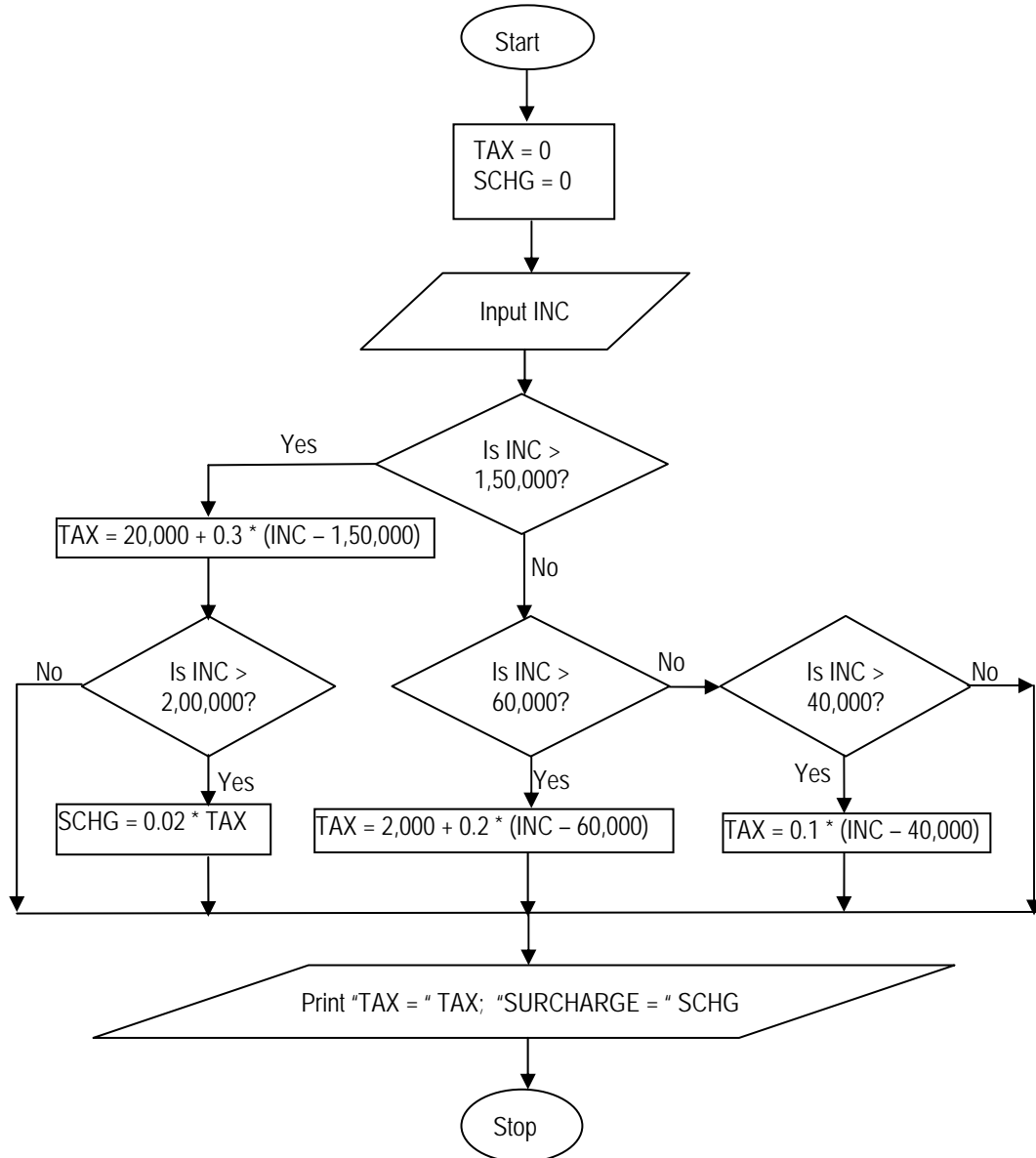
The client program has only User Interface (UI) code that talks, via a network, to the "middle tier" on which the business and database logic sits which in turn, via a network, talks to the database. In practice the middle tier can be placed, if necessary, on the same machine as the database.

In either architecture, the data "traffic" is highest between database logic and database server. This means that the network infrastructure that connects the database logic with the database server needs to be very high bandwidth; i.e. expensive.

The advantages of a multi-tier architecture are:

- Forced separation of UI and business logic;
 - Low bandwidth network;
 - Business logic sits on a small number (may be just one) of centralized machines; and
 - Enforced separation of UI and business logic.
9. Large enterprise IT managers understand the criticality of data protection challenges and try to mitigate the cost, risk and complexity of data protection throughout their enterprises — including data centers, disaster recovery sites and branch locations. Some of the top challenges faced by large enterprise IT managers and the best practices for overcoming them are as follows:
- (i) **Control skyrocketing data growth:** Data growth is the biggest data center hardware infrastructure challenge for large enterprises. Several types of data deduplication technologies help in reducing data storage needs by eliminating redundant data. Data deduplication also reduces the data that must be sent across a WAN for remote backups, network replication, and disaster recovery.
 - (ii) **System performance and scalability:** To avoid data center sprawl in the data protection environment, IT managers should look ahead 3-5 years and choose a data protection "target" system that will scale to accommodate the performance and capacity they will need without adding new system images. It also saves money in administration time by eliminating the need to load balance and tune new systems needed for scaling.

- (iii) **Network congestion and connectivity architecture:** The new generation of servers with multi-core processors demands significantly high input/output (I/O), and if these servers are virtualized, this requirement further goes up, which is one of the biggest data center infrastructure challenge. Vendors should help its customers to be strategic with their network infrastructure rather than using the traditional LAN switches that are not designed to meet the sudden upsurge in network demand.
 - (iv) **IT administration and staff time at premium:** Data protection IT administrators have more data to protect and more complex data protection standards to meet while staying within a limited budget. They need to invest in systems that automate disk-subsystem management, reduce complexity, and provide effective dashboards and reporting. Minimum requirements for large enterprise data protection platforms include: automatic load balancing and tuning; automatic system monitoring and “phone home” functionality; and providing dashboards and reporting.
 - (v) **Inadequate Disaster Recovery plans:** Large enterprises that have been using physical tape backup systems and disparate disk-based solutions in branch offices are particularly vulnerable to downtime and data loss in the event of a disaster. Enterprise IT managers should consider the use of a consistent platform that enables IT staff to manage remote-office backup, deduplication, replication and restore operations from a data center headquarters. It also minimizes the burden on IT administrators in branch locations and provides administrators with a company-wide view of data protection efficiency.
 - (vi) **Adopting new risk prone, cost-effective data protection technologies:** With limited budgets and resources, IT managers have worked to protect their investment in existing technologies. IT managers should look for enterprise-class data protection solutions that mitigate these costs and risk with features such as robust tape emulation and storage pooling.
 - (vii) **Resource balancing:** The enterprise chief technical officer needs to strike a working balance between reduced operational budgets, increased demands on existing infrastructure, maximizing availability, ensuring round-the-clock monitoring and management, and the periodic upgrades that today’s technology demands.
10. Let us define the variables:
- SCHG: Surcharge on the income of a person;
- TAX: Income Tax of a person;
- INC: Income of a person
- The required flow chart is as follows:



11. The World Wide Web (WWW or W3), most often called as Web, is defined as a network of computers all over the world. The fundamental unit of the Web is the Web page which is defined as a text document that contains links to other Web pages, graphic and audio files, and other Internet services such as File Transfer Protocol (FTP) and E-mail. Major functional components of the WWW are discussed below:

- (i) **HTML:** HTML stands for HyperText Markup Language and is the main markup language for web page. HTML lets the creator of a Web page specify how text will be displayed and how to link to other Web pages, files, and Internet services. These links are formally known as hypertext links, because they are activated when a user clicks on specific text or images within a Web page.
 - (ii) **HTTP:** All computers in the Web communicate with each other using a communication standard called Hypertext Transfer Protocol (HTTP). HTTP is defined as the set of rules for transferring files (text, graphic images, sound, video, and other multimedia files) on the World Wide Web. As soon as a Web user opens their Web browser, the user is indirectly making use of HTTP.
 - (iii) **URIs:** Uniform Resource Identifier (URI) is a string of characters used to identify a resource either by location, name or both. Such identification enables interaction with representations of the resource over a network (typically the World Wide Web) using specific protocols. URIs can be classified as names (URNs) and locators (URLs), or as both.
 - (iv) **Web Hardware and Software:** Web pages reside on servers that run special software that allow users to access Web pages and to activate links to other Web pages and to Internet services. A user can directly access any Web page on one of these servers and then follow the links to other pages. Computers reading the Web pages are called a Web Client that view the pages with a program called a Web Browser. The Web browser reads a specified Web page using the HTML commands within the Web page to display the desired information. Text positioning, fonts, colors, and size are specified through HTML. The browser software interprets the HTML commands and displays the information on the user's monitor.
12. **MODEM:** MODEM stands for Modulator/Demodulator. In the simplest form, MODEM is defined as an encoding as well as decoding device used in data transmission. Data communication could be achieved due to the development of encoding/decoding devices.
- In other words, 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. Modems are used for handling data streams from a peripheral device to the CPU and vice versa through the common carrier network. MODEMs are required to telecommunicate computer data with ordinary telephone lines because computer data is in digital form but telephone lines are analogue. One of the greatest benefits of a modem is that it confers the ability to access remote computers. It allows higher speed of data transmission and reduces the efforts of noise and distortion.
- Types of MODEMs:** MODEMs are classified on the basis of different criteria such as the place where they are installed, the manner in which they accept information and the way

they transmit signals. Based on these criteria, MODEMs are classified into the following types:

(i) **External vs. Internal Modems (on the basis of place where they are installed)**

External Modem: This is a modem separated from the computer system unit and is connected to the serial port of the computer by means of a cable. It is connected to the telephone wall jack by another cable and can be switched off or on easily too. The lights on the external modem also inform about the status of transmission of data.

Internal Modem: An internal modem is a circuit board (a modem card) that can be added to the system unit of the computer and takes one of the expansion slots. An internal modem is a device installed inside a desktop or laptop computer, allowing the computer to communicate over a network with other connected computers.

(ii) **Standard vs. Intelligent Modems (on the basis of the manner in which they accept information)**

Standard Modems: Standard modems are usually operated by commands entered from a microcomputer keyboard. Users control the functions (dialing, etc.) of a modem through the keyboard.

Intelligent Modems: Intelligent modems are also called Advanced modems that can accept new instructions and then respond to the commands while transmitting data and information. These can be done by microprocessor chips and internal Read Only Memory (ROM) contained in the modem. These modems are more expensive.

(ii) **Short-Haul and Wireless Modems (on the basis of the way the signals are transmitted)**

Short-Haul Modems: Short-haul modems are devices that transmit signals down the cable through any COM1 port. They sometimes are called modem eliminators, because they do not require an external power source. They are also called line drivers that can send data for a distance of more than one mile. This type of modem can be used within or across several buildings in a company or a university campus.

Wireless Modems: Wireless modems transmit the data signals through the air instead of by using a cable. They sometimes are called a radiofrequency modem. This type of modem is designed to work with cellular technology, and wireless LANs.

13. OSI Model has been outlined by International Organization for Standardization (ISO) to facilitate communication of heterogeneous hardware or software platforms with each other. It is an abstract description for layered communications and computer network protocol design. It was developed as part of the Open Systems Interconnection (OSI) initiative. In its most basic form, it divides network architecture into seven layers, wherein

a layer is a collection of layers which, from top to bottom, are the Application, Presentation, Session, Transport, Network, Data-Link, and Physical Layers. It is therefore often referred to as the OSI Seven Layer Model. A layer is a collection of conceptually similar functions that provide services to the layer above it and receives services from the layer below it. The description of each OSI layer is discussed below.

- **Layer 7 or Application Layer:** The application layer of OSI layer architecture is closest to the end user, which means that both the OSI application layer and the user interact directly with the software application. This layer interacts with software applications and provides user services by file transfer, file sharing, etc.
- **Layer 6 or Presentation Layer:** This layer at times referred as Syntax Layer also, is usually a part of an operating system, that converts incoming and outgoing data from one presentation format to another (for example, from a text stream into a popup window with the newly arrived text). Encryption, data compression can also be undertaken at this layer level.
- **Layer 5 or Session Layer:** This layer sets up, coordinates, and terminates conversations, exchanges, and dialogs between the applications at each end. It deals with session and connection coordination. It provides for full-duplex, half-duplex, or simplex operation, and establishes check pointing, adjournment, termination, and restart procedures.
- **Layer 4 or Transport Layer:** This layer also ensures reliable and transparent transfer of data between user processes, assembles and disassembles message packets, and provides error recovery and flow control. Multiplexing and encryption are undertaken at this layer level. This means that the Transport Layer can keep track of the segments and retransmit those that fail.
- **Layer 3 or Network Layer:** The Network Layer provides the functional and procedural means of transferring variable length data sequences from a source to a destination via one or more networks, while maintaining the quality of service requested by the Transport Layer. The Network Layer makes a choice of the physical route of transmission, creates a virtual circuit for upper layers to make them independent of data transmission and switching, establishes, maintains, terminates connections between the nodes and ensure proper routing of data.
- **Layer 2 or Data Link Layer:** The Data Link Layer responds to service requests from the Network Layer and issues service requests to the Physical Layer. The Data Link Layer is the protocol layer which transfers data between adjacent network nodes in a wide area network or between nodes on the same local area network segment. This layer is also a hardware layer which specifies channel access control method and ensures reliable transfer of data through the transmission medium. It provides the functional and procedural means to transfer data between network entities and to detect and possibly correct errors that may occur in the Physical Layer.

- **Layer 1 or Physical Layer:** The Physical Layer is a hardware layer which specifies mechanical features as well as electromagnetic features of the connection between the devices and the transmission. In particular, it defines the relationship between a device and a physical medium. The major functions and services performed by the Physical Layer are establishment and termination of a connection to a communications medium; participation in the process whereby the communication resources are effectively shared among multiple users; modulation or conversion between the representation of digital data in user equipment and the corresponding signals transmitted over a communications channel.
14. Some problems with paper-based information systems that EDI can address are as follows:
- (i) **Labour costs** - In a paper based system, manual processing is required for data keying, document storage and retrieval, document matching, envelope stuffing etc.
 - (ii) **Errors** - Since the same information is keyed in a number of times, paper-based systems are error-prone.
 - (iii) **Inventory** -Due to the fact that delays and uncertainties are commonplace in paper processing, inventories may be higher than they need to be.
 - (iv) **Uncertainty** - Uncertainty exists in three areas. Firstly, transportation and keying delays mean that timing is uncertain. Secondly, the sender does not know whether the matter dispatched was received at all. Thirdly, in the payment area, it is difficult to tell when the bank will disburse the cheque.

The implementation of EDI reduces the mail and processing delays. Uncertainty with regard to timings is discarded in some cases and lessened in others. This enables a firm to forecast cash flows more accurately.

15. **Language Translator:** A language translator or language processor is a general term used for any assembler, compiler or other routine that accepts statements in one language and produces equivalent statements in another language. The language processor reads the source language statements one at a time and prepares a number of machine instructions to perform the operations specified or implied by each source statement. Most computer installations have several language processors available, one for each programming language the computer can accept.

The three most widely used types of language translators are compilers, interpreters, and assemblers.

Compilers: Compilers translate the entire program into machine language before the program is executed. Compilers are most commonly used system software to translate high-level languages such as COBOL, FORTRAN, and Pascal into Low level language. Program is entered into the computer system and submitted to the appropriate compiler. For instance, A COBOL program is input to a COBOL compiler; a Pascal program, to a Pascal compiler. The program submitted for compilation is called a **source program** (or

source module). The compiler then translates the program into machine language, producing an object program (or object module). Then, another software program called a **linkage editor** binds the object module of this program to object modules of any subprograms that must be used to complete processing. The resultant program, which is ready for computer execution, is called a **load program** (or load module). It is the load program that the computer actually executes.

Interpreters: Whereas compilers translate programs into machine language all at once before programs are run, interpreters translate programs a line at a time as they are being run. For instance, if a user has a program in which a single statement is executed a thousand times during the course of the program's run, the interpreter would translate that statement a thousand different times into machine language. With an interpreter, each statement is translated into machine language just before it is executed. No object module or storable load module is ever produced.

They are usually easier and faster to use, since the user is not bothered with distinct and time-consuming compile, link-edit, and execution stages. They typically provide users with superior error messages. An interpreter for a 3GL typically requires less storage space in primary memory than a compiler for that language. Interpreters are usually less expensive than compilers.

Assemblers: A program written in assembly language consists of a series of instructions called-mnemonics that correspond to a stream of executable instructions, when translated by an assembler, which can be loaded into memory and executed. A utility program called an assembler is used to translate assembly language statements into the target computer's machine code. The assembler performs a one-to-one mapping from mnemonic statements into machine instructions and data. Assemblers are used exclusively with assembly languages.

**SECTION – B: STRATEGIC MANAGEMENT
QUESTIONS**

Correct/Incorrect with reasoning

1. State with reasons which of the following statements are correct/incorrect:
 - (a) PESTLE analysis is used to monitoring the micro environmental factors.
 - (b) Growth share matrix is popularly used for resource allocation.
 - (c) For a small entrepreneur vision and mission are irrelevant.
 - (d) Vertical diversification integrates firms forward or backward in the product chain.
 - (e) Production strategy implements, supports and drives higher strategies.
 - (f) SBU concepts facilitate multi-business operations.
 - (g) Strategies may require changes in organizational structure.
 - (h) Benchmarking is a remedy for all problems faced by organizations.
 - (i) The thrust of operational control is on individual tasks or transactions.

Explain the concepts

2. Explain the meaning of the following concepts:
 - (a) Demographic environment
 - (b) ADL Matrix
 - (c) Directional Strategies
 - (d) Synchro-marketing

Differences between the two concepts

3. Distinguish between the following:
 - (a) Transformational and transactional leadership
 - (b) SWOT and TOWS Matrix
 - (c) Mergers and acquisitions

Short notes

4. Write short notes on the following:
 - (a) Global strategy
 - (b) Corporate culture
 - (c) Value chain analysis
 - (d) Co-generic merger

Brief answers

5. Briefly answer the following questions:
 - (a) "Environment is the sum of several external and internal forces that affect the functioning of business." Explain.
 - (b) Liquidation is the last resort option for a business organisation. Explain.
 - (c) Briefly explain the need of turnaround strategy.
 - (d) 'A network structure is suited to unstable environment.' Elaborate.

Chapter 1-Business Environment

6. Discuss the Porter's model for systematically diagnosing the significant competitive pressures in a market.
7. Explain how technological factors present an opportunity as well as threat to a particular business organization.

Chapter 2-Business Policy and Strategic Management

8. What do you understand by strategic management? Discuss its framework.
9. "Strategy is partly proactive and partly reactive." Do you agree? Give reasons for your answer.

Chapter 3-Strategic Analysis

10. Explain the model which has been inspired from traffic control lights.
11. An organization wants to start a new business and would like to understand the structure of competition in the industry. Identify the factors that an organization should analyze.

Chapter 4-Strategic Planning

12. What do you understand by 'Strategy'? Explain the four generic strategies as discussed by Glueck and Jauch.
13. How a company can deal with strategic uncertainty?

Chapter 5-Formulation of Functional Strategy

14. What are the three major research and development approaches for implementing strategies.
15. "Evaluating the worth of a business is central to strategy implementation." In the light of this statement, explain the methods that can be used for determining the worth of a business.

Chapter 6-Strategic Implementation and Control

16. How the management of internal linkages in the value chain analysis creates competitive advantage?

17. An important part of strategic management process is implementation of strategy. Discuss the relationship of soundness of strategy formulation with the quality of implementation.

Chapter 7-Reaching Strategic Edge

18. Define TQM? Explain the various principles that guide success of TQM.
19. 'The growing use of the internet by businesses and consumers is changing the competitive scenario.' Identify the characteristics of the E-commerce environment doing so.

SUGGESTED ANSWERS / HINTS

1. (a) **Incorrect:** The term PESTLE Analysis is used to describe a framework for analysis of macro environmental factors. It involves identification of political, economic, socio-cultural, technological, legal and environmental influences on an organization and providing a way of scanning the environmental influences that have affected or are likely to affect an organization or its policy. The advantage of this tool is that it encourages management into proactive and structured thinking.
- (b) **Correct:** Growth share matrix also known for its cow and dog metaphors is popularly used for resource allocation in a diversified company. Primarily, it categorises organisations/products on the basis two factors consisting of the growth opportunities and the market share enjoyed.
- (c) **Incorrect:** Entrepreneur, big or small has to function within several influences external forces. Competition in different form and different degree is present in all kind and sizes of business. Even entrepreneur with small businesses can have complicated environment. To grow and prosper they need to have clear vision and mission.
- (d) **Correct:** In vertically integrated diversification, firms opt to engage in businesses that are related to the existing business of the firm. It moves forward or backward in the chain and enters specific products with the intention of making them part of new businesses for the firm.
- (e) **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.
- (f) **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.

- (g) **Correct:** Strategies may require changes in structure as the structure dictates how resources will be allocated. Structure should be designed to facilitate the strategic pursuit of a firm and, therefore, should follow strategy. Without a strategy or reasons for being, companies find it difficult to design an effective structure.
 - (h) **Incorrect:** Benchmarking is an approach of setting goals and measuring productivity based on best industry practices and is a process of continuous improvement in search for competitive advantage. However, it is not panacea for all problems. Rather, it studies the circumstances and processes that help in superior performance. Better processes are not merely copied. Efforts are made to learn, improve and evolve them to suit the organizational circumstances.
 - (i) **Correct:** The thrust of operational control is on individual tasks or transactions as against total or more aggregative management functions. For example, procuring specific items for inventory is a matter of operational control, in contrast to inventory management as a whole. One of the tests that can be applied to identify operational control areas is that there should be a clear-cut and somewhat measurable relationship between inputs and outputs which could be predetermined or estimated with least uncertainty.
2. (a) **Demographic Environment:** The term demographics denote characteristics of population in an area, district, country or in world. Some of the demographic factors have great impact on the business. Factors such as general age profile, sex ratio, income, education, growth rate affect the business with different magnitude.
- (b) **ADL Matrix:** The ADL matrix which has derived its name from Arthur D. Little is a portfolio analysis method that is based on product life cycle. The approach forms a two dimensional matrix based on stage of industry maturity and the firms competitive position, environmental assessment and business strength assessment.
- (c) The corporate strategies a firm can adopt have been classified into four broad categories: stability, expansion, retrenchment, and combination known as directional/grand strategies. They are often called master or business strategies to provide basic direction for strategic actions toward achieving long-term business objectives.
- (d) **Synchro-marketing:** When the demand for the product is irregular causing idle capacity or over-worked capacities, synchro-marketing can be used to find ways to alter the pattern of demand so that it equates more suitably with the pattern of supply. It can be done through flexible pricing, promotion, and other incentives.
3. (a) **Transformational leadership style** use charisma and enthusiasm to inspire people to exert them for the good of the organization. Transformational leadership style

may be appropriate in turbulent environments, in industries at the very start or end of their life-cycles, in poorly performing organizations when there is a need to inspire a company to embrace major changes. Transformational leaders offer excitement, vision, intellectual stimulation and personal satisfaction. They inspire involvement in a mission, giving followers a 'dream' or 'vision' of a higher calling so as to elicit more dramatic changes in organizational performance. Such a leadership motivates followers to do more than originally affected to do by stretching their abilities and increasing their self-confidence, and also promote innovation throughout the organization.

Whereas, *transactional leadership style* focus more on designing systems and controlling the organization's activities and are more likely to be associated with improving the current situation. Transactional leaders try to build on the existing culture and enhance current practices. Transactional leadership style uses the authority of its office to exchange rewards, such as pay and status. They prefer a more formalized approach to motivation, setting clear goals with explicit rewards or penalties for achievement or non-achievement.

Transactional leadership style may be appropriate in settled environment, in growing or mature industries, and in organizations that are performing well.

(b) TOWS Analysis is a variant of the classic business tool, SWOT Analysis. TOWS and SWOT are acronyms for different arrangements of the words Strengths, Weaknesses, Opportunities and Threats. By analyzing the external environment (threats and opportunities), and internal environment (weaknesses and strengths), we can use these techniques to think about the strategy of a company. Following are the some basic differences between TOWS and SWOT matrix:

- ◆ TOWS emphasises on external environment whereas SWOT emphasises on internal environment.
- ◆ TOWS matrix is about the combinations of SO, ST, WO, WT whereas SWOT matrix is about S, W, O, T.
- ◆ TOWS analysis is an action tool whereas SWOT analysis is a planning tool.
- ◆ TOWS is particularly useful in evaluating the potential impact of sudden events or developments while SWOT is usually employed in evaluating a company's business plan.

(c) Merger and acquisition in simple words are defined as a process of combining two or more organizations together.

Some organizations prefer to grow through mergers. Merger is considered to be a process when two or more companies come together to expand their business operations. In such a case the deal gets finalized on friendly terms and both the organizations share profits in the newly created entity. In a merger two organizations

combine to increase their strength and financial gains along with breaking the trade barriers.

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

4. (a) A global strategy assumes more standardization of products across country boundaries. Under this strategy, the company tries to focus on a low cost structure by leveraging their expertise in providing certain products and services and concentrating the production of these standard products and services at a few favourable locations around the world. Competitive strategy is centralized and controlled by the home office.
 - (b) Corporate culture refers to a company's values, beliefs, business principles, traditions, ways of operating and internal work environment. Every corporation has a culture that exerts powerful influences on the behaviour of managers.
 - (c) Value chain analysis refers to separate activities which are necessary to underpin an organization's strategies and are linked together both within and around the organization. Organizations are much more than a random collection of machines, money and people. Value chain of a manufacturing organization comprises of primary and supportive activities.
 - (d) 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 includes 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, organization in the white goods categories such as refrigerators can diversify by merging with another organization having business in kitchen appliances.
5. (a) **Business environment in which an organization exists can be broadly divided into two parts:** the external and the internal. Since the environment is complex and has multiple elements, classification helps to understand it better. External environmental factors are largely beyond the control of individual enterprise and are dynamic in the sense that they keep on changing. These are technological, physical, political and socio-cultural. Internal environment is the environment that has a direct impact on the business and is within the control of the businesses. These are internal management, machinery, methods of production, etc.
 - (b) Liquidation as a form of retrenchment strategy is considered as the most extreme and unattractive. It involves closing down a firm and selling its assets. It is considered as the

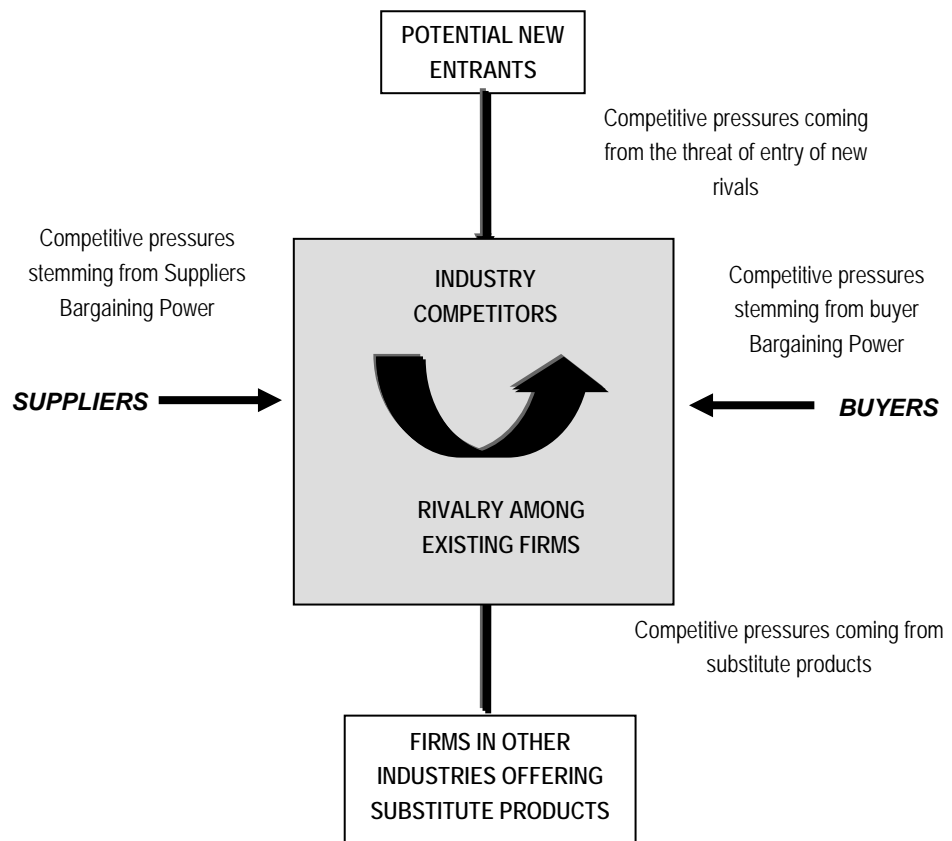
last resort because it leads to serious consequences such as loss of employment for workers and other employees, termination of opportunities a firm could pursue, and the stigma of failure. The company management, government, banks and financial institutions, trade unions, suppliers, creditors, and other agencies are extremely reluctant to be part of such a decision, or ask, for liquidation.

- (c) Turnaround is needed when an enterprise's performance deteriorates to a point that it needs a radical change of direction in strategy, and possibly in structure and culture as well. It is a highly targeted effort to return an organization to profitability and increase positive cash flows to a sufficient level. It is used when both threats and weaknesses adversely affect the health of an organization so much that its basic survival is difficult.

The overall goal of turnaround strategy is to return an underperforming or distressed company to normalcy in terms of acceptable levels of profitability, solvency, liquidity and cash flow. To achieve its objectives, turnaround strategy must reverse causes of distress, resolve the financial crisis, achieve a rapid improvement in financial performance, regain stakeholder support, and overcome internal constraints and unfavourable industry characteristics.

- (d) Network structure is a newer and somewhat more radical organizational design. The network structure could be termed a "non-structure" as it virtually eliminates in-house business functions and outsource many of them. An organisation organized in this manner is often called a virtual organization because it is composed of a series of project groups or collaborations linked by constantly changing non-hierarchical, cobweb-like networks. The network structure becomes most useful when the environment of a firm is unstable and is expected to remain so. Under such conditions, there is usually a strong need for innovation and quick response. Instead of having salaried employees, it may contract with people for a specific project or length of time. Long-term contracts with suppliers and distributors replace services that the company could provide for itself.
6. Five forces model of Michael Porter is a powerful and widely used tool for systematically diagnosing the significant competitive pressures in the market and assessing their strength and importance. The model holds that the state of competition in an industry is a composite of competitive pressures operating in five areas of the overall market. These five forces are:
1. **Threat of new entrants:** New entrants are a powerful source of competition. The new capacity and product range they bring in throw up new competitive pressures. The bigger the new entrant, the more severe the competitive effect. New entrants also place a limit on prices and affect the profitability of existing players.
 2. **Bargaining power of customers:** This is another force that influences the competitive condition of the industry. This force will become heavier depending on the possibilities of the buyers forming groups or cartels. The bargaining power of the buyers influences not only the prices that the producer can charge but also influences in many cases, costs and investments of the producer because powerful buyers usually bargain for better services which involve costs and investment on the part of the producer.

3. **Bargaining power of suppliers:** Quite often suppliers, too, exercise considerable bargaining power. The more specialised the offering from the supplier, greater is his clout. And, if the suppliers are also limited in number they stand a still better chance to exhibit their bargaining power. The bargaining power of suppliers determines the cost of raw materials and other inputs of the industry and, therefore, industry attractiveness and profitability.
4. **Rivalry among current players:** The rivalry among existing players is quite obvious. This is what is normally understood as competition. For any player, the competitors influence strategic decisions at different strategic levels. The impact is evident more at functional level in the prices being changed, advertising, and pressures on costs, product and so on.
5. **Threats from substitutes:** Substitute products are a latent source of competition in an industry. In many cases they become a major constituent of competition. Substitute products offering a price advantage and/or performance improvement to the consumer can drastically alter the competitive character of an industry. And they can bring it about all of a sudden.



7. Technology is the most dynamic of all the environmental factors. An individual enterprise is concerned with the dynamics of its product and process technology, research and development activities in the industry and elsewhere, innovations in products and processes, technological obsolescence and so on. Changes in technology vitally affect the costs, profitability, plant location decisions, product lines, growth and development.

The technology and business are highly interrelated and interdependent. Technology is patronized by business. Technology also drives business and makes a total change on how it is carried out.

Technology can act as both opportunity and threat to a business. It can act as opportunity as business can take advantage of adopting technological innovations to their strategic advantage. However, at the same time technology can act as threat if organisations are not able to adopt it to their advantage. New entrants or existing competitors can always use availability of technological improvements in products or production methods that can be a threat to a business.

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

8. 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.

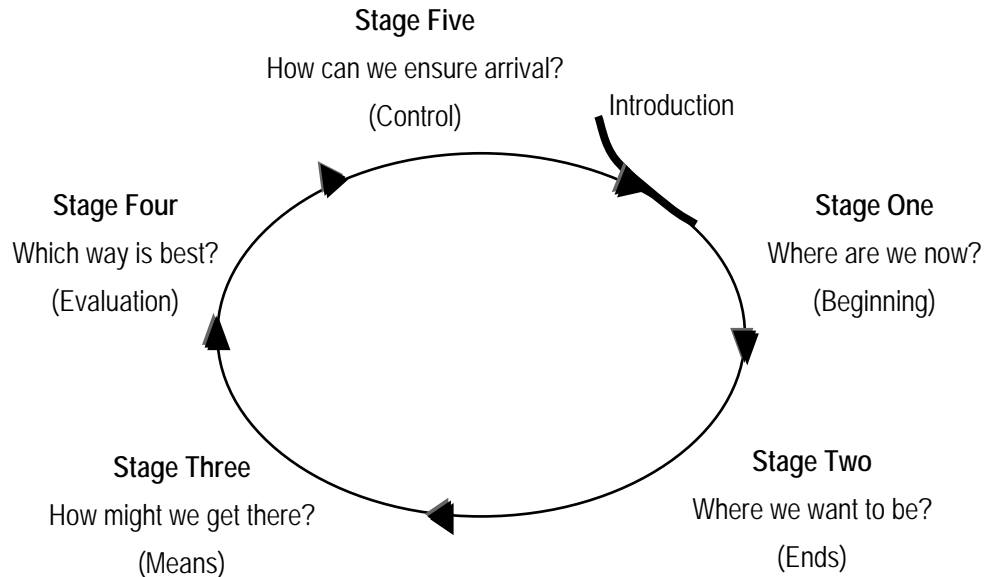


Figure - Framework of strategic management

9. Yes, strategy is partly proactive and partly reactive. In proactive strategy, organizations will analyze possible environmental scenarios and create strategic framework after proper planning and set procedures and work on these strategies in a predetermined manner. However, in reality no company can forecast both internal and external environment exactly. Everything cannot be planned in advance. It is not possible to anticipate moves of rival firms, consumer behaviour, evolving technologies and so on.

There can be significant deviations between what was visualized and what actually happens. Strategies need to be attuned or modified in light of possible environmental changes. There can be significant or major strategic changes when the environment demands. Reactive strategy is triggered by the changes in the environment and provides ways and means to cope with the negative factors or take advantage of emerging opportunities.

10. The model has been used by General Electric Company (developed by GE with the assistance of the consulting firm McKinsey & Company) known as "Stop-Light" Strategy Model. This model is also known as Business Planning Matrix, GE Nine-Cell Matrix and GE Model. The strategic planning approach in this model has been inspired from traffic control lights. The lights that are used at crossings to manage traffic are: green for go, amber or yellow for caution, and red for stop. This model uses two factors while taking strategic decisions: Business Strength and Market Attractiveness. The vertical axis indicates market attractiveness and the horizontal axis shows the business strength in the industry. The market attractiveness is measured by a number of factors like:

- Size of the market.
- Market growth rate.
- Industry profitability.
- Competitive intensity.
- Availability of Technology.
- Pricing trends.
- Overall risk of returns in the industry.
- Opportunity for differentiation of products and services.
- Demand variability.
- Segmentation.
- Distribution structure (e.g. retail, direct, wholesale) etc.

Business strength is measured by considering the typical drivers like:

- Market share.
- Market share growth rate.
- Profit margin.
- Distribution efficiency.
- Brand image.
- Ability to compete on price and quality.
- Customer loyalty.
- Production capacity.
- Technological capability.
- Relative cost position.
- Management caliber, etc.

		<i>Business Strength</i>		
		<i>Strong</i>	<i>Average</i>	<i>Weak</i>
Market Attractiveness	<i>High</i>			
	<i>Medium</i>			
	<i>Low</i>			

Figure : The GE Portfolio Matrix

<u>Zone</u>		<u>Strategic Signals</u>
Green		<i>Invest/Expand</i>
Yellow		<i>Select/Earn</i>
Red		<i>Harvest/Divest</i>

If a product falls in the green section, the business is at advantageous position. To reap the benefits, the strategic decision can be to expand, to invest and grow. If a product is in the amber or yellow zone, it needs caution and managerial discretion is called for making the strategic choices. If a product is in the red zone, it will eventually lead to losses that would make things difficult for organisations. In such cases, the appropriate strategy should be retrenchment, divestment or liquidation.

- Industry and competitive analysis can be done using a set of concepts and techniques to get a clear understanding of key industry traits, the intensity of competition, the drivers of industry change, the market positions and strategies of rival companies, the keys to competitive success, and the industry's profit outlook. The factors that can be analysed are:

Dominant economic features of the industry

Industries differ significantly in their basic character and structure. Industry and competitive analysis begins with an overview of the industry's dominant economic features. The factors to consider in profiling an industry's economic features are market size, scope of competitive rivalry (local, regional, national, international, or global), market growth rate and position in the business life, number of rivals and their relative sizes, number of buyers and their relative sizes and so on.

Nature and strength of competition

An important component of industry and competitive analysis is to identify what the main sources of competitive pressure are and how strong each competitive force is. This analytical step is essential because managers cannot devise a successful strategy without in-depth understanding of the industry's competitive character. Even though competitive pressures in various industries are never precisely the same, the competitive process works in a similar fashion to use a common analytical framework in gauging the nature and intensity of competitive forces.

Triggers of change

An industry's economic features and competitive structure say a lot about its fundamental character but little about the ways in which its environment may be changing. All industries are characterized by trends and new developments that gradually produce changes important enough to require a strategic response.

Identifying the companies that are in the strongest/weakest positions

The next step in examining the industry's competitive structure is to study the market positions of rival companies. One technique for revealing the competitive positions of industry participants is strategic group mapping, which is useful analytical tool for comparing the market positions of each firm separately or for grouping them into like positions when an industry has so many competitors that it is not practical to examine each one in depth.

Likely strategic moves of rivals

Unless a company pays attention to what competitors are doing, it ends up flying blind into competitive battle. A company can't expect to outmanoeuvre its rivals without monitoring their actions, understanding their strategies, and anticipating what moves they are likely to make next. Competitive intelligence about the strategies rivals are deploying, their latest moves, their resource strengths and weaknesses, and the plans they have announced is essential to anticipating the actions they are likely to take next and what bearing their moves might have on a company's own best strategic moves.

Key factors for competitive success

Key Success Factors (KSFs) are those things that most affect industry members' ability to prosper in the marketplace - the particular strategy elements, product attributes, resources, competencies, competitive capabilities, and business outcomes that spell the difference between profit and loss and, ultimately, between competitive success or failure. KSFs by their very nature are so important that all firms in the industry must pay close attention to them.

Prospects and financial attractiveness of industry

The final step of industry and competitive analysis is to use the results of analysis of previous six issues to draw conclusions about the relative attractiveness or unattractiveness of the industry, both near-term and long-term. Strategists are obligated to assess the industry outlook carefully, deciding whether industry and competitive conditions present an attractive business opportunity for the company or whether the company's growth and profit prospects are gloomy.

12. Strategies provide an integral framework for management and negotiate their way through a complex and turbulent external environment. Strategy seeks to relate the goals of the organisation to the means of achieving them.

Strategy may be defined as a long range blueprint of an organisation's desired image, direction and destination what it wants to be, what it wants to do and where it wants to go. Strategy is meant to fill in the need of organisations for a sense of dynamic direction, focus and cohesiveness.

The Generic Strategies

According to Glueck and Jauch there are four generic ways in which strategic alternatives can be considered. These are stability, expansion, retrenchment and combinations.

- (i) **Stability strategies:** One of the important goals of a business enterprise is stability to safeguard its existing interests and strengths, to pursue well established and tested objectives, to continue in the chosen business path, to maintain operational efficiency on a sustained basis, to consolidate the commanding position already reached, and to optimise returns on the resources committed in the business.
 - (ii) **Expansion Strategy:** Expansion strategy is implemented by redefining the business by adding the scope of business substantially increasing the efforts of the current business. Expansion is a promising and popular strategy that tends to be equated with dynamism, vigor, promise and success. Expansion includes diversifying, acquiring and merging businesses.
 - (iii) **Retrenchment Strategy:** A business organisation can redefine its business by divesting a major product line or market. Retrenchment or retreat becomes necessary for coping with particularly hostile and adverse situations in the environment and when any other strategy is likely to be suicidal. In business parlance also, retreat is not always a bad proposition to save the enterprise's vital interests, or even to regroup and recoup the resources before a fresh assault and ascent on the growth ladder is launched.
 - (iv) **Combination Strategies:** Stability, expansion or retrenchment strategies are not mutually exclusive. It is possible to adopt a mix to suit particular situations. An enterprise may seek stability in some areas of activity, expansion in some and retrenchment in the others. Retrenchment of ailing products followed by stability and capped by expansion in some situations may be thought of. For some organisations, a strategy by diversification and/or acquisition may call for a retrenchment in some obsolete product lines, production facilities and plant locations.
13. A typical external analysis will emerge with dozens of strategic uncertainties. To be manageable, they need to be grouped into logical clusters or themes. It is then useful to assess the importance of each cluster in order to set priorities with respect to Information gathering and analysis.

Sometimes the strategic uncertainty is represented by a future trend or event that has inherent unpredictability. Information gathering and additional analysis will not be able to reduce the uncertainty. In that case, scenario analysis can be employed. Scenario

analysis basically accepts the uncertainty as given and uses it to drive a description of two or more future scenarios. Strategies are then developed for each. One outcome could be a decision to create organizational and strategic flexibility so that as the business context changes the strategy will adapt.

14. There are at least three major R&D approaches for implementing strategies. The first strategy is to be the first firm to market new technological products. This is a glamorous and exciting strategy but also a dangerous one. Firms such as 3M and General Electric have been successful with this approach, but many other pioneering firms have fallen, with rival firms seizing the initiative.

A second R&D approach is to be an innovative imitator of successful products, thus minimizing the risks and costs of start up. This approach entails allowing a pioneer firm to develop the first version of the new product and to demonstrate that a market exists. Then, laggard firms develop a similar product. This strategy requires excellent R&D personnel and an excellent marketing department.

A third R&D strategy is to be a low-cost producer by mass-producing products similar to but less expensive than products recently introduced. As a new product accepted by customers, price becomes increasingly important in the buying decision. Also, mass marketing replaces personal selling as the dominant selling strategy. This R&D strategy requires substantial investment in plant and equipment, but fewer expenditures in R&D than the two approaches described earlier.

15. It is true that evaluating the worth of a business is central to strategy implementation. There are circumstances where it is important to evaluate the actual worth of the business. These circumstances can be wide and varied. At a higher level they may include acquisition, mergers or diversification. They may also include other situations such as fixing of share price in an issue. Acquisition, merger, retrenchment may require establishing the financial worth or cash value of a business to successfully implement such strategies.

Various methods for determining a business's worth can be grouped into three main approaches.

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

the firm's average net income for the preceding years. The third approach can be called the outstanding shares method whereby one has to simply multiply the number of shares outstanding by the market price per share and add a premium.

16. Management of organization's value chain or linkages provide 'leverage' and levels of performance which are difficult to match. The ability to co-ordinate the activities of specialist teams or departments may create competitive advantage through improving value for money in the product or service. Specialization of roles and responsibilities is common in most organizations and is one way in which high levels of competence in separate activities is achieved. However, it often results in a set of activities which are incompatible – different departments pulling in different directions - adding overall cost and/or diminishing value in the product or service.

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

- There may be important linkages between the primary activities. For example, a decision to hold high levels of finished stock might ease production scheduling problems and provide for a faster response time to the customer. However, it will probably add to the overall cost of operations. An assessment needs to be made of whether the value added to the customer by this faster response through holding stocks is greater than the added cost.
- It is easy to miss this issue of managing linkages between primary activities in an analysis if, for example, the organization's competences in marketing activities and operations are assessed separately. The operations may look good because they are geared to high-volume, low-variety, low-unit-cost production. However, at the same time, the marketing team may be selling speed, flexibility and variety to the customers. So high levels of competence in separate activities are not enough if, as here, the competences are incompatible: that is, they are not related to the same view of what value for money means to the customer.
- 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.

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

- Vertical integration attempts to improve performance through ownership of more parts of the value system, making more linkages internal to the organization. However, the practical difficulties and costs of co-ordinating a wider range of internal activities can outweigh the theoretical benefits.
 - Within manufacturing industry the competence in closely specifying requirements and controlling the performance of suppliers (sometimes linked to quality checking and/or penalties for poor performance) can be critical to both quality enhancement and cost reduction.
17. Strategy implementation concerns the managerial exercise of putting a freshly chosen strategy into place. Strategy execution deals with the managerial exercise of supervising the ongoing pursuit of strategy, making it work, improving the competence with which it is executed and showing measurable progress in achieving the targeted results. Strategic implementation is concerned with translating a decision into action, with presupposes that the decision itself was made with some thought being given to feasibility and acceptability.

It is crucial to realize the difference between strategy formulation and strategy implementation because they both require very different skills. Also, a company will be successful only when the strategy formulation is sound and implementation is excellent. There is no such thing as successful strategic design. This sounds obvious, but in practice the distinction is not always made. The matrix in the figure below represents various combinations of strategy formulation and implementation:

Strategy formulation	Sound	<i>A</i>	<i>B</i> (Success)
	Flawed	<i>C</i>	<i>D</i>
		Weak	Excellent
		Strategy implementation	

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
19. The impact of the Internet and the rapidly emerging e-commerce environment is substantial and widespread. The advent of the Internet and online networks is changing everything. Growing use of the Internet by businesses and consumers reshapes the economic landscape and alters traditional industry boundaries. Characteristics of E-commerce environment changing competitive scenario are as under:
- (a) The Internet makes it feasible for companies everywhere to compete in global markets. This is true especially for companies whose products are of good quality and can be shipped economically.

- (b) There are new e-Commerce strategic initiatives of existing rivals and new entrants in form of e-commerce rivals. The innovative use of the Internet adds a valuable weapon to the competitive arsenal of rival sellers, giving them yet another way to jockey for market position and manoeuvre for competitive advantage.
- (c) Entry barriers into the e-commerce world are relatively low. Relatively low entry barriers explain why there are already hundreds of thousands of newly formed e-commerce firms, with perhaps millions more to spring up around the world in years to come. In many markets and industries, entry barriers are low enough to make additional entry both credible and likely.
- (d) Increased bargaining power of customers to compare the products, prices and other terms and conditions of rival vendors. Online buyers gain bargaining power because they confront far fewer obstacles to comparing the products, prices, and shipping times of rival vendors.
- (e) Possibility for business organizations to locate the best suppliers across the world to gain cost advantage. The Internet makes it feasible for companies to reach beyond their borders to find the best suppliers and, further, to collaborate closely with them to achieve efficiency gains and cost savings. Organisations can extend their geographic search for suppliers and can collaborate electronically with chosen suppliers to systemise ordering and shipping of parts and components, improve deliveries and communicate speedily and efficiently.
- (f) Internet and PC technologies are advancing rapidly, often in uncertain and unexpected directions. There has been wide acceptance of new technologies such as tablets and smart phones. These devices have improved the availability of the internet creating new avenues for the business. Such changes are often bringing in new opportunities and challenges.
- (g) Faster diffusion of new technology and new idea across the world. Organisations in emerging countries and elsewhere can use the internet to monitor the latest technological developments and to stay abreast of what is transpiring in the developed markets.
- (h) The e-commerce environment demands that companies move swiftly. In the exploding e-commerce world, speed is a condition of survival. New developments occur on one front and then on another occur regularly.
- (i) E-commerce technology opens up a host of opportunities for reconfiguring industry and company value chains. Using the internet to link the orders of customers with the suppliers of components enables just-in-time delivery to manufacturers, slicing inventory costs and allowing production to match demand.
- (j) The Internet can be an economical means of delivering customer service. Organisations are discovering ways to deliver service in a centralised manner –

online or through telephone. Thus curtailing the need to keep company personnel at different locations or at the facilities of major customers.

- (k) The capital for funding potentially profitable e-commerce businesses is readily available. In the Internet age, e-commerce businesses have found it relatively easy to raise capital. Venture capitalists are quite willing to fund start-up enterprises provided they have a promising technology or idea, an attractive business model, and a well thoughtout strategic plan.
- (l) The needed e-commerce resource in short supply is human talent-in the form of both technological expertise and managerial know-how. While some e-commerce companies have their competitive advantage lodged in patented technology or unique physical assets or brand-name awareness, many are pursuing competitive advantage based on the expertise and intellectual capital of their personnel and on their organizational competencies and capabilities.