PAPER – 5: ADVANCED ACCOUNTING

PART – I: ANNOUNCEMENTS STATING APPLICABILITY & NON-APPLICABILITY FOR MAY, 2018 EXAMINATION

A. Applicable for May, 2018 Examination

I. Applicability of the Companies Act, 2013 and other Legislative Amendments

The relevant notified Sections of the Companies Act, 2013 and legislative amendments including relevant Notifications / Circulars / Rules / Guidelines issued by Regulating Authority up to 31st October, 2017 will be applicable for May, 2018 Examination.

II. Maintenance of Statutory Liquidity Ratio (SLR)

Section 24 and Section 56 of the Banking Regulation Act, 1949 – Maintenance of SLR and holdings of SLR in HTM category

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

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

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

III. Maintenance of Cash Reserve Ratio (CRR)

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

B. Not applicable for May, 2018 examination

Non-Applicability of Ind AS for May, 2018 Examination

The Ministry of Corporate Affairs has notified Companies (Indian Accounting Standards) Rules, 2015 on 16th February, 2015, for compliance by certain class of companies. These Ind AS are not applicable for May, 2018 Examination.

PART – II : QUESTIONS AND ANSWERS

QUESTIONS

Employee Stock Option Plans

1. PQ Ltd. grants 100 stock options to each of its 1,000 employees on 1-4-2015, conditional upon the employee remaining in the company for 2 years. The fair value of the option is ₹ 18 on the grant date and the exercise price is ₹ 55 per share. The other information is given as under:

   (i) Number of employees expected to satisfy service condition are 930 in the 1st year and 850 in the 2nd year.

   (ii) 40 employees left the company in the 1st year of service and 880 employees have actually completed 2 year vesting period.

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

Buy Back of Securities

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

Liabilities	Amount (₹)
Equity shares of ₹ 10 each, fully paid up	12,50,000
Bonus shares of ₹ 10 each, fully paid up	1,00,000
Share option outstanding Account	4,00,000
Revenue Reserve	15,00,000
Securities Premium	2,50,000
Profit & Loss Account	1,25,000
Capital Reserve	2,00,000
Unpaid dividends	1,00,000
12% Debentures (Secured)	18,75,000
Advance from related parties (Unsecured)	10,00,000
Current maturities of long term borrowings	16,50,000
Application money received for allotment due for refund	2,00,000
	86,50,000
Fixed Assets	46,50,000
Current Assets	40,00,000
	86,50,000

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

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

Equity Shares with Differential Rights

3. L, M, N and O hold Equity capital in the proportion of 30:30:20:20 in AB Ltd. X, Y, Z and K hold preference share capital in the proportion of 40:30:20:10.

*You are required to **identify** the voting rights of shareholders in case of resolution of winding up of the company if the paid-up capital of the company is ₹ 80 Lakh and Preference share capital is ₹ 40 Lakh.*

Underwriting of Shares and Debentures

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

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

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

   6,000 shares of one allottee who failed to pay the allotment money were finally forfeited by 30-06-2017 and were re-allotted for payment in cash of ₹ 4 per share.

   *You are required to **prepare** each underwriter's liability (in shares) in statement form assuming that benefit of firm underwriting is given to individual underwriter and to **prepare** necessary journal entries to record the above events and transactions (including cash).*

Amalgamation of Companies

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

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

Summarized balance sheets as at 31-03-2017

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

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

The profit had been:

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

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

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

You are required to:

(i) ***Calculate*** *the number of shares issued to P Ltd. and Q Ltd; and*

(ii) ***Prepare*** *required journal entries in the books of PQ Ltd.; and*

(iii) ***Prepare*** *the Balance Sheet of PQ Ltd. as per Schedule III after recording the necessary journal entries.*

Internal Reconstruction of a Company

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

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

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

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

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

(1) Uncalled capital is to be called up in full and then all the shares to be converted into Equity Shares of ₹ 40 each.

(2) The existing shareholders agree to subscribe in cash, fully paid up equity shares of 40 each for ₹ 12,50,000.

(3) Trade creditors are given option of either to accept fully paid equity shares of ₹ 40 each for the amount due to them or to accept 70% of the amount due to them in cash in full settlement of their claim. Trade creditors for ₹ 7,50,000 accept equity shares and rest of them opted for cash towards full and final settlement of their claim.

(4) Mr. A agrees to cancel debentures amounting to ₹ 2,00,000 out of total debentures due to him and agree to accept 15% Debentures for the balance amount due. He also agree to subscribe further 15% Debentures in cash amounting to ₹ 1,00,000.

(5) Mr. B agrees to cancel debentures amounting to ₹ 50,000 out of total debentures due to him and agree to accept 15% Debentures for the balance amount due.

(6) Land & Building to be revalued at ₹ 51,84,000, Machinery at ₹ 7,20,000, Computers at ₹ 4,00,000, Inventories at ₹ 3,50,000 and Trade receivables at 10% less to as they are appearing in Balance Sheet as above.

(7) Outstanding Expenses are fully paid in cash.

(8) Profit & Loss A/c will be written off and balance, if any, of Capital Reduction A/c will be adjusted against Capital Reserve.

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

Liquidation of a Company

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

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

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

Unsecured Creditors ₹ 99,000

Liquidation Expenses ₹ 1,000

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

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

Financial Statements of Insurance Companies

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

(i) On 31.03.16, it had reserve for unexpired risks amounting to ₹ 80 crores. Its composition was as under:

(a) ₹ 30 crores in respect of Marine insurance business

(b) ₹ 40 crores in respect of Fire insurance business and

(c) ₹ 10 crores in respect of Miscellaneous insurance business

(ii) Long Live Insurance Co. Ltd. reserves 100% of net premium income in respect of Marine insurance business and 50% of net premium income in respect of Fire and Miscellaneous income policies.

(iii) During 2016-17, the following business was conducted:

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

Financial Statements of Banking Companies

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

	₹
Interest and discount received	59,29,180
Interest paid on deposits	32,59,920
Issued and subscribed capital	16,00,000
Salaries and allowances	3,20,000

Directors fee and allowances	48,000
Rent and taxes paid	1,44,000
Postage and telegrams	96,460
Statutory reserve fund	12,80,000
Commission, exchange and brokerage	3,04,000
Rent received	1,04,000
Profit on sale of investments	3,20,000
Depreciation on bank's properties	48,000
Statutory expenses	44,000
Preliminary expenses	40,000
Auditor's fee	28,000

The following further information is given:

(i) A customer to whom a sum of ₹ 16 lakhs has been advanced has become insolvent and it is expected only 40% can be recovered from his estate.

(ii) There were also other debts for which a provision of ₹ 2,10,000 was found necessary by the auditors.

(iii) Rebate on bills discounted on 31.3.2016 was ₹ 19,000 and on 31.3.2017 was ₹ 25,000.

(iv) Preliminary expenses are to be fully written off during the year.

(v) Provide ₹ 9,00,000 for Income-tax.

(vi) Profit and Loss account opening balance was Nil as on 31.3.2016.

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

NBFCs

10. While closing its books of account on 31st March, 2017 a Non-Banking Finance Company has its advances classified as follows:

	₹ in lakhs
Standard assets	53,600
Sub-standard assets	2,680
Secured portions of doubtful debts:	
– Up to one year	640
– one year to three years	180
– more than three years	60
Unsecured portions of doubtful debts	194
Loss assets	96

Calculate *the amount of provision, which must be made against the Advances as per the Non-Banking Financial Company – Non-Systemically Important Non-Deposit taking Company (Reserve Bank) Directions, 2016.*

Mutual Funds

11. Amar has invested in two mutual funds. From the details given below, you are required to calculate effective yield on per annum basis in respect of each of the schemes to Amar up to 31.03.2017.

Mutual Fund	X	Y
Date of Investment	1-12-2016	1-1-2017
Amount of investment (₹)	2,00,000	4,00,000
NAV at the date of investment (₹)	10.50	10.00
Dividend received upto 31-3-2017 (₹)	3,800	6,000
NAV as on 31-3-2017 (₹)	10.40	10.10

Valuation of Goodwill

12. The following is the summarized Balance Sheet of Alpha Ltd. as at 31st March, 2017:

Liabilities	*(₹ in lakhs)*	*Assets*	*(₹ in lakhs)*
Share Capital:		Fixed Assets:	
Equity shares of ₹ 10 each	200.00	Land and buildings	100.00
9% Preference share fully paid up	40.00	Plant and machinery	321.00
Reserve and Surplus:		Furniture and fixture	22.00
General reserve	48.00	Vehicles	20.00
Profit and Loss	121.60	Investments	40.00
Secured loans:		Inventory	27.00
10% Debentures	20.00	Trade Receivables	19.60
12% Term loan	72.00	Cash and bank	41.60
Trade Payables	64.00		
Provision for taxation	25.60		
	591.20		591.20

Non-trade investments were 20% of the total investments.

Balances as on 1.4.2016 to the following accounts were as: Profit and Loss account ₹ 43.20 lakhs, General reserve ₹ 46 lakhs.

Alpha Ltd. desires to value goodwill. For the purpose of valuation of goodwill, the company requires you to ***calculate average capital employed****.*

Consolidated Financial Statements

13. Given below are the Profit & Loss Accounts of Hello Ltd. and its subsidiary Sun Ltd. for the year ended 31st March, 2017:

	Hello Ltd. (*₹ in lacs*)	Sun Ltd. (*₹ in lacs*)
Incomes:		
Sales and other income	10,000	2,000
Increase in Inventory	2,000	400
	12,000	2,400
Expenses:		
Raw material consumed	1,600	400
Wages and Salaries	1,600	300
Production expenses	400	200
Administrative Expenses	400	200
Selling and Distribution Expenses	400	100
Interest	200	100
Depreciation	200	100
	4,800	1,400
Profit before tax	7,200	1,000
Provision for tax	2,400	400
Profit after tax	4,800	600
Dividend paid	2,400	300
Balance of Profit	2,400	300

Other Information:

Hello Ltd. sold goods to Sun Ltd. of ₹ 240 lacs at cost plus 20%. Inventory of Sun Ltd. includes such goods valuing ₹ 48 lacs. Administrative expenses of Sun Ltd. include ₹ 10 lacs paid to Hello Ltd. as consultancy fees. Selling and distribution expenses of Hello Ltd. include ₹ 20 lacs paid to Sun Ltd. as commission.

Hello Ltd. holds 80% of equity share capital of ₹ 2,000 lacs in Sun Ltd. prior to 2015-2016. Hello Ltd. took credit to its Profit and Loss Account, the proportionate amount of dividend declared and paid by Sun Ltd. for the year 2015-2016.

*You are required to **prepare** a consolidated profit and loss account of Hello Ltd. and its subsidiary Sun Ltd. for the year ended 31st March, 2017.*

Guidance Notes

14. How will a company classify its investment in preference shares, which are convertible into equity shares within one year from the balance sheet date? Will it classify the investment as a current asset or a non-current asset? **Explain.**

Accounting Standards

AS 7 Construction Contracts

15. (a) Uday Constructions undertake to construct a·bridge for the Government of Uttar Pradesh. The construction commenced during the financial year ending 31.03.2016 and is likely to be completed by the next financial year. The contract is for a fixed price of ₹ 12 crores with an escalation clause. The costs to complete the whole contract are estimated at ₹ 9.50 crores of rupees. You are·given the following information for the year ended 31.03.2016:

Cost incurred upto 31.03.2016 ₹ 4 crores

Cost estimated to complete the contract ₹ 6 crores

Escalation in cost by 5% and accordingly the contract price is increased by 5%.

*You are required to **identify** the state of completion and **calculate** the revenue and profit to be recognized for the year as per AS 7.*

AS 9 Revenue Recognition

(b) A manufacturing company has the following stages of production and sale in manufacturing fine paper rolls:

Date	Activity	Cost to Date (₹)	Net Realizable Value (₹)
15.1.16	Raw Material	1,00,000	80,000
20.1.16	Pulp (WIP 1)	1,20,000	1,20,000
27.1.16	Rough & thick paper (WIP 2)	1,50,000	1,80,000
15.2.16	Fine Paper Rolls	1,80,000	3,50,000
20.2.16	Ready for sale	1,80,000	3,50,000
15.3.16	Sale agreed and invoice raised	2,00,000	3,50,000
02.4.16	Delivered and paid for	2,00,000	3,50,000

***Explain** the stage on which you think revenue will be generated and **calculate** how much would be net profit for year ending 31.3.16 on this product as per AS 9.*

AS 18 Related Party Disclosures

16. (a) Is remuneration paid to Board of Directors a related party transaction? **Explain.**

AS 19 Leases

(b) 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 **calculate** the amount of the annual lease payment and the unearned finance income.* Discounting Factor at 10% for years 1, 2 and 3 are 0.909, 0.826 and 0.751 respectively.

AS 20 Earnings Per Share

17. The following information relates to M/s. XYZ Limited for the year ended 31st March, 2017:

Net Profit for the year after tax: ₹ 75,00,000

Number of Equity Shares of ₹ 10 each outstanding: ₹ 10,00,000

Convertible Debentures Issued by the Company (at the beginning of the year)

Particulars	Nos.
8% Convertible Debentures of ₹ 100 each	1,00,000
Equity Shares to be issued on conversion	1,10,000

The Rate of Income Tax: 30%.

*You are required to **calculate** Basic and Diluted Earnings Per Share (EPS).*

AS 24 Discontinuing Operations

18. A consumer goods producer has changed the product line as follows:

	Dish washing Bar (Per month)	*Clothes washing Bar (Per month)*
January 2016 - September 2016	2,00,000	2,00,000
October 2016 - December 2016	1,00,000	3,00,000
January 2017 - March 2017	Nil	4,00,000

The company has enforced a gradual enforcement of change in product line on the basis of an overall plan. The Board of Directors has passed a resolution in March 2016 to this effect. The company follows calendar year as its accounting year.

*You required to **advise** the company whether it should be treated as discontinuing operation or not as per AS 24?*

AS 26 Intangible Assets

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

    *You are required to **advise** the Company as per the applicable Accounting Standard.*

AS 29 Provisions, Contingent Liabilities and Contingent Assets

20. The company has not made provision for warrantee in respect of certain goods considering that the company can claim the warranty cost from the original supplier.

    *You are required to **examine** in line with the provisions of AS 29.*

ANSWERS

1. Calculation of ESOP cost to be amortized

	2015-2016	*2016-2017*
Fair value of options per share	₹ 18	₹ 18
No. of options expected to vest under the scheme	93,000 (930 x 100)	88,000 (880 x 100)
Fair value of options	₹ 16,74,000	₹ 15,84,000
Value of options recognized as expenses	(₹ 16,74,000 / 2) 8,37,000	(₹ 15,84,000 – ₹ 8,37,000) 7,47,000

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

Journal Entries for buy-back of shares

			Debit (₹)	*Credit (₹)*
(a)	Equity shares buy-back account	Dr.	5,00,000	
	To Bank account			5,00,000

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

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

Particulars	*Note No*	*Amount* ₹
EQUITY AND LIABILITIES		
1 **Shareholders' funds**		
(a) Share capital	1	11,00,000
(b) Reserves and Surplus	2	22,25,000
2 **Non-current liabilities**		
(a) Long-term borrowings	3	28,75,000
3 **Current liabilities**		
(a) Other current liabilities	4	19,50,000
Total		81,50,000
ASSETS		
1 **Non-current assets**		
(a) Fixed assets		46,50,000
2 Current assets (40,00,000-5,00,000)		35,00,000
Total		81,50,000

Notes to Accounts

		₹	₹
1.	Share Capital		
	Equity share capital		
	1,10,000 Equity shares of ₹10 each		11,00,000

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

3. L, M, N and O hold Equity capital is held by in the proportion of 30:30:20:20 and X, Y, Z and K hold preference share capital in the proportion of 40:30:20:10. As the paid-up equity share capital of the company is ₹ 80 Lakhs and Preference share capital is ₹ 40 Lakh (2:1), then relative weights in the voting right of equity shareholders and preference shareholders will be 2/3 and 1/3. The respective voting right of various shareholders will be

L = 2/3X30/100 = 3/15

M = 2/3X30/100 = 3/15

N = 2/3X20/100 = 2/15

O = 2/3X20/100 = 2/15

X = 1/3X40/100 = 2/15

Y = 1/3X30/100 = 1/10

Z = 1/3X20/100 = 1/15

K = 1/3X10/100 = 1/30

4. Statement showing liability of underwriters

	Particulars	*Basis*	*White*	*Black*
A.	Gross Liability [No. of Shares)	1:1	15,00,000	15,00,000

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

Journal Entries

2017				
Jan 31	Bank A/c	Dr.	72,00,000	
	To Equity Share Application A/c			72,00,000
	(Being application money received @ ₹ 2.50 per share on 28,80,000 shares)			
March 31	Equity Share Application A/c	Dr.	72,00,000	
	To Equity Share Capital A/c			72,00,000
	(Being the transfer of application money to share capital on 28,80,000 shares vide Board's Resolution)			
March 31	Equity Share Allotment A/c (28,80,000 x ₹ 3)	Dr.	86,40,000	
	To Equity Share Capital A/c (28,80,000x ₹ 2.5)			72,00,000
	To Securities Premium A/c (28,80,000 x ₹ 0.5)			14,40,000
	(Being allotment money due on 28,80,000 shares allotted to public)			
	Black (1,20,000 x ₹ 5.5)	Dr.	6,60,000	
	To Equity Share Capital A/c (1,20,000 x ₹ 5)			6,00,000
	To Securities Premium A/c (1,20,000 x ₹ 0.5)			60,000

	(Being the application and allotted money due on net liability of underwriter i.e. 1,20,000 shares)			
March 31	Bank A/c	Dr.	92,82,000	
	To Equity Share Allotment A/c [(28,80,000 – 6,000) x ₹ 3]			86,22,000
	To Black (1,20,000 x ₹ 5.5)			6,60,000
	(Being the receipt of money due on allotment except from the allottee for 6,000 shares)			
March 31	Underwriting Commission A/c	Dr.	12,60,000	
	To Black A/c			6,30,000
	To White A/c			6,30,000
	(Being commission @ 4 % on issue price of ₹ 10.50 for ₹30 lakh shares payable to underwriters)			
March 31	Black A/c		6,30,000	
	White A/c		6,30,000	
	To Bank A/c			12,60,000
	(Being commission paid to underwriters)			
June 30	Equity Share Capital A/c (6,000 x 5)	Dr.	30,000	
	Securities Premium A/c (6,000 x 0.5)	Dr.	3,000	
	To Share Allotment A/c (6,000 x 3)			18,000
	To Forfeited Shares A/c (6,000 x 2.5)			15,000
	(Being 6,000 shares forfeited vide Board's Resolution)			
June 30	Bank A/c (6,000 x ₹ 4)	Dr.	24,000	
	Forfeited Shares A/c	Dr.	6,000	
	To Equity Share Capital A/c (6,000 x ₹ 5)			30,000
	(Being the reissue of 6,000 shares @ ₹ 4 as ₹ 5 paid up at par)			
	Forfeited Shares A/c (15,000 – 6,000)	Dr.	9,000	
	To Capital Reserve A/c			9,000
	(Being the transfer of profit on reissue)			

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

	₹
Amount of Share Capital as per balance sheet	
P Ltd.	6,00,000
Q Ltd.	8,40,000
	14,40,000

Share of P Ltd. = ₹ 14,40,000 x [21,60,000/ (21,60,000 + 14,40,000)]

= ₹ 8,64,000 or 86,400 shares

Securities premium = ₹ 21,60,000 – ₹ 8,64,000 = ₹ 12,96,000

Premium per share = ₹ 12,96,000 / ₹ 86,400 = ₹ 15

Issued 86,400 shares @ ₹ 10 each at a premium of ₹ 15 per share

Share of Q Ltd. = ₹ 14,40,000 x [14,40,000/ (21,60,000 + 14,40,000)]

= ₹ 5,76,000 or 57,600 shares

Securities premium = ₹ 14,40,000 – ₹ 5,76,000 = ₹ 8,64,000

Premium per share = ₹ 8,64,000 / ₹ 57,600 = ₹ 15

Issued 57,600 shares @ ₹ 10 each at a premium of ₹ 15 per share

(ii) Journal Entries in the books of PQ Ltd.

		Dr.	Cr.
Particulars		*Amount (₹)*	*Amount (₹)*
Business purchase account	Dr.	36,00,000	
To Liquidator of P Ltd. account			21,60,000
To Liquidator of Q Ltd. account			14,40,000
(Being the amount of purchase consideration payable to liquidator of P Ltd. and Q Ltd. for assets taken over)			
Goodwill	Dr.	5,40,000	
Fixed assets account	Dr.	7,20,000	
Inventory account	Dr.	3,60,000	
Trade receivables account	Dr.	4,80,000	
Cash at bank	Dr.	3,00,000	
To Trade payables account			2,40,000
To Business purchase account			21,60,000
(Being assets and liabilities of P Ltd. taken over)			
Fixed assets account	Dr.	10,80,000	
Inventory account	Dr.	6,60,000	

Trade receivables account	Dr.	7,80,000	
To bank overdraft account			5,40,000
To Trade payables account			5,40,000
To Business purchase account			14,40,000
(Being assets and liabilities of Q Ltd. taken over)			
Liquidator of P Ltd. Account	Dr.	21,60,000	
To Equity share capital account (86,400 x ₹ 10)			8,64,000
To Securities premium (86,400 x ₹ 15)			12,96,000
(Being the allotment of shares as per agreement for discharge of purchase consideration)			
Liquidator of Q Ltd. account	Dr.	14,40,000	
To Equity share capital account (57,600 x ₹ 10)			5,76,000
To Securities premium (57,600 x ₹ 15)			8,64,000
(Being the allotment of shares as per agreement for discharge of purchase consideration)			
Bank A/c		18,00,000	
To Equity share capital account			7,20,000
To Securities premium			10,80,000
(Equity share capital issued to raise working capital)			

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

		Particulars	*Notes*	*₹*
		Equity and Liabilities		
1		Shareholders' funds		
	a	Share capital	1	21,60,000
	b	Reserves and Surplus	2	32,40,000
2		Current liabilities		
	a	Trade payables (2,40,000 + 5,40,000)		7,80,000
		Total		61,80,000
		Assets		
1		Non-current assets		
	a	Fixed assets		

		Tangible assets (7,20,000 + 10,80,000)		18,00,000
		Intangible assets (goodwill)	4	5,40,000
2		Current assets		
	a	Inventories (3,60,000 + 6,60,000)		10,20,000
	b	Trade receivables (4,80,000 +7,80,000)		12,60,000
	c	Cash and cash equivalents	3	15,60,000
		Total		61,80,000

Notes to accounts

		₹
1	**Share Capital**	
	Issued, subscribed and paid up share capital	
	2,16,000 Equity shares of ₹10 each	21,60,000
	(Out of the above 1,44,000 shares issued for non-cash consideration under scheme of amalgamation)	
2	**Reserves and Surplus**	
	Securities premium	32,40,000
	(@₹15 for 2,16,000 shares)	
3	**Cash and cash equivalents**	
	Cash at Bank	15,60,000
4	**Intangible Assets**	
	Goodwill	5,40,000

Working Notes:

1. **Calculation of goodwill of P Ltd.**

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

2. **Calculation of Net assets**

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

3. **New authorized capital**

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

4. **Cash and Cash equivalents**

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

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

6. **Journal Entries**

		₹	₹
Bank A/c	Dr.	10,00,000	
To Equity share capital A/c			10,00,000
(Being money on final call received)			
Equity share capital (₹ 50) A/c	Dr.	75,00,000	
To Equity share capital (₹ 40) A/c			60,00,000
To Capital Reduction A/c			15,00,000
(Being conversion of equity share capital of ₹ 50 each into ₹ 40 each as per reconstruction scheme)			
Bank A/c	Dr.	12,50,000	
To Equity Share Capital A/c			12,50,000
(Being new shares allotted at ₹ 40 each)			

Trade payables A/c	Dr.	12,40,000	
To Equity share capital A/c			7,50,000
To Bank A/c (4,90,000 x 70%)			3,43,000
To Capital Reduction A/c			1,47,000
(Being payment made to creditors in shares or cash to the extent of 70% as per reconstruction scheme)			
8% Debentures A/c	Dr.	3,00,000	
12% Debentures A/c	Dr.	4,00,000	
To A A/c			7,00,000
(Being cancellation of 8% and 12% debentures of A)			
A A/c	Dr.	7,00,000	
To 15% Debentures A/c			5,00,000
To Capital Reduction A/c			2,00,000
(Being issuance of new 15% debentures and balance transferred to capital reduction account as per reconstruction scheme)			
Bank A/c	Dr.	1,00,000	
To 15% Debentures A/c			1,00,000
(Being new debentures subscribed by A)			
8% Debentures A/c	Dr.	1,00,000	
12% Debentures A/c	Dr.	2,00,000	
To B A/c			3,00,000
(Being cancellation of 8% and 12% debentures of B)			
B A/c	Dr.	3,00,000	
To 15% Debentures A/c			2,50,000
To Capital Reduction A/c			50,000
(Being issuance of new 15% debentures and balance transferred to capital reduction account as per reconstruction scheme)			
Land and Building (51,84,000 – 42,70,000)	Dr.	9,14,000	
Inventories	Dr.	30,000	
To Capital Reduction A/c			9,44,000

(Being value of assets appreciated)			
Outstanding expenses A/c	Dr.	10,60,000	
To Bank A/c			10,60,000
(Being outstanding expenses paid in cash)			
Capital Reduction A/c	Dr.	33,41,000	
To Machinery A/c			1,30,000
To Computers A/c			1,20,000
To Trade receivables A/c			1,09,000
To Profit and Loss A/c			29,82,000
(Being amount of Capital Reduction utilized in writing off P & L A/c (Dr.) balance and downfall in value of other assets)			
Capital Reserve A/c	Dr.	5,00,000	
To Capital Reduction A/c			5,00,000
(Being debit balance of capital reduction account adjusted against capital reserve)			

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

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

Notes to accounts

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

Working Notes:

1. **Cash at Bank Account**

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

2. **Capital Reduction Account**

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

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

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

Working Notes:

(i) **Calculation of Shortage of funds**	₹
Total Amount Available	3,80,400
Less: liquidation Expenses	(1,000)
Balance	3,79,400
Less: Unsecured Creditors	(99,000)
Balance	2,80,400
Less: Pref. Shareholders	(3,00,000)
Shortage of Funds	19,600

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

$$\text{Shortage of funds} \times \frac{100}{100 - \text{Rate of Commission}} = ₹\,19{,}600 \times \frac{100}{100-2}$$

$$= \frac{₹19{,}600 \times 100}{98} = ₹\,20{,}000$$

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

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

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

8. **In the books of Long Live Insurance Co. Ltd.**

Journal Entries

Date	*Particulars*		*(₹ in crores)*	
			Dr.	*Cr.*
1.4.2016	Unexpired Risk Reserve (Fire) A/c	Dr.	40.00	

	Unexpired Risk Reserve (Marine) A/c	Dr.	30.00	
	Unexpired Risk Reserve (Miscellaneous) A/c	Dr.	10.00	
	To Fire Revenue Account			40.00
	To Marine Revenue Account			30.00
	To Miscellaneous Revenue Account			10.00
	(Being unexpired risk reserve brought forward from last year)			
31.3.2017	Marine Revenue A/c	Dr.	30	
	To Unexpired Risk Reserve(Marine) A/c			30
	(Being closing reserve for unexpired risk created at 100% of net premium income for marine)			
	Fire Revenue A/c	Dr.	43	
	To Unexpired Risk Reserve(Fire) A/c			43
	(Being closing reserve for unexpired risk created at 50% of net premium income for Fire)			
	Miscellaneous Revenue A/c	Dr.	8.5	
	To Unexpired Risk Reserve(Misc.) A/c			8.5
	(Being closing reserve for unexpired risk created at 50% net premium income for Misc.)			

Working Note:

Calculation of Closing balance of Reserve for Unexpired Risks

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

9. **TOP Bank Limited**

Profit and Loss Account for the year ended 31st March, 2017

		Schedule	*Year ended 31.03.2017*
			(₹ in '000s)
I.	**Income:**		
	Interest earned	13	5923.18
	Other income	14	728.00
	Total		6,651.18
II.	**Expenditure**		
	Interest expended	15	3259.92
	Operating expenses	16	768.46
	Provisions and contingencies (960+210+900)		2,070.00
	Total		6,098.38
IIII.	**Profits/Losses**		
	Net profit for the year		552.80
	Profit brought forward		nil
			552.80
IV.	**Appropriations**		
	Transfer to statutory reserve (25%)		138.20
	Balance carried over to balance sheet		414.60
			552.80

		Year ended 31.3. 2017 (₹ in '000s)
	Schedule 13 – Interest Earned	
I.	Interest/discount on advances/bills (Refer W.N.)	5923.18
		5923.18
	Schedule 14 – Other Income	
I.	Commission, exchange and brokerage	304
II.	Profit on sale of investments	320
III.	Rent received	104
		728
	Schedule 15 – Interest Expended	
I.	Interests paid on deposits	3259.92

	Schedule 16 – Operating Expenses	
I.	Payment to and provisions for employees	320
II.	Rent and taxes	144
III.	Depreciation on bank's properties	48
IV.	Director's fee, allowances and expenses	48
V.	Auditors' fee	28
VI.	Law (statutory) charges	44
VII.	Postage and telegrams	96.46
VIII.	Preliminary expenses	40
		768.46

Working Note:

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

10. Calculation of provision required on advances as on 31st March, 2017:

	Amount ₹ in lakhs	*Percentage of provision*	*Provision ₹ in lakhs*
Standard assets	53,600	.25	134.00
Sub-standard assets	2,680	10	268.00
Secured portions of doubtful debts			
–up to one year	640	20	128.00
–one year to three years	180	30	54.00
–more than three years	60	50	30.00
Unsecured portions of doubtful debts	194	100	194.00
Loss assets	96	100	96.00
			904.00

11. Calculation of effective yield on per annum basis in respect of two mutual fund schemes up to 31.03.2017

		X	Y
1	Amount of Investment (₹)	2,00,000	4,00,000
2	Date of investment	1.12.2016	1.1.2017
3	NAV at the date of investment (₹)	10.50	10.00
4	No. of units on date of investment [1/3]	19,047.62	40,000
5	NAV per unit on 31.03.2017 (₹)	10.40	10.10
6	Total NAV of mutual fund investments on 31.03.2017 [4 x 5]	1,98,095.25	4,04,000
7	Increase/ decrease of NAV [6-1]	(1,904.75)	4,000
8	Dividend received up to 31.3.2017	3,800	6,000
9	Total yield [7+8]	1,895.25	10,000
10	Yield % [9/1] x 100	0.95%	2.5%
11	Number of days from date of investment	121	90
12	Effective yield p.a. [10/11] x 365 days	2.87%	10.14%

12. Computation of Average Capital employed

		(₹ in lakhs)
Total Assets as per Balance Sheet		591.20
Less: Non-trade investments (20% of ₹40 lakhs)		(8.00)
		583.20
Less: Outside Liabilities:		
10% Debentures	20.00	
12% Term Loan	72.00	
Trade Payables	64.00	
Provision for Taxation	25.60	(181.60)
Capital Employed as on 31.03.2017		401.60
Less: ½ of profit earned during the year:		
Increase in General Reserve balance	2.00	
Increase in Profit & Loss A/c	78.40	
	80.40 /2	40.20
Average capital employed		361.40

13. **Consolidated Profit & Loss Account of Hello Ltd. and its subsidiary Sun Ltd. for the year ended on 31st March, 2017**

Particulars	*Note No.*	*₹ in Lacs*
I. Revenue from operations	1	11,730
II. Total revenue		11,730
III. Expenses		
Cost of Material purchased/Consumed	3	2,360
Changes of Inventories of finished goods	2	(2,392)
Employee benefit expense	4	1,900
Finance cost	6	300
Depreciation and amortization expense	7	300
Other expenses	5	1,070
Total expenses		3,538
IV. Profit before Tax(II-III)		8,192
V. Tax Expenses	8	2,800
VI. Profit After Tax		5,392
Profit transferred to Consolidated Balance Sheet		
Profit After Tax		5,392
Dividend paid		
Hello Ltd.	2,400	
Sun Ltd.	300	
	2,700	
Less: Share of Hello Ltd. in dividend of Sun Ltd.		
80% of ₹ 300 lacs	(240)	(2,460)
Profit to be transferred to consolidated balance sheet		2,932

Notes to Accounts

		₹ in Lacs	*₹ in Lacs*
1.	Revenue from Operations		
	Sales and other income		
	Hello Ltd.	10,000	
	Sun Ltd.	2,000	
		12,000	

	Less: Inter-company Sales	(240)	
	Consultancy fees received by Hello Ltd. from Sun Ltd.	(10)	
	Commission received by Sun Ltd. from Hello Ltd.	(20)	11,730
2.	Increase in Inventory		
	Hello Ltd.	2,000	
	Sun Ltd.	400	
		2,400	
	Less: Unrealized profits ₹48 lacs × $\frac{20}{120}$	(8)	2,392
			14,122
3.	Cost of Material purchased/consumed		
	Hello Ltd.	1,600	
	Sun Ltd.	400	
		2,000	
	Less: Purchases by Sun Ltd. from Hello Ltd.	(240)	1,760
	Direct Expenses		
	Hello Ltd.	400	
	Sun Ltd.	200	600
			2,360
4.	Employee benefits and expenses		
	Wages and Salaries:		
	Hello Ltd.	1,600	
	Sun Ltd.	300	1,900
5.	Other Expenses		
	Administrative Expenses		
	Hello Ltd.	400	
	Sun Ltd.	200	
		600	
	Less: Consultancy fees received by Hello Ltd. from Sun Ltd.	(10)	590
	Selling and Distribution Expenses:		
	Hello Ltd.	400	

	Sun Ltd.	100	
		500	
	Less: Commission received from Sun Ltd. from Hello Ltd.	(20)	480
			1,070
6.	Finance Cost		
	Interest:		
	Hello Ltd.	200	
	Sun Ltd.	100	300
7.	Depreciation and Amortization		
	Depreciation:		
	Hello Ltd.	200	
	Sun Ltd.	100	300
8.	Provision for tax		
	Hello Ltd.	2,400	
	Sun Ltd.	400	2,800

Note: Since the amount of dividend received by Hello Ltd. for the year 2015-2016 is not given, it has not been deducted from 'sales and other income' in consolidated profit and loss account and not added to consolidated opening retained earnings (which is also not given).

14. In accordance with the Schedule III, an investment realizable within 12 months from the reporting date is classified as a current asset. Such realisation should be in the form of cash or cash equivalents, rather than through conversion of one asset into another non-current asset. Hence, company must classify such an investment as a non-current asset, unless it expects to sell the preference shares or the equity shares on conversion and realise cash within 12 months.

15. (a)

	₹ in crore
Cost of construction of bridge incurred 31.3.16	4.00
Add: Estimated future cost	6.00
Total estimated cost of construction	10.00
Contract Price (12 crore x 1.05)	12.60 crore

Stage of completion

Percentage of completion till date to total estimated cost of construction

= $(4/10)\times100 = 40\%$

Revenue and Profit to be recognized for the year ended 31st March, 2016 as per AS 7

Proportion of total contract value recognized as revenue = Contract price x percentage of completion

=₹ 12.60 crore x 40% =₹ 5.04 crore

Profit for the year ended 31st March, 2016 = ₹ 5.04 crore less ₹ 4 crore = 1.04 crore

(b) According to AS 9 "Revenue Recognition", in a transaction involving the sale of goods, performance should be regarded as being achieved when the following conditions have been fulfilled:

(i) the seller of goods has transferred to the buyer the property in the goods for a price or all significant risks and rewards of ownership have been transferred to the buyer and the seller retains no effective control of the goods transferred to a degree usually associated with ownership; and

(ii) no significant uncertainty exists regarding the amount of the consideration that will be derived from the sale of the goods.

Thus, sales will be recognized only when following two conditions are satisfied:

(i) The sale value is fixed and determinable.

(ii) Property of the goods is transferred to the customer.

Both these conditions are satisfied only on 15.3.2016 when sales are agreed upon at a price and goods are allocated for delivery purpose through invoice. The amount of net profit ₹ 1,50,000 (3,50,000 – 2,00,000) would be recognized in the books for the year ending 31st March, 2016.

16. (a) In case of a Company, the Managing Director, whole time director, manager and any person in accordance with whose directions or instructions the board of directors of the company is accustomed to act, are usually considered Key Managerial Personnel (KMP).

Persons who do not have the authority and responsibility for planning, directing and controlling the activities of the enterprise would not be KMP. Conversely, persons without any formal titles may be considered to be KMP, if they plan, direct and control the activities of the enterprise.

Further, as per Sec 2(76) of Companies Act, 2013, a related party includes a director or his relative. Sec 2(34) defines a director as a director appointed to the Board of a Company.

Hence, remuneration paid to Board of Directors will be considered as related party transaction.

(b) (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
Add: Unguaranteed residual value	1,33,500
Gross investment in the lease	20,64,000.00
Less: Present value of investment (lease payments and residual value) (₹ 1,00,258.5+ ₹ 15,99,741)	(16,99,999.50)
Unearned finance income	3,64,000.50

17. Computation of basic earnings per share

Net profit for the current year / Weighted average number of equity shares outstanding during the year

₹ 75,00,000 / 10,00,000 = ₹ 7.50 per share

Computation of diluted earnings per share $\frac{\text{Adjusted net profit for the current year}}{\text{Weighted average number of equity shares}}$

Adjusted net profit for the current year

	₹
Net profit for the current year	75,00,000
Add: Interest expense for the current year	8,00,000
Less: Tax relating to interest expense (30% of ₹ 8,00,000)	(2,40,000)
Adjusted net profit for the current year	80,60,000

Number of equity shares resulting from conversion of debentures

= 1,10,000 Equity shares (given in the question)

Weighted average number of equity shares used to compute diluted earnings per share

= 11,10,000 shares (10,00,000 + 1,10,000)

Diluted earnings per share

= 80,60,000/ 11,10,000 = ₹ 7.26 per share

<u>Note</u>: Conversion of convertible debentures into Equity Share will be dilutive potential equity shares. Hence, to compute the adjusted profit the interest paid on such debentures will be added back as the same would not be payable in case these are converted into equity shares.

18. As per AS 24 'Discontinuing Operations', a discontinuing operation is a component of an enterprise:

(i) that the enterprise, pursuant to a **single plan**, is:

(1) disposing of substantially in its entirety,

(2) disposing of piecemeal, or

(3) terminating through abandonment; and

(ii) that represents a separate **major line** of business or geographical area of operations; and

(iii) that can be distinguished operationally and for financial reporting purposes.

As per provisions of the standard, business enterprises frequently close facilities, abandon products or even product lines, and change the size of their work force in response to market forces. While those kinds of terminations generally are not, in themselves, discontinuing operations, they can occur in connection with a discontinuing operation. Examples of activities that do not necessarily satisfy criterion of discontinuing operation are gradual or evolutionary phasing out of a product line or class of service, discontinuing, even if relatively abruptly, several products within an ongoing line of business;

In the given case, the company has enforced a gradual enforcement of change in product line and does not represent a separate major line of business and hence is not a discontinued operation. If it were a discontinuing operation, the initial disclosure event is the occurrence of one of the following, whichever occurs earlier:

(i) the enterprise has entered into a binding sale agreement for substantially all of the assets attributable to the discontinuing operation; or

(ii) the enterprises board of directors or similar governing body has both approved a detailed, formal plan for discontinuance and made an announcement of the plan.

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

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

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

PAPER – 6: AUDITING AND ASSURANCE

PART – I : ACADEMIC UPDATE
(Legislative Amendments / Notifications / Circulars / Rules / Guidelines issued by Regulating Authority)

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

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

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

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

1. Point no. (II) - para 3.1 on page number 10.13 be read as -

   all private limited companies having paid up share capital of rupees fifty crores or more;

2. In diagram appearing at page number 10.14, line in the middle box be read as -

   all private limited companies having paid up share capital ≥ ₹ 50 crore

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

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

4. Notification No. G.S.R. 583(E) dated 13th June, 2017 stated that requirements of reporting under section 143(3)(i) read Rule 10 A of the Companies (Audit and Auditors) Rules, 2014 of the Companies Act 2013 shall not apply to certain private companies. Clarification regarding applicability of exemption given to certain private companies under section 143(3)(i) (vide circular no. 08/2017 dated 25th July 2017) clarified that the exemption shall be applicable for those audit reports in respect of financial statements pertaining to financial year, commencing on or after 1st April, 2016, which are made on or after the date of the said notification.

5. The Central Government amends the Notification G.S.R. 464(E), dated 5th June 2015 Vide Notification G.S.R. 583(E) Dated 13th June, 2017. Amendments are given below:

(1) Section 143(3)(i), shall not apply to a private company:-

(i) which is a one person company or a small company; or

which has turnover less than rupees fifty crore as per latest audited financial **statement or** which has aggregate borrowings from banks or financial institutions or anybody corporate at any point of time during the financial year less than rupees twenty five crore."

PART – II: QUESTIONS AND ANSWERS

QUESTIONS

1. State with reason (in short) whether the following statements are true or false:

(i) The objective of audit is to obtain absolute assurance and to report on the financial statements.

(ii) Teeming and lading is one of the techniques of suppressing cash receipts.

(iii) There is direct relationship between materiality and the degree of audit risk.

(iv) As per SA 230 on "Audit Documentations", the working papers are not the property of the auditor.

(v) Control risk is the susceptibility of an account balance or class of transactions to misstatement that could be material either individually or, when aggregated with misstatements in other balances or classes, assuming that there were no related internal controls.

(vi) As per section 138 of the Companies Act, 2013 private companies are not required to appoint internal auditor.

(vii) The term "internal audit" is defined as the "checks on day to day transactions which operate continuously as part of the routine system whereby the work of one person is proved independently or is complementary to the work of another, the object being the prevention or early detection of errors or fraud".

(viii) A Chartered Accountant holding securities of S Ltd. having face value of ₹ 950 is qualified for appointment as an auditor of S Ltd.

(ix) Manner of rotation of auditor will not be applicable to company A, which is having paid up share capital of ₹ 15 crores and having public borrowing from nationalized bank of ₹ 50 crore because it is a Private Limited Company.

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

Chapter 1- Nature, Objective and Scope of Audit

2. (a) As per SA 220, "Quality Control for an Audit of Financial Statements" the auditor should obtain information considered necessary in the circumstances before accepting an engagement with a new client, when deciding whether to continue an existing engagement and when considering acceptance of a new engagement with an existing client. Explain

(b) GST & Co., a firm of Chartered Accountants has been appointed to audit the accounts of XYZ Ltd. The partner wanted to cover principal aspects while conducting its audit of financial statements. Advise those principal aspects.

3. (a) The matter of difficulty, time, or cost involved is not in itself a valid basis for the auditor to omit an audit procedure for which there is no alternative or to be satisfied with audit evidence that is less than persuasive. Explain.

(b) "An auditor who before the completion of the engagement is requested to change the engagement to one which provides a lower level of assurance should consider the appropriateness of doing so." Discuss.

Chapter 2- Audit Strategy, Audit Planning and Audit Programme

4. (a) Surya and Chand Ltd is a manufacturing company engaged in the production of miscellaneous electrical goods. Trilochan and Co. has been appointed as the auditors to carry out its audit. Auditor thinks that Planning an audit would involve establishing the overall audit strategy for the engagement and developing an audit plan. Also, Adequate planning benefits the audit of financial statements in several ways. Analyse and Advise explaining the benefits of adequate planning.

(b) Determining materiality involves the exercise of professional judgment. A percentage is often applied to a chosen benchmark as a starting point in determining materiality for the financial statements as a whole. Discuss stating the factors that may affect the identification of an appropriate benchmark

5. (a) Evolving one audit programme applicable to all audit engagements under all circumstances is not practicable. Explain

(b) Arpana Hospitals Ltd having Gross Professional Charges of ₹ 50 crores is engaged in providing healthcare services. STP & Co., a firm of auditors is appointed as its auditors.

Advise what special points to be kept in mind for the purpose of construction of an Audit programme. Explain.

Chapter 3- Audit Documentation and Audit Evidence

6. (a) State the significant difficulties encountered during audit with reference to SA-260 (communication with those charged with governance).

   (b) Evaluating responses to inquiries is an integral part of the inquiry process. Explain.

7. (a) Audit evidence includes both information contained in the accounting records underlying the financial statements and other information. Discuss.

   (b) The quantity of audit evidence needed is affected by the auditor's assessment of the risks of misstatement. Auditor's judgment as to sufficiency may be affected by few factors. Explain.

8. (a) "Even when information to be used as audit evidence is obtained from sources external to the entity, circumstances may exist that could affect its reliability". Explain. Also state clearly generalisations about the reliability of audit evidence.

   (b) The auditor P of PAR and Co., a firm of Chartered Accountants is conducting audit of AB Industries Ltd. The auditor requests management to provide Banker's certificate in support of Fixed deposits whereas management provides only written representation on the matter.

   Analyse how would you deal as an auditor

Chapter 4- Risk Assessment and Internal Control

9. (a) As part of the risk assessment, the auditor shall determine whether any of the risks identified are, in the auditor's judgment, a significant risk.

   In exercising judgment as to which risks are significant risks, state the factors which shall be considered by the auditor.

   Explain the above in context of SA-315.

   (b) Discuss what is included in risk assessment procedures to obtain audit evidence about the design and implementation of relevant controls.

10. (a) "A satisfactory control environment is not an absolute deterrent to fraud although it may help reduce the risk of fraud." Explain.

    (b) The auditor of XYZ Ltd, engaged in FMCG (Fast Moving Consumable Goods) obtains an understanding of the control environment. As part of obtaining this understanding, the auditor evaluates whether:

    (i) Management has created and maintained a culture of honesty and ethical behavior; and

    (ii) The strengths in the control environment elements collectively provide an appropriate foundation for the other components of internal control.

Advise what is included in control environment. Also explain the elements of control environment.

Chapter 5- Fraud and Responsibilities of the Auditor in this Regard.

11. (a) Saburi Yarns Ltd is engaged in manufacturing and trading of yarns of different types. Its huge amount is locked up in account receivables. Moreover, Management of Saburi Yarns Ltd is worried about its Internal Control system over receipts from account receivables and other receipts. Management wants to understand from you as an auditor few techniques as to how receipts can be suppressed resulting into frauds and finally incurring losses.

    (b) Although fraud is a broad legal concept, for the purposes of the SAs, the auditor is concerned with fraud that causes a material misstatement in the financial statements. Explain.

12. The scope of auditor's inquiry under **clause (x)** of paragraph 3 of Companies (Auditor's Report) Order, 2016 is restricted to frauds 'noticed or reported' during the year. Explain.

Chapter 6- Audit in an Automated Environment

13. Understanding the entity and its automated environment involves understanding how IT department is organised, IT activities, the IT dependencies, relevant risks and controls.

    Explain stating the points that an auditor should consider to obtain an understanding of the company's automated environment.

14. Discuss the impact of IT related risks on Substantive Audit, Controls and Reporting.

Chapter 7- Audit Sampling

15. Whatever may be the approach non-statistical or statistical sampling, the sample must be representative. Discuss explaining Statistical and Non Statistical sampling approaches.

16. XYZ Ltd is engaged in trading of electronic goods and having huge accounts receivables. For analysing the whole accounts receivables, auditor wanted to use sampling technique. In considering the characteristics of the population from which the sample will be drawn, the auditor determines that stratification or value-weighted selection technique is appropriate. SA 530 provides guidance to the auditor on the use of stratification and value-weighted sampling techniques. Advise the auditor in accordance with SA 530.

Chapter 8 - Analytical Procedures

17. Analytical procedures use comparisons and relationships to assess whether account balances or other data appear reasonable. Explain stating the purpose of analytical procedures with examples.

18. Ratio analysis is useful for analysing asset and liability accounts as well as revenue and expense accounts. An individual balance sheet account is difficult to predict on its own, but its relationship to another account is often more predictable (e.g., the trade receivables balance related to sales).

    Explain stating the techniques available as substantive analytical procedures.

Chapter 9 - Audit of Items of Financial Statements

19. ABC Ltd. has issued shares for cash at a premium of Rs 450, that is, at amount in excess of the nominal value of the shares which is Rs 10 for cash. Section 52 of the Companies Act, 2013 provides that a Company shall transfer the amount received by it as securities premium to securities premium account. Advise the means in which the amount in the account can be applied.

20. The auditor A of ABC & Co.- firm of auditors is conducting the audit of XYZ Ltd and while performing testing of additions wanted to verify that all PPE (Property Pland and Equipment) purchase invoices are in the name of the entity he is auditing. For all additions to land, building in particular, the auditor desires to have concrete evidence about ownership. The auditor is worried about whether the entity has valid legal ownership rights over the PPE claimed to be held by the entity and recorded in the financial statements. Advise the auditor.

Chapter 10 - The Company Audit

21. Examine the following:

    (a) "**Section 139(1)** of the Companies Act, 2013 provides that every company shall, at the first annual general meeting appoint an auditor who shall hold office till the conclusion of its sixth annual general meeting".

    (b) Filling of a casual vacancy of auditor in respect of a company audit.

22. (a) M/s RM & Co. is an audit firm having partners CA. R and CA. M. The firm has been offered the appointment as an auditor of Enn Ltd. for the Financial Year 2016-17. Mr. Bee, the relative of CA. R, is holding 5,000 shares (face value of ₹ 10 each) in Enn Ltd. having market value of ₹ 1,50,000. Whether M/s RM & Co. is disqualified to be appointed as auditors of Enn Ltd.? Advise.

    (b) CA. Poshin is providing the services of investment banking to C Ltd. Later on, he was also offered to be appointed as an auditor of the company for the current financial year. Advise.

23. (a) Rano Pvt. Ltd. is a private limited Company, having paid up share capital of ₹ 45 crore but having public borrowing from nationalized banks and financial institutions of

₹ 40 crore. Advise the company on the applicability of rotation of auditors.

(b) Discuss the matters to be included in the auditor's report regarding statutory dues and repayment of loans or borrowing to a financial institution, bank, Government or dues to debenture holders as per CARO, 2016.

Chapter 11 - Audit Report

24. Communicating Key Audit Matter is not a substitute for disclosure in the Financial Statements rather Communicating key audit matters in the auditor's report is in the context of the Auditor having formed an opinion on the financial statements as a whole. Analyse.

25. The auditor shall evaluate whether the financial statements are prepared in accordance with the requirements of the applicable financial reporting framework.

    This evaluation shall include consideration of the qualitative aspects of the entity's accounting practices, including indicators of possible bias in management's judgments.

    Advise about qualitative aspects of the entity's accounting practices, including indicators of possible bias in management's judgments.

Chapter 12- Bank Audit

26. Your firm of Chartered Accountants has been appointed as the Auditor of two branches of OBC which are located in the Industrial area. Considering that the location of the branches of bank in industrial area, these would be "advances oriented branches and audit of advances would require the major attention of the auditors. Advise how would you proceed to obtain evidence in respect of audit of advances.

Chapter 13- Audit of Different Types of Entities

27. (a) An audit of Expenditure is one of the major components of Government Audit. In the context of 'Government Expenditure Audit', write in brief, what do you understand by:

    (i) Audit against Rules and Orders

    (ii) Audit of Sanctions

    (iii) Audit against Provision of Funds

    (iv) Propriety Audit

    (v) Performance Audit.

    (b) Explain in detail the duties of Comptroller and Auditor General of India.

28. What are the special steps involved in conducting the audit of an Educational Institution?

SUGGESTED ANSWERS / HINTS

1. **(i) Incorrect:** As per SA-200 "Overall Objectives of the Independent Auditor", in conducting an audit of financial statements, the overall objectives of the auditor are:

    (a) To obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement; and

    (b) To report on the financial statements, and communicate as required by the SAs, in accordance with the auditor's findings.

    (ii) Correct: Teeming and Lading is one of the techniques of suppressing cash receipts Money received from one customer is misappropriated and the account is adjusted with the subsequent receipt from another customer and so on.

    (iii) Incorrect: There is an inverse relationship between materiality and the degree of audit risk. The higher the materiality level, the lower the audit risk and vice versa. For example, the risk that a particular account balance or class of transactions could be misstated by an extremely large amount might be very low but the risk that it could be misstated by an extremely small amount might be very high.

    (iv) Incorrect: As per SA 230 on "Audit Documentations" the working papers are the property of the auditor and the auditor has right to retain them. He may at his discretion can make available working papers to his client. The auditor should retain them long enough to meet the needs of his practice and legal or professional requirement.

    (v) Incorrect: Inherent risk is the susceptibility of an account balance or class of transactions to misstatement that could be material either individually or, when aggregated with misstatements in other balances or classes, assuming that there were no related internal controls.

    (vi) Incorrect: Section 138 of the Companies Act, 2013 requires every private company to appoint an internal auditor having turnover of ₹ 200 crore or more during the preceding financial year; or outstanding loans or borrowings from banks or public financial institutions exceeding ₹ 100 crore or more at any point of time during the preceding financial year.

    (vii) Incorrect: As defined in scope of Standards on Internal Audit, "Internal Audit means an independent management function, which involves a continuous and critical appraisal of the functioning of an entity with a view to suggest improvements thereto and add value to and strengthen the overall governance mechanism of the entity, including the entity's strategic risk management and internal control system".

    (viii) Incorrect: As per the provisions of the Companies Act, 2013, a person is disqualified to be appointed as an auditor of a company if he is holding any security of or interest in the company.

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

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

Although company A is a private limited company having paid up share capital of ₹ 15 crores yet it is having public borrowings from nationalized bank of ₹ 50 crores, therefore it would be governed by provisions of rotation of auditor.

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

Chapter 1- Nature, Objective and Scope of Audit

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

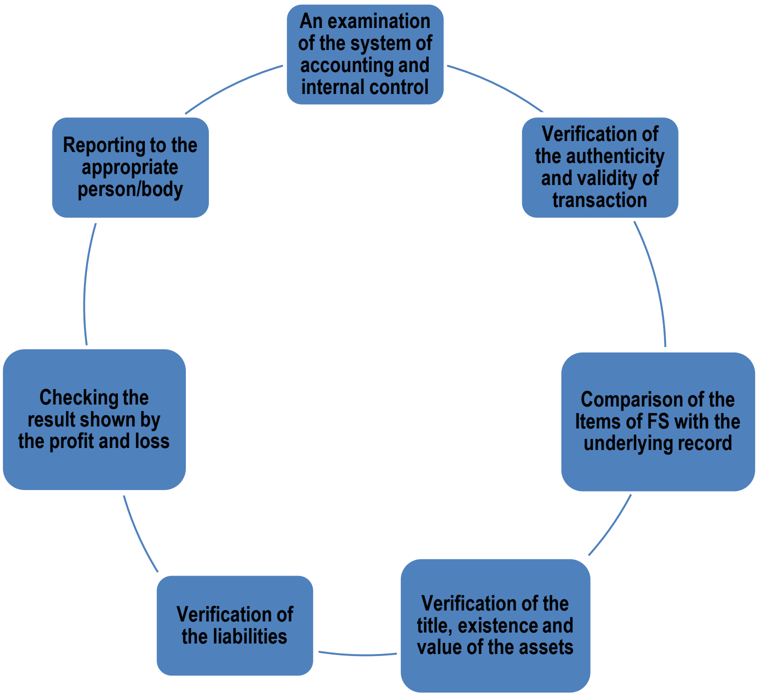
(i) The integrity of the principal owners, key management and those charged with governance of the entity;

(ii) Whether the engagement team is competent to perform the audit engagement and has the necessary capabilities, including time and resources;

(iii) Whether the firm and the engagement team can comply with relevant ethical requirements; and

(iv) Significant matters that have arisen during the current or previous audit engagement, and their implications for continuing the relationship.

(b) The principal aspects to be covered in an audit concerning final statements of account are the following:



(i) **An examination of the system of accounting and internal control** to ascertain whether it is appropriate for the business and helps in properly recording all transactions.

(ii) **Reviewing the system and procedures** to find out whether they are adequate and comprehensive and incidentally whether material inadequacies and weaknesses exist to allow frauds and errors going unnoticed.

(iii) **Checking of the arithmetical accuracy of the books of account** by the verification of postings, balances, etc.

(iv) **Verification of the authenticity and validity of transaction** entered into by making an examination of the entries in the books of accounts with the relevant supporting documents.

(v) **Ascertaining that a proper distinction has been made between items of capital and of revenue nature** and that the amounts of various items of income and expenditure adjusted in the accounts corresponding to the accounting period.

(vi) **Comparison of the balance sheet and profit and loss account or other statements with the underlying record** in order to see that they are in accordance therewith.

(vii) **Verification of the title, existence and value of the assets** appearing in the balance sheet.

> Assertions about account balances at the period end:
>
> (i) Existence—assets, liabilities, and equity interests exist.
>
> (ii) Rights and obligations—the entity holds or controls the rights to assets, and liabilities are the obligations of the entity.
>
> (iii) Completeness—all assets, liabilities and equity interests that should have been recorded have been recorded.
>
> (iv) Valuation and allocation—assets, liabilities, and equity interests are included in the financial statements at appropriate amounts and any resulting valuation or allocation adjustments are appropriately recorded.

(viii) **Verification of the liabilities** stated in the balance sheet.

(ix) **Checking the result shown by the profit and loss** and to see whether the results shown are true and fair.

(x) **Where audit is of a corporate body, confirming that the statutory requirements** have been complied with.

(xi) **Reporting to the appropriate person/body** whether the statements of account examined do reveal a true and fair view of the state of affairs and of the profit and loss of the organisation.

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

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

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

If the auditor concludes that there is reasonable justification to change the engagement and if the audit work performed complied with the SAs applicable to the changed engagement, the report issued would be appropriate for the revised terms of engagement. In order to avoid confusion, the report would not include reference to-

(i) the original engagement; or

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

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

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

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

(i) Withdraw from the audit engagement where possible under applicable law or regulation; and

(ii) Determine whether there is any obligation, either contractual or otherwise, to report the circumstances to other parties, such as those charged with governance, owners or regulators.

Chapter 2- Audit Strategy, Audit Planning and Audit Programme

4. (a) Planning an audit involves establishing the overall audit strategy for the engagement and developing an audit plan. Adequate planning benefits the audit of financial statements in several ways, including the following:

1. Helping the auditor to devote appropriate attention to important areas of the audit.
2. Helping the auditor identify and resolve potential problems on a timely basis.
3. Helping the auditor properly organize and manage the audit engagement so that it is performed in an effective and efficient manner.
4. Assisting in the selection of engagement team members with appropriate levels

of capabilities and competence to respond to anticipated risks, and the proper assignment of work to them.

5. Facilitating the direction and supervision of engagement team members and the review of their work.

6. Assisting, where applicable, in coordination of work done by auditors of components and experts.

(b) Determining materiality involves the exercise of professional judgment. A percentage is often applied to a chosen benchmark as a starting point in determining materiality for the financial statements as a whole. **Factors that may affect the identification of an appropriate benchmark include the following:**

- The elements of the financial statements

  Example - assets, liabilities, equity, revenue, expenses;

- Whether there are items on which the attention of the users of the particular entity's financial statements tends to be focused

  Example - for the purpose of evaluating financial performance users may tend to focus on profit, revenue or net assets.

- The nature of the entity, where the entity is at in its life cycle, and the industry and economic environment in which the entity operates;

  The entity's ownership structure and the way it is financed and

  Example- if an entity is financed solely by debt rather than equity, users may put more emphasis on assets, and claims on them, than on the entity's earnings);

  The relative volatility of the benchmark.

5. (a) Businesses vary in nature, size and composition; work which is suitable to one business may not be suitable to others; efficiency and operation of internal controls and the exact nature of the service to be rendered by the auditor are the other factors that vary from assignment to assignment. On account of such variations, evolving one audit programme applicable to all businesses under all circumstances is not practicable. However, it becomes a necessity to specify in detail in the audit programme the nature of work to be done so that no time will be wasted on matters not pertinent to the engagement and any special matter or any specific situation can be taken care of.

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

(1) Stay within the scope and limitation of the assignment.

(2) Determine the evidence reasonably available and identify the best evidence for

deriving the necessary satisfaction.

(3) Apply only those steps and procedures which are useful in accomplishing the verification purpose in the specific situation.

(4) Consider all possibilities of error.

(5) Co-ordinate the procedures to be applied to related items.

Chapter 3- Audit Documentation and Audit Evidence

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

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

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

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

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

7. (a) Audit evidence may be defined as the information used by the auditor in arriving at the conclusions on which the auditor's opinion is based. Audit evidence includes both information contained in the accounting records underlying the financial statements and other information.

Explaining this further, audit evidence includes:-

(1) **Information contained in the accounting records:** Accounting records include the records of initial accounting entries and supporting records, such as checks and records of electronic fund transfers; invoices; contracts; the general and subsidiary ledgers, journal entries and other adjustments to the financial statements that are not reflected in journal entries; and records such as work sheets and spreadsheets supporting cost allocations, computations, reconciliations and disclosures.

(2) **Other information that authenticates the accounting records and also supports the auditor's rationale behind the true and fair presentation of the financial statements:** Other information which the auditor may use as audit evidence includes, for example minutes of the meetings, written confirmations from trade receivables and trade payables, manuals containing details of internal control etc. A combination of tests of accounting records and other information is generally used by the auditor to support his opinion on the financial statements.

(b) Sufficiency of Audit Evidence: Sufficiency is the measure of the quantity of audit evidence. The quantity of audit evidence needed is affected by the auditor's assessment of the risks of misstatement (the higher the assessed risks, the more audit evidence is likely to be required) and also by the quality of such audit evidence (the higher the quality, the less may be required). Obtaining more audit evidence, however, may not compensate for its poor quality. **Auditor's judgment as to sufficiency may be affected by the factors such as:**

(i) Materiality

(ii) Risk of material misstatement

(iii) Size and characteristics of the population.

(i) **Materiality** may be defined as the significance of classes of transactions, account balances and presentation and disclosures to the users of the financial statements. Less evidence would be required in case assertions are less material to users of the financial statements. But on the other hand if assertions are more material to the users of the financial statements, more evidence would be required.

(ii) **Risk of material misstatement** may be defined as the risk that the financial statements are materially misstated prior to audit. This consists of two components described as follows at the assertion level (a) Inherent risk—The susceptibility of an assertion to a misstatement that could be material before consideration of any related controls. (b) Control risk—The risk that a misstatement that could occur in an assertion that could be material will not be prevented or detected and corrected on a timely basis by the entity's internal control. Less evidence would be required in case assertions that have a lower risk of material misstatement. But on the other hand if assertions have a higher risk of material misstatement, more evidence would be required.

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

8. (a) Reliability of Audit Evidence: SA 500 on "Audit Evidence" provides that the reliability of information to be used as audit evidence, and therefore of the audit evidence itself, is influenced by its source and its nature, and the circumstances under which it is obtained, including the controls over its preparation and maintenance where relevant. Therefore, generalisations about the reliability of various kinds of audit evidence are subject to important exceptions. Even when information to be used as audit evidence is obtained from sources external to the entity, circumstances may exist that could affect its reliability. For example, information obtained from an independent external source may not be reliable if the source is not knowledgeable, or a management's expert may lack objectivity. While recognising that exceptions may exist, the following generalisations about the reliability of audit evidence may be useful:

(1) The reliability of audit evidence is increased when it is obtained from independent sources outside the entity.

(2) The reliability of audit evidence that is generated internally is increased when the related controls, including those over its preparation and maintenance, imposed by the entity are effective.

(3) Audit evidence obtained directly by the auditor (for example, observation of the application of a control) is more reliable than audit evidence obtained indirectly or by inference (for example, inquiry about the application of a control).

(4) Audit evidence in documentary form, whether paper, electronic, or other medium, is more reliable than evidence obtained orally (for example, a contemporaneously written record of a meeting is more reliable than a subsequent oral representation of the matters discussed).

(5) Audit evidence provided by original documents is more reliable than audit

evidence provided by photocopies or facsimiles, or documents that have been filmed, digitized or otherwise transformed into electronic form, the reliability of which may depend on the controls over their preparation and maintenance.

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

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

Chapter 4- Risk Assessment and Internal Control

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

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

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

(i) Whether the risk is a risk of fraud;

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

(iii) The complexity of transactions;

(iv) Whether the risk involves significant transactions with related parties;

(v) The degree of subjectivity in the measurement of financial information related to the risk, especially those measurements involving a wide range of measurement uncertainty; and

(vi) Whether the risk involves significant transactions that are outside the normal course of business for the entity or that otherwise appear to be unusual.

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

- Inquiring of entity personnel.

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

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

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

(b) **Control Environment – Component of Internal Control:** The auditor shall obtain an understanding of the control environment. As part of obtaining this understanding, the auditor shall evaluate whether:

(i) Management has created and maintained a culture of honesty and ethical behavior; and

(ii) The strengths in the control environment elements collectively provide an appropriate foundation for the other components of internal control.

What is included in Control Environment?

The control environment includes:

(i) the governance and management functions and

(ii) the attitudes, awareness, and actions of those charged with governance and management.

(iii) The control environment sets the tone of an organization, influencing the control consciousness of its people.

Elements of the Control Environment: Elements of the control environment that may be relevant when obtaining an understanding of the control environment include the following:

(a) **Communication and enforcement of integrity and ethical values** – These are essential elements that influence the effectiveness of the design, administration and monitoring of controls.

(b) **Commitment to competence** – Matters such as management's consideration of the competence levels for particular jobs and how those levels translate into requisite skills and knowledge.

(c) **Participation by those charged with governance –** Attributes of those charged with governance such as:

- Their independence from management.
- Their experience and stature.
- The extent of their involvement and the information they receive, and the scrutiny of activities.
- The appropriateness of their actions, including the degree to which difficult questions are raised and pursued with management, and their interaction with internal and external auditors.

(d) **Management's philosophy and operating style – Characteristics such as management's:**

- Approach to taking and managing business risks.
- Attitudes and actions toward financial reporting.
- Attitudes toward information processing and accounting functions and personnel.

(e) **Organisational structure** – The framework within which an entity's activities for achieving its objectives are planned, executed, controlled, and reviewed.

(f) **Assignment of authority and responsibility** - Matters such as how authority and responsibility for operating activities are assigned and how reporting relationships and authorisation hierarchies are established.

(g) **Human resource policies and practices** – Policies and practices that relate to, for example, recruitment, orientation, training, evaluation, counselling, promotion, compensation, and remedial actions.

Chapter 5- Fraud and Responsibilities of the Auditor in this Regard.

11. (a) Few Techniques of how receipts are suppressed are:

(1) *Teeming and Lading*: Amount received from a customer being misappropriated; also to prevent its detection the money received from another customer subsequently being credited to the account of the customer who has paid earlier. Similarly, moneys received from the customer who has paid thereafter being credited to the account of the second customer and such a practice is continued

so that no one account is outstanding for payment for any length of time, which may lead the management to either send out a statement of account to him or communicate with him.

(2) Adjusting unauthorised or fictitious rebates, allowances, discounts, etc. to customer' accounts and misappropriating amount paid by them.

(3) Writing off as debts in respect of such balances against which cash has already been received but has been misappropriated.

(4) Not accounting for cash sales fully.

(5) Not accounting for miscellaneous receipts, *e.g.,* sale of scrap, quarters allotted to the employees, etc.

(6) Writing down asset values in entirety, selling them subsequently and misappropriating the proceeds.

(b) The Standard on Auditing (SA) 240 "The Auditor's Responsibilities Relating to Fraud in an Audit of Financial Statements" defines the term 'fraud' as-

"an intentional act by one or more individuals among management, those charged with governance, employees, or third parties, involving the use of deception to obtain an unjust or illegal advantage".

Although fraud is a broad legal concept, for the purposes of the SAs, the auditor is concerned with fraud that causes a material misstatement in the financial statements.

Two types of intentional misstatements are relevant to the auditor–

- misstatements resulting from fraudulent financial reporting and
- misstatements resulting from misappropriation of assets.

Although the auditor may suspect or, in rare cases, identify the occurrence of fraud, the auditor does not make legal determinations of whether fraud has actually occurred.

12. Reporting under Companies (Auditor's Report) Order, 2016 [CARO, 2016]: The auditor is also required to report under **clause (x)** of paragraph 3 of Companies (Auditor's Report) Order, 2016, whether any fraud by the company or any fraud on the Company by its officers or employees has been noticed or reported during the year. If yes, the nature and the amount involved is to be indicated.

The scope of auditor's inquiry under **clause (x)** of paragraph 3 of Companies (Auditor's Report) Order, 2016 is restricted to frauds 'noticed or reported' during the year. It may be noted that this clause of the Order, by requiring the auditor to report whether any fraud by the company or on the company by its Officer or employees has been noticed or reported, does not relieve the auditor from his responsibility to consider fraud and error in an audit of financial statements. In other words, irrespective of the auditor's comments under this clause, the auditor is also required to comply with the requirements of SA 240, "The Auditor's Responsibility Relating to Fraud in an Audit of Financial Statements".

Audit Procedures and Reporting under CARO:

(1) While planning the audit, the auditor should discuss with other members of the audit team, the susceptibility of the company to material misstatements in the financial statements resulting from fraud. While planning, the auditor should also make inquiries of management to determine whether management is aware of any known fraud or suspected fraud that the company is investigating.

(2) The auditor should examine the reports of the internal auditor with a view to ascertain whether any fraud has been reported or noticed by the management. The auditor should examine the minutes of the audit committee, if available, to ascertain whether any instance of fraud pertaining to the company has been reported and actions taken thereon.

The auditor should enquire from the management about any frauds on the company that it has noticed or that have been reported to it. The auditor should also discuss the matter with other employees including officers of the company. The auditor should also examine the minute book of the board meeting of the company in this regard.

(3) The auditor should obtain written representations from management that:

(i) it acknowledges its responsibility for the implementation and operation of accounting and internal control systems that are designed to prevent and detect fraud and error;

(ii) it believes the effects of those uncorrected misstatements in financial statements, aggregated by the auditor during the audit are immaterial, both individually and in the aggregate, to the financial statements taken as a whole. A summary of such items should be included in or attached to the written representation;

(iii) it has

(a) disclosed to the auditor all significant facts relating to any frauds or suspected frauds known to management that may have affected the entity; and

(b) it has disclosed to the auditor the results of its assessment of the risk that the financial statements may be materially misstated as a result of fraud.

(4) Because management is responsible for adjusting the financial statements to correct material misstatements, it is important that the auditor obtains written representation from management that any uncorrected misstatements resulting from fraud are, in management's opinion, immaterial, both individually and in the aggregate. Such representations are not a substitute for obtaining sufficient appropriate audit evidence. In some circumstances, management may not believe that certain of the uncorrected financial statement misstatements aggregated by the auditor during the

audit are misstatements. For that reason, management may want to add to their written representation words such as, "We do not agree that items constitute misstatements because [description of reasons]."

The auditor should consider if any fraud has been reported by them during the year under section 143(12) of the Act and if so whether that same would be reported under this Clause. It may be mentioned here that section 143(12) of the Act requires the auditor has reasons to believe that a fraud is being committed or has been committed by an employee or officer. In such a case the auditor needs to report to the Central Government or the Audit Committee. However, this Clause will include only the reported frauds and not suspected fraud.

(5) Where the auditor notices that any fraud by the company or on the company by its officers or employees has been noticed by or reported during the year, the auditor should, apart from reporting the existence of fraud, also required to report, the nature of fraud and amount involved. For reporting under this clause, the auditor may consider the following:

(i) This clause requires all frauds noticed or reported during the year shall be reported indicating the nature and amount involved. As specified the fraud by the company or on the company by its officers or employees are only covered.

(ii) Of the frauds covered under section 143(12) of the Act, only noticed frauds shall be included here and not the suspected frauds.

(iii) While reporting under this clause with regard to the nature and the amount involved of the frauds noticed or reported, the auditor may also consider the principles of materiality outlined in Standards on Auditing.

Chapter 6- Audit in an Automated Environment

13. Understanding and Documenting Automated Environment: Understanding the entity and its automated environment involves understanding how IT department is organised, IT activities, the IT dependencies, relevant risks and controls.

Given below are some of the points that an auditor should consider to obtain an understanding of the company's automated environment

- Information systems being used (one or more application systems and what they are)
- their purpose (financial and non-financial)
- Location of IT systems - local vs global
- Architecture (desktop based, client-server, web application, cloud based)
- Version (functions and risks could vary in different versions of same application)
- Interfaces within systems (in case multiple systems exist)
- In-house vs Packaged

- Outsourced activities (IT maintenance and support)
- Key persons (CIO, CISO, Administrators)

14. **Impact of IT related risks i.e. on Substantive Audit, Controls and Reporting:** The above risks, if not mitigated, could have an impact on audit in different ways. Let us understand how:

Impact on Substantive Audit	Impact on Controls	Impact on Reporting
•cannot rely on the data obtained from systems •system data and reports should be tested substantively for completeness and accuracy •more audit evidence is needed	•cannot rely on automated controls, system calculations and accounting procedures built into applications •cannot rely on IT dependent manual controls •system data and reports should be tested substantively for completeness and accuracy. •more substantive audit work is needed	•communication to those charged with governance •modified auditors report

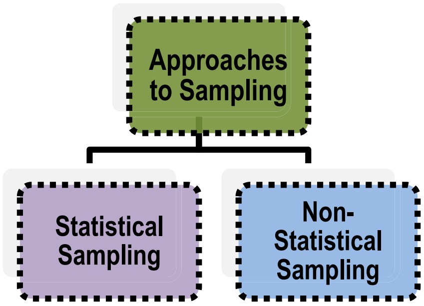
- First, we may not be able to rely on the data obtained from systems where such risks exist. This means, all forms of data, information or reports that we obtain from systems for the purpose of audit has to be thoroughly tested and corroborated for completeness and accuracy.
- Second, we will not be able to rely on automated controls, calculations, accounting procedures that are built into the applications. Additional audit work may be required in this case.
- Third, due to the regulatory requirement of auditors to report on internal financial controls of a company, the audit report also may have to be modified in some instances.

In all the above scenarios, it is likely that the auditor will be required to obtain more audit evidence and perform additional audit work. The auditor should also be able to demonstrate how the risks were identified and what audit evidence was obtained and validated to address these IT risks.

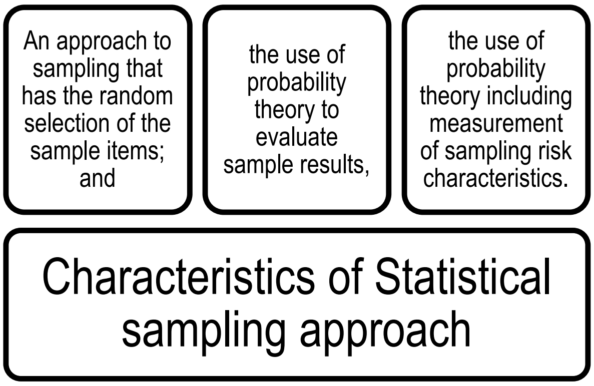
Here, we should remember that as the complexity, automation and dependence of business operations on IT systems increases, the severity and impact of IT risks too increases accordingly. The auditor should apply professional judgement in determining and assessing such risks and plan the audit response appropriately.

Chapter 7 Audit Sampling

15. Audit sampling enables the auditor to obtain and evaluate audit evidence about some characteristic of the items selected in order to form or assist in forming a conclusion concerning the population from which the sample is drawn. Audit sampling can be applied using either non-statistical or statistical sampling approaches.



Statistical sampling is an approach to sampling that has the random selection of the sample items; and the use of probability theory to evaluate sample results, including measurement of sampling risk characteristics. A sampling approach that does not have above characteristics is considered **non-statistical sampling**.



The decision whether to use a statistical or non-statistical sampling approach is a matter for the auditor's judgment; however, sample size is not a valid criterion to distinguish between statistical and non-statistical approaches.

Sample must be representative.

Whatever may be the approach non-statistical or statistical sampling, the sample must be representative. This means that it must be closely similar to the whole population although not necessarily exactly the same. The sample must be large enough to provide statistically meaningful results.

16. **Stratification and Value-Weighted Selection:** In considering the characteristics of the population from which the sample will be drawn, the auditor may determine that stratification or value-weighted selection technique is appropriate. SA 530 provides guidance to the auditor on the use of stratification and value-weighted sampling techniques.

    Stratification: Audit efficiency may be improved if the auditor stratifies a population by dividing it into discrete sub-populations which have an identifying characteristic. The objective of stratification is to reduce the variability of items within each stratum and therefore allow sample size to be reduced without increasing sampling risk.

    When performing tests of details, the population is often stratified by monetary value. This allows greater audit effort to be directed to the larger value items, as these items may contain the greatest potential misstatement in terms of overstatement. Similarly, a population may be stratified according to a particular characteristic that indicates a higher risk of misstatement, **for example, when testing the allowance for doubtful accounts in the valuation of accounts receivable, balances may be stratified by age.**

    The results of audit procedures applied to a sample of items within a stratum can only be projected to the items that make up that stratum. To draw a conclusion on the entire population, the auditor will need to consider the risk of material misstatement in relation to whatever other strata make up the entire population.

    For example, 20% of the items in a population may make up 90% of the value of an account balance. The auditor may decide to examine a sample of these items. The auditor evaluates the results of this sample and reaches a conclusion on the 90% of value separately from the remaining 10% (on which a further sample or other means of gathering audit evidence will be used, or which may be considered immaterial).

    If a class of transactions or account balance has been divided into strata, the misstatement is projected for each stratum separately. Projected misstatements for each stratum are then combined when considering the possible effect of misstatements on the total class of transactions or account balance.

    Value-Weighted Selection: When performing tests of details it may be efficient to identify the sampling unit as the individual monetary units that make up the population. Having selected specific monetary units from within the population, **for example, the accounts receivable balance, the auditor may then examine the particular items, for example, individual balances, that contain those monetary units.** One benefit of this approach to defining the sampling unit is that audit effort is directed to the larger value items because they have a greater chance of selection, and can result in smaller sample sizes.

    This approach may be used in conjunction with the systematic method of sample selection and is most efficient when selecting items using random selection.

Chapter 8- Analytical Procedures

17. Purpose of Analytical Procedures

Analytical procedures use comparisons and relationships to assess whether account balances or other data appear reasonable. Analytical procedures are used for the following purposes:

(i) To obtain relevant and reliable audit evidence when using substantive analytical procedures; and

(ii) To design and perform analytical procedures near the end of the audit that assist the auditor when forming an overall conclusion as to whether the financial statements are consistent with the auditor's understanding of the entity.

For instance, establishing the relationship that exists between certain balances included in the Balance Sheet and the Statement of Profit and Loss and comparing them with those that existed between the same set of balances in the previous year's reconciling the physical balances of assets with the relevant financial record; obtaining of account from the bankers, account receivables and account payables and reconciling with relevant balances in books of account; confirming amounts of outstanding income and expenses by preparing reconciliation statements, etc. These are helpful in the detection of unusual state of affairs and mistakes in accounts.

Example:

In XYZ Ltd., after applying analytical procedures as comparison of the gross profit ratio with that of the previous year, it is discovered that there has been fall in the ratio. Therefore, it became necessary for the auditor to make further enquiries as it may be due to pilferage of inventories/ misappropriation of a part of the sale proceeds/ a change in the cost of sales without a corresponding increase in the sales price.

Likewise, on verifying the balances of sundry account receivables and account payables by obtaining the confirmation of their statements of account, it will be possible for the auditor to find out whether the discrepancy in the balance of an account receivable is due to the failure to debit his account with the cost of goods supplied to him or is the result of non-adjustment of a remittance received from him. Also whether in the case of account payable, the discrepancy is due to failure to afford him credit for one or more consignments of goods supplied by him or failure to debit him with an amount of remittance.

Similarly, by taking inventories of raw materials and stores at the end of the year any excesses or shortages therein shall be detected. The investigation of their causes might disclose that the shortages were the result of a misappropriation of inventory or that the excess were due to requisitions having been entered before the inventories were issued.

In the same way, by reconciling the amounts of interest and dividends collected with the amounts which had accrued due and that which are outstanding for payment, the mistake, if any, in the adjustment of such an income would be detected.

The overall tests can be extended for making inter-firm and intra-firm comparison of trading results.

For example, if balances included in the Statement of Profit and Loss of an entity are compared with those contained in the Statement of Profit and Loss for the same period of another entity engaged in the same trade and working under similar circumstances, it would be possible to find out the cause of the variation in the rate of profitability that exists.

Similarly, it would also be possible to compare the balances on the Statement of Profit and Loss with that of the previous period, it would be possible to find out the reasons for increase or decrease in the amount of profits of those years. By setting up certain expenses ratios on the basis of balances included in the Statement of Profit and Loss, for the year under audit, comparing them with the same ratios for the previous year, it is possible to ascertain the extent of increase or decrease in various items of expenditure in relation to sales and that of trading profit in relation to sales. If differences are found to be material, the auditor would ascertain the reasons thereof and assess whether the accounts have been manipulated to inflate or suppress profits.

An abnormal fall in the cost of manufacture or that in the administrative cost, apart from economy in expenses, there could be no provision or less provision for expenses incurred in the year. When it is suspected, the auditor should compare the entries in the outstanding book with those in the previous year. He must also check the vouchers for one month immediately before the close of the following years. To verify that none of the expenses in the accounts under audit have been charged to the accounts of the following years.

Often it is possible to independently verify the correctness of some of the items of expenses included in the Statement of Profit and Loss. For instance the cost of importing goods which are subjected to an ad valorem duty at uniform rate can be verified from the amount of duty paid. Similarly, a quantity of sugar sold by sugar mill can be verified independently from the amount of excise duty paid. Similarly, the amount of any income or expenses which has a direct relationship with the amount of profits or that of sales can be verified independently, *e.g.,* commission paid to a manager calculated on the basis of net profits, commission paid to a selling agent as percentage of sales, etc. Such calculation of ratios, trends and comparisons is also termed as analytical review.

Thus, it is important to note that Analytical procedures may help identify the existence of unusual transactions or events, and amounts, ratios, and trends that might indicate matters that have audit implications. Unusual or unexpected relationships that are identified may assist the auditor in identifying risks of material misstatement, especially risks of material misstatement due to fraud.

18. **Techniques available as substantive analytical procedures:** The design of a substantive analytical procedure is limited only by the availability of reliable data and the experience and creativity of the audit team. Substantive analytical procedures generally take one of the following forms:

- **Trend analysis** — A commonly used technique is the comparison of current data with the prior period balance or with a trend in two or more prior period balances. We evaluate whether the current balance of an account moves in line with the trend established with previous balances for that account, or based on an understanding of factors that may cause the account to change.
- **Ratio analysis** — Ratio analysis is useful for analysing asset and liability accounts as well as revenue and expense accounts. An individual balance sheet account is difficult to predict on its own, but its relationship to another account is often more predictable (e.g., the trade receivables balance related to sales). Ratios can also be compared over time or to the ratios of separate entities within the group, or with the ratios of other companies in the same industry.
  - ***For example,*** Financial ratios may include:
  - Trade receivables or inventory turnover
  - Freight expense as a percentage of sales revenue
- **Reasonableness tests** — Unlike trend analysis, this analytical procedure does not rely on events of prior periods, but upon non-financial data for the audit period under consideration (e.g., occupancy rates to estimate rental income or interest rates to estimate interest income or expense). These tests are generally more applicable to income statement accounts and certain accrual or prepayment accounts.
- **Structural modelling** — A modelling tool constructs a statistical model from financial and/or non-financial data of prior accounting periods to predict current account balances (e.g., linear regression).

Chapter 9 - Audit of Items of Financial Statements

19. Shares Issued at Premium: In case a company has issued shares at a premium, that is, at amount in excess of the nominal value of the shares, whether for cash or otherwise, section 52 of the Companies Act, 2013 provides that a Company shall transfer the amount received by it as securities premium to securities premium account and state the means in which the amount in the account can be applied. As per the section, where a company issues shares at a premium, whether for cash or otherwise, a sum equal to the aggregate amount of the premium received on those shares shall be transferred to a "securities premium account" and the provisions of this Act relating to reduction of share capital of a company shall apply as if the securities premium account were the paid-up share capital of the company.

Application of securities premium account: The securities premium account may be applied by the Company:

(a) towards the issue of unissued shares of the company to the members of the company as fully paid bonus shares;

(b) in writing off the preliminary expenses of the Company;

(c) in writing off the expenses of, or the commission paid or discount allowed on, any issue of shares or debentures of the company;

(d) in providing for the premium payable on the redemption of any redeemable preference shares or of any debentures of the company; or

(e) for the purchase of its own shares or other securities under section 68.

The auditor needs to verify whether the premium received on shares, if any, has been transferred to a "securities premium account" and whether the application of any amount out of the said "securities premium account" is only for the purposes mentioned above

20. In addition to the procedures undertaken for verifying completeness of additions to PPE during the period under audit, the auditor while performing testing of additions should also verify that all PPE purchase invoices are in the name of the entity that entitles legal title of ownership to the respective entity. For all additions to land, building in particular, the auditor should obtain copies of conveyance deed/ sale deed to establish whether the entity is mentioned to be the legal and valid owner.

The auditor should insist and verify the original title deeds for all immoveable properties held as at the balance sheet date. In case the entity has given such immoveable property as security for any borrowings and the original title deeds are not available with the entity, the auditor should request the entity's management for obtaining a confirmation from the respective lenders that they are holding the original title deeds of immoveable property as security. In addition, the auditor should also verify the register of charges, available with the entity to assess the PPE that has been given as security to any third parties.

Chapter 10 - The Company Audit

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

The following points need to be noted in this regard-

(i) The company shall place the matter relating to such appointment of ratification by member at every Annual General Meeting.

(ii) Before such appointment is made, the written consent of the auditor to such appointment, and a certificate from him or it that the appointment, if made, shall be in accordance with the conditions as may be prescribed, shall be obtained from the auditor.

(iii) The certificate shall also indicate whether the auditor satisfies the criteria provided in **section 141**.

(iv) The company shall inform the auditor concerned of his or its appointment, and also file a notice of such appointment with the Registrar within 15 days of the meeting in which the auditor is appointed.

(b) Filling of a Casual Vacancy

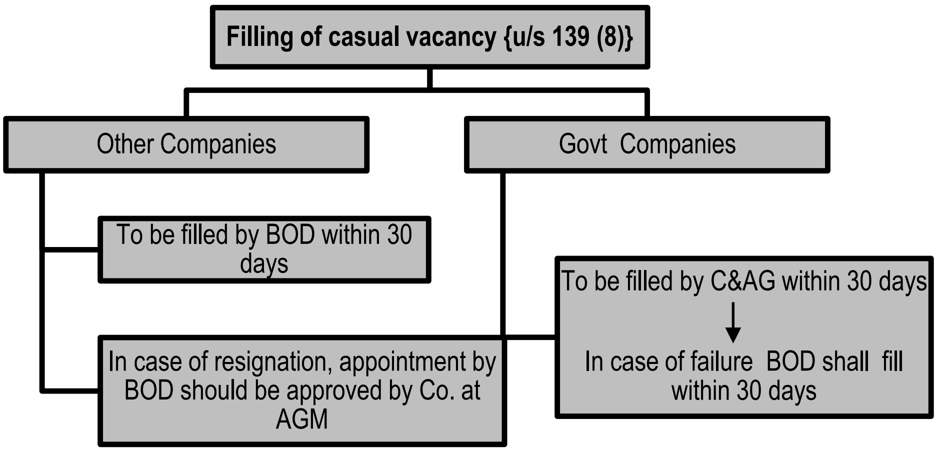
As per **Section 139(8),** any casual vacancy in the office of an auditor shall-

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

If such casual vacancy is as a result of the resignation of an auditor, such appointment shall also be approved by the company at a general meeting convened within three months of the recommendation of the Board and he shall hold the office till the conclusion of the next annual general meeting.

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

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



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

22. (a) As per section 141(3)(d)(i), a person shall not be eligible for appointment as an auditor of a company, who, or his relative or partner is holding any security of or interest in the company or its subsidiary, or of its holding or associate company or a subsidiary of such holding company. However, as per proviso to this section, the relative of the person may hold the securities or interest in the company of face value not exceeding of ₹ 1,00,000.

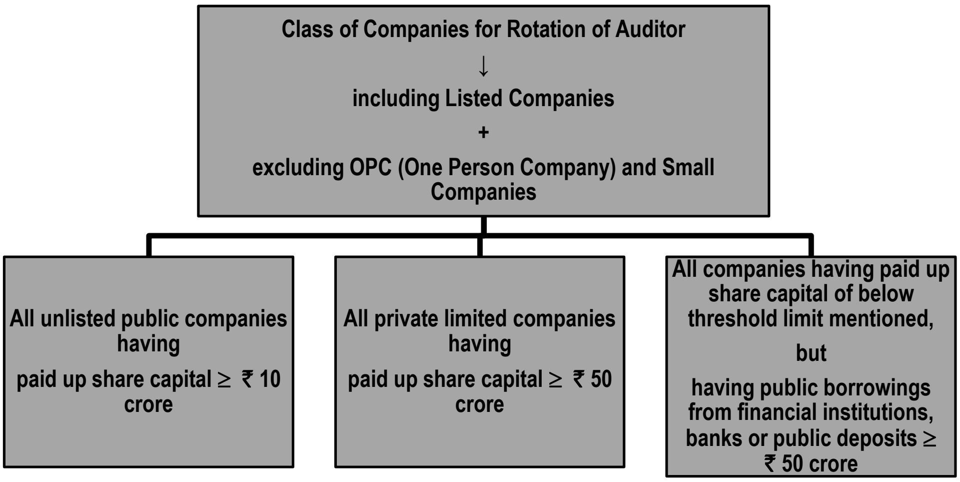
In the instant case, M/s RM & Co. is an audit firm having partners CA. R and CA. M. Mr. Bee is a relative of CA. R and he is holding shares of Enn Ltd. of face value of ₹ 50,000 only (5,000 shares x ₹ 10 per share).

Therefore, M/s RM & Co. is not disqualified for appointment as an auditors of Enn Ltd. as the relative of CA. R (i.e. partner of M/s RM & Co.) is holding the securities in Enn Ltd. which is within the limit mentioned in proviso to section 141(3)(d)(i) of the Companies Act, 2013.

(b) Section 141(3)(i) of the Companies Act, 2013 disqualifies a person for appointment as an auditor of a company who is engaged as on the date of appointment in consulting and specialized services as provided in section 144. Section 144 of the Companies Act, 2013 prescribes certain services not to be rendered by the auditor which includes investment banking services.

Therefore, CA. Poshin is advised not to accept the assignment of auditing as the investment banking service is specifically notified in the list of services not to be rendered by him as per section 141(3)(i) read with section 144 of the Companies Act, 2013.

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



(I) all unlisted public companies having paid up share capital of rupees ten crore or more;

(II) all private limited companies having paid up share capital of rupees fifty crore or more;

(III) all companies having paid up share capital of below threshold limit mentioned above, but having public borrowings from financial institutions, banks or public deposits of rupees fifty crores or more.

From the above, it can be concluded that rotational provisions would not be applicable.

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

Clause (vii) (a) whether the company is regular in depositing undisputed statutory dues including provident fund, employees' state insurance, income-tax, sales-tax, service tax, duty of customs, duty of excise, value added tax, cess and any other statutory dues with the appropriate authorities and if not, the extent of the arrears of outstanding statutory dues as at the last day of the financial year concerned for a period of more than six months from the date they became payable, shall be indicated;

(b) where dues of income tax or sales tax or service tax or duty of customs or duty of excise or value added tax have not been deposited on account of any dispute, then the amounts involved and the forum where dispute is pending shall be mentioned. (A mere representation to the concerned Department shall not constitute a dispute).

Clause (viii) whether the company has defaulted in repayment of loans or borrowing to a financial institution, bank, Government or dues to debenture holders? If yes, the period and the amount of default to be reported (in case of defaults to banks, financial institutions, and Government, lender wise details to be provided).

Chapter 11- Audit Report

24. Communicating key audit matters in the auditor's report is not:

(i) A substitute for disclosures in the financial statements that the applicable

Financial reporting framework requires management to make, or that are otherwise necessary to achieve fair presentation;

(ii) A substitute for the auditor expressing a modified opinion when required by the circumstances of a specific audit engagement in accordance with SA 705 (Revised);

(iii) A substitute for reporting in accordance with SA 570 when a material uncertainty exists relating to events or conditions that may cast significant doubt on an entity's ability to continue as a going concern; or

(iv) A separate opinion on individual matters.

25. Evaluations by the Auditor

The auditor shall evaluate whether the financial statements are prepared in accordance with the requirements of the applicable financial reporting framework.

This evaluation shall include consideration of the qualitative aspects of the entity's accounting practices, including indicators of possible bias in management's judgments.

Qualitative Aspects of the Entity's Accounting Practices

1. Management makes a number of judgments about the amounts and disclosures in the financial statements.
2. SA 260 (Revised) contains a discussion of the qualitative aspects of accounting practices.
3. In considering the qualitative aspects of the entity's accounting practices, the auditor may become aware of possible bias in management's judgments. The auditor may conclude that lack of neutrality together with uncorrected misstatements causes the financial statements to be materially misstated. Indicators of a lack of neutrality include the following:

   (i) The selective correction of misstatements brought to management's attention during the audit

   Example

   ✐ Correcting misstatements with the effect of increasing reported earnings, but not correcting misstatements that have the effect of decreasing reported earnings.

- The combination of several deficiencies affecting the same significant account or disclosure (or the same internal control component) could amount to a significant deficiency (or material weakness if required to be communicated in the jurisdiction). This evaluation requires judgment and involvement of audit executives.

(ii) Possible management bias in the making of accounting estimates.

4. SA 540 addresses possible management bias in making accounting estimates.

   Indicators of possible management bias do not constitute misstatements for purposes of drawing conclusions on the reasonableness of individual accounting estimates. They may, however, affect the auditor's evaluation of whether the financial statements as a whole are free from material misstatement.

Chapter 12- Bank Audit

26. **Audit of Advances:** Advances generally constitute the major part of the assets of the bank. There are large number of borrowers to whom variety of advances are granted. The audit of advances requires the major attention from the auditors.

    In carrying out audit of advances, the auditor is primarily concerned with obtaining evidence about the following:

    a. Amounts included in balance sheet in respect of advances are outstanding at the date of the balance sheet.

    b. Advances represent amount due to the bank.

    c. Amounts due to the bank are appropriately supported by Loan documents and other documents as applicable to the nature of advances.

    d. There are no unrecorded advances.

    e. The stated basis of valuation of advances is appropriate and properly applied, and that the recoverability of advances is recognised in their valuation.

    f. The advances are disclosed, classified and described in accordance with recognised accounting policies and practices and relevant statutory and regulatory requirements.

    g. Appropriate provisions towards advances have been made as per the RBI norms, Accounting Standards and generally accepted accounting practices.

       The auditor can obtain sufficient appropriate audit evidence about advances by study and evaluation of internal controls relating to advances, and by:

       - examining the validity of the recorded amounts;
       - examining loan documentation;
       - reviewing the operation of the accounts;
       - examining the existence, enforceability and valuation of the security;

- checking compliance with RBI norms including appropriate classification and provisioning; and
- carrying out appropriate analytical procedures.

In carrying out his substantive procedures, the auditor should examine all large advances while other advances may be examined on a sampling basis. The accounts identified to be problem accounts however need to be examined in detail unless the amount involved is insignificant.

Advances which are sanctioned during the year or which are adversely commented by RBI inspection team, concurrent auditors, bank's internal inspection, etc. should generally be included in the auditor's review.

Chapter 13- Audit of Different Types of Entities

27 (a) Government Expenditure Audit: Audit of government expenditure is one of the major components of government audit conducted by the office of C&AG. The basic standards set for audit of expenditure are to ensure that there is provision of funds authorised by competent authority fixing the limits within which expenditure can be incurred. **Briefly, these standards are explained below:**

(i) **Audit against Rules & Orders:** The auditor has to see that the expenditure incurred conforms to the relevant provisions of the statutory enactment and is in accordance with the financial rules and regulations framed by the competent authority.

(ii) **Audit of Sanctions:** The auditor has to ensure that each item of expenditure is covered by a sanction, either general or special, accorded by the competent authority, authorising such expenditure.

(iii) **Audit against Provision of Funds:** It contemplates that there is a provision of funds out of which expenditure can be incurred and the amount of such expenditure does not exceed the appropriations made.

(iv) **Propriety Audit:** It is required to be seen that the expenditure is incurred with due regard to broad and general principles of financial propriety. The auditor aims to bring out cases of improper, avoidable, or in fructuous expenditure even though the expenditure has been incurred in conformity with the existing rules and regulations. Audit aims to secure a reasonably high standard of public financial morality by looking into the wisdom, faithfulness and economy of transactions.

(v) **Performance Audit:** This involves that the various programmes, schemes and projects where large financial expenditure has been incurred are being run economically and are yielding results expected of them. Efficiency-cum-performance audit, wherever used, is an objective examination of the financial and operational performance of an organisation, programme, authority or function and is oriented towards identifying opportunities for greater economy, and effectiveness.

(b) Duties of C&AG: The Comptroller & Auditor General's (Duties, Powers and Conditions of Service) Act, 1971 lays down duties of the C&AG as under-

(i) **Compile and submit Accounts of Union and States -** The C&AG shall be responsible for compiling the accounts of the Union and of each State from the initial and subsidiary accounts rendered to the audit and accounts offices under his control by treasuries, offices or departments responsible for the keeping of such account.

(ii) **General Provisions Relating to Audit - It shall be the duty of the C&AG –**

(a) to audit and report on all expenditure from the Consolidated Fund of India and of each State and of each Union Territory having a Legislative Assembly and to ascertain whether the moneys shown in the accounts as having been disbursed were legally available for and applicable to the service or purpose to which they have been applied or charged and whether the expenditure conforms to the authority which governs it;

(b) to audit and report all transactions of the Union and of the States relating to Contingency Funds and Public Accounts;

(c) to audit and report on all trading, manufacturing profit and loss accounts and balance-sheets and other subsidiary accounts kept in any department of the Union or of a State.

(iii) **Audit of Receipts and Expenditure -** Where any body or authority is substantially financed by grants or loans from the Consolidated Fund of India or of any State or of any Union Territory having a Legislative Assembly, the Comptroller and Auditor General shall, subject to the provisions of any law for the time being in force applicable to the body or authority, as the case may be, audit all receipts and expenditure of that body or authority and to report on the receipts and expenditure audited by him.

(iv) **Audit of Grants or Loans -** Where any grant or loan is given for any specific purpose from the Consolidated Fund of India or of any State or of any Union Territory having a Legislative Assembly to any authority or body, not being a foreign State or international organisation, the Comptroller and Auditor General shall scrutinise the procedures by which the sanctioning authority satisfies itself as to the fulfillment of the conditions subject to which such grants or loans were given and shall for this purpose have right of access, after giving reasonable previous notice, to the books and accounts of that authority or body.

(v) **Audit of Receipts of Union or States** - It shall be the duty of the Comptroller and Auditor General to audit all receipts which are payable into the Consolidated Fund of India and of each State and of each Union Territory having a Legislative Assembly and to satisfy himself that the rules and procedures in that behalf are designed to secure an effective check on the assessment, collection and proper allocation of revenue and are being duly observed and to make this purpose such examination of the accounts as he thinks fit and report thereon.

(vi) **Audit of Accounts of Stores and Inventory -** The Comptroller and Auditor General shall have authority to audit and report on the accounts of stores and inventory kept in any office or department of the Union or of a State.

(vii) **Audit of Government Companies and Corporations -** The duties and powers of the Comptroller and Auditor General in relation to the audit of the accounts of government companies shall be performed and exercised by him in accordance with the provisions of the Companies Act, 2013. The comptroller and Auditor-General of India shall appoint the auditor under sub-section (5) or sub-section (7) of section 139 (i.e. appointment of First Auditor or Subsequent Auditor) and direct such auditor the manner in which the accounts of the Government company are required to be audited and thereupon the auditor so appointed shall submit a copy of the audit report to the Comptroller and Auditor-General of India which, among other things, include the directions, if any, issued by the Comptroller and Auditor-General of India, the action taken thereon and its impact on the accounts and financial statement of the company.

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

(i) Examine the Trust Deed, or Regulations in the case of school or college and note all the provisions affecting accounts. In the case of a university, refer to the Act of Legislature and the Regulations framed thereunder.

(ii) Read through the minutes of the meetings of the Managing Committee or Governing Body, noting resolutions affecting accounts to see that these have been duly complied with, specially the decisions as regards the operation of bank accounts and sanctioning of expenditure.

(iii) Check names entered in the Students' Fee Register for each month or term, with the respective class registers, showing names of students on rolls and test amount of fees charged; and verify that there operates a system of internal check which ensures that demands against the students are properly raised.

(iv) Check fees received by comparing counterfoils of receipts granted with entries in the cash book and tracing the collections in the Fee Register to confirm that the revenue from this source has been duly accounted for.

(v) Total up the various columns of the Fees Register for each month or term to ascertain that fees paid in advance have been carried forward and the arrears that are irrecoverable have been written off under the sanction of an appropriate authority.

(vi) Check admission fees with admission slips signed by the head of the institution and confirm that the amount had been credited to a Capital Fund, unless the Managing Committee has taken a decision to the contrary.

(vii) See that free studentship and concessions have been granted by a person authorised to do so, having regard to the prescribed Rules.

(viii) Confirm that fines for late payment or absence, etc., have either been collected or remitted under proper authority.

(ix) Confirm that hostel dues were recovered before students' accounts were closed and their deposits of caution money refunded.

(x) Verify rental income from landed property with the rent rolls, etc.

(xi) Vouch income from endowments and legacies, as well as interest and dividends from investment; also inspect the securities in respect of investments held.

(xii) Verify any Government or local authority grant with the relevant papers of grant. If any expense has been disallowed for purposes of grant, ascertain the reasons and compliance thereof.

(xiii) Report any old heavy arrears on account of fees, dormitory rents, etc, to the Managing Committee.

(xiv) Confirm that caution money and other deposits paid by students on admission have been shown as liability in the balance sheet and not transferred to revenue.

(xv) See that the investments representing endowment funds for prizes are kept separate and any income in excess of the prizes has been accumulated and invested along with the corpus.

(xvi) Verify that the Provident Fund money of the staff has been invested in appropriate securities.

(xvii) Vouch donations, if any, with the list published with the annual report. If some donations were meant for any specific purpose, see that the money was utilised for the purpose.

(xviii) Vouch all capital expenditure in the usual way and verify the same with the sanction for the Committee as contained in the minute book.

(xix) Vouch in the usual manner all establishment expenses and enquire into any unduly heavy expenditure under any head.

(xx) See that increase in the salaries of the staff have been sanctioned and minuted by the Committee.

(xxi) Ascertain that the system ordering inspection on receipt and issue of provisions, foodstuffs, clothing and other equipment is efficient and all bills are duly authorised and passed before payment.

(xxii) Verify the inventories of furniture, stationery, clothing, provision and all equipment, etc. These should be checked by reference to Inventory Register and values applied to various items should be test checked.

(xxiii) Confirm that the refund of taxes deducted from the income from investment (interest on securities, etc.) has been claimed and recovered since the institutions are generally exempted from the payment of income-tax.

(xxiv) Verify the annual statements of accounts and while doing so see that separate statements of account have been prepared as regards Poor Boys Fund, Games Fund, Hostel and Provident Fund of Staff, etc.

PAPER – 7: ENTERPRISE INFORMATION SYSTEMS AND STRATEGIC MANAGEMENT

SECTION – A: ENTERPRISE INFORMATION SYSTEMS

QUESTIONS

Chapter 1: Automated Business Processes

1. A travel agency ABC wishes to implement an automated Grievance Management System at its workplace to manage and handle the problems with an aim of solving them. Determine the major benefits that will be drawn out of automating this Grievance related business process.
2. Describe the term “Internal Control System”? State its limitations as well.
3. A bicycle shop in Delhi provides hired bicycles for day(s) at different rates as shown in table:

Season	Charges per day
Spring (March - May)	₹ 8.00
Summer (June - August)	₹ 9.50
Autumn (Sept - Nov.)	₹ 5.00
Winter (Dec. - Feb.)	₹ 6.00

To attract his customers, the proprietor also gives a discount on the number of days a bicycle is hired for. If the hire period is more than 10 days, a reduction of 15% is made. For every bicycle hired, a deposit of ₹ 20 must be paid.

Develop a flowchart to print out the details for each customer such as name of customer, number of days a bicycle is hired for, hire-charges and total charges including the deposit. It is also assumed that there are 25 customers and complete details for each customer such as name of customer, season and number of days the bicycle is required for is inputted through console.

Chapter 2: Financial and Accounting Systems

4. Explain the concept of “Customer Relationship Management (CRM)” and identify its key benefits also.
5. Being an IT consultant to a Government agency PQR, identify the most common open international standard, that should be used by the agency for their standardized digital business reporting. Support the recommendation by preparing a list of its important features also.

Chapter 3: Information Systems and Its Components

6. Physical security mechanisms in an organization provides protection to people, data, equipment, systems, facilities and company assets. Determine some major ways of protecting the organization’s computer installation in the event of any explosion or fire.

7. (a) As an Information Systems (IS) Auditor, you need to keep yourself up-to-date with the latest Audit tools, techniques and methodology to meet the demands of the job. Discuss about various Audit Tools that you should be aware about.

   (b) Discuss the advantages of continuous Audit Techniques.

Chapter 4: E- Commerce, M-Commerce and Emerging Technologies

8. A customer X intends to place an order for an electric cooker on an online portal ABC.com. With the help of the diagram, determine the general workflow of the E-Commerce transaction that will take place.

9. Describe any six commercial laws each in brief, that are applicable to any e-commerce or m-commerce transactions.

Chapter – 5: Core Banking Systems

10. (a) In Core Banking Systems, discuss the possible risks and their controls around the CASA (Current and Savings Account) process.

    (b) Define Money Laundering.

SUGGESTED ANSWERS/HINTS

1. The major benefits that will be drawn out of automating the Grievance related business process and implementing the Grievance Management System are as follows:

- **Quality and Consistency:** Ensures that every action is performed identically - resulting in high quality, reliable results and stakeholders will consistently experience the same level of service.
- **Time Saving:** Automation reduces the number of tasks employees would otherwise need to do manually. It frees up time to work on items that add genuine value to the business, allowing innovation and increasing employees' levels of motivation.
- **Visibility:** Automated processes are controlled and consistently operate accurately within the defined timeline. It gives visibility of the process status to the organization.
- **Improved Operational Efficiency:** Automation reduces the time it takes to achieve a task, the effort required to undertake it and the cost of completing it successfully. Automation not only ensures systems run smoothly and efficiently, but that errors are eliminated and that best practices are constantly leveraged.
- **Governance and Reliability:** The consistency of automated processes means stakeholders can rely on business processes to operate and offer reliable processes to customers, maintaining a competitive advantage.

- **Reduced Turnaround Times:** Eliminate unnecessary tasks and realign process steps to optimize the flow of information throughout production, service, billing and collection. This adjustment of processes distills operational performance and reduces the turnaround times for both staff and external customers.
- **Reduced Costs:** Manual tasks, given that they are performed one-at-a-time and at a slower rate than an automated task, will cost more. Automation allows us to accomplish more by utilizing fewer resources.

2. **Internal Control System:** Internal Control System means all the policies and procedures adopted by the management of an entity to assist in achieving management's objective of ensuring, as far as practicable, the orderly and efficient conduct of its business, including adherence to management policies, the safeguarding of assets, the prevention and detection of fraud and error, the accuracy and completeness of the accounting records, and the timely preparation of reliable financial information. An Internal Control System:

- facilitates the effectiveness and efficiency of operations.
- helps ensure the reliability of internal and external financial reporting.
- assists compliance with applicable laws and regulations.
- helps safeguarding the assets of the entity.

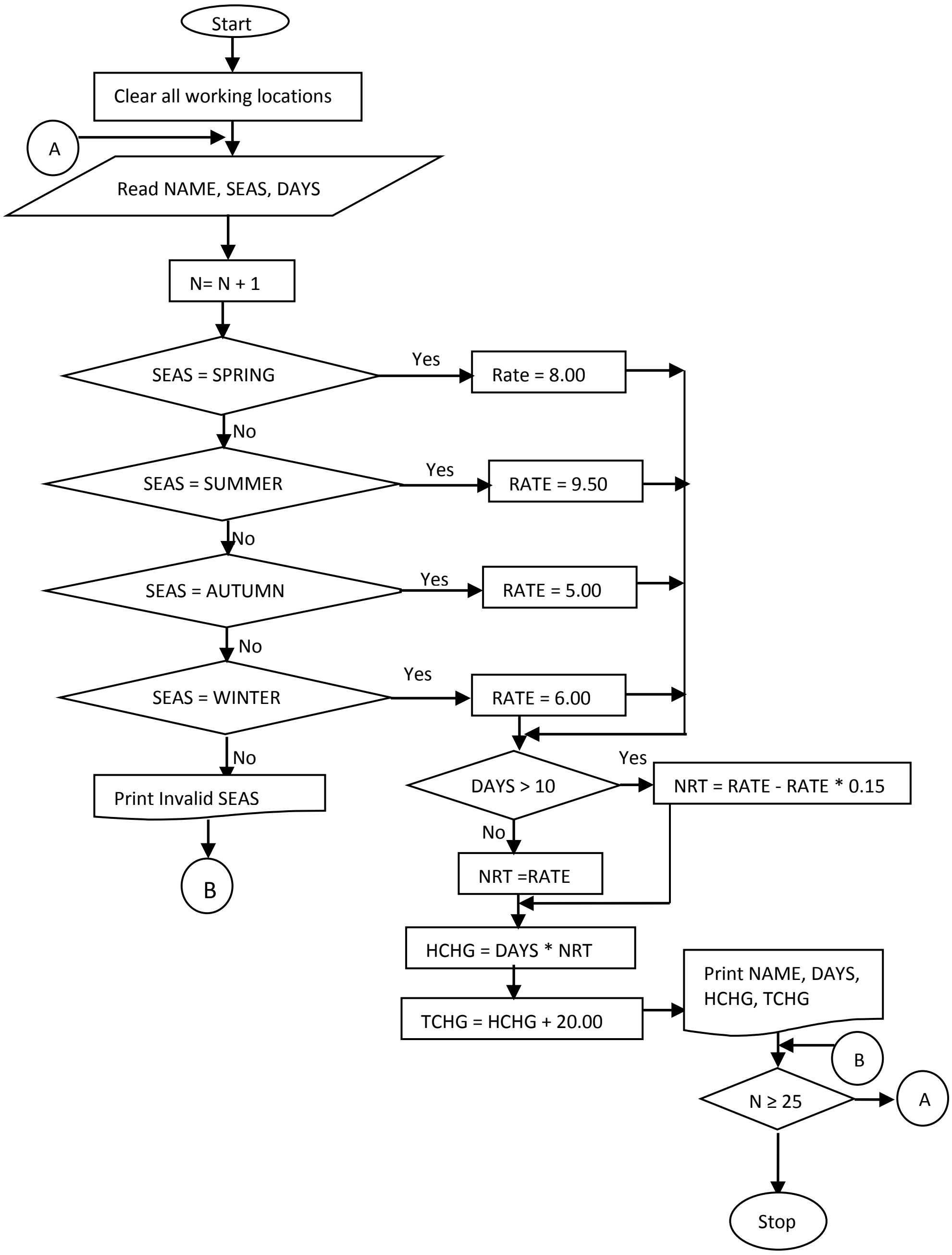
Limitations of Internal Control System are as follows:

- The fact that most internal controls do not tend to be directed at transactions of unusual nature. The potential for human error, such as, due to carelessness, distraction, mistakes of judgement and misunderstanding of instructions.
- The possibility of circumvention of internal controls through collusion with employees or with parties outside the entity.
- The possibility that a person responsible for exercising an internal control could abuse that responsibility, for example, a member of management overriding an internal control.
- Manipulations by management with respect to transactions or estimates and judgements required in the preparation of financial statements.

3. Let us define the variables first:

NAME: Name of the customer	SEAS: Season in which bicycle is hired
DAYS: Number of days a bicycle is hired for	RATE: Hire charges of bicycle per day
N: Number of customers	NRT: Net Rate
HCHG: Hire Charges	TCHG: Total Charges

The required flowchart is shown below:



4. **Customer Relationship Management (CRM):** CRM is a system which aims at improving the relationship with existing customers, finding new prospective customers, and winning back former customers. This system can be brought into effect with software which helps in collecting, organizing, and managing the customer information. CRM manages the enterprise's relationship with its customers. This includes determining who the high-value customers are and documenting what interactions the customers have had with the enterprise.

   Key benefits of a CRM module are as under:

   - **Improved customer relations:** One of the prime benefits of using a CRM is obtaining better customer satisfaction. By using this strategy, all dealings involving servicing, marketing, and selling out products to the customers can be carried out in an organized and systematic way. Better services can be provided to customers through improved understanding of their issues and this in turn helps in increasing customer loyalty and decreasing customer agitation. In this way, continuous feedback from the customers regarding the products and services can be received. It is also possible that the customers may recommend the product to their acquaintances, when efficient and satisfactory services are provided.
   - **Increase customer revenues:** By using a CRM strategy for any business, the revenue of the company can be increased. Using the data collected, marketing campaigns can be popularized in a more effective way. With the help of CRM software, it can be ensured that the product promotions reach a different and brand new set of customers, and not the ones who had already purchased the product, and thus effectively increase the customer revenue.
   - **Maximize up-selling and cross-selling:** A CRM system allows up-selling which is the practice of giving customers premium products that fall in the same category of their purchase. The strategy also facilitates cross selling which is the practice of offering complementary products to customers, based on their previous purchases. This is done by interacting with the customers and getting an idea about their wants, needs, and patterns of purchase. The details thus obtained will be stored in a central database, which is accessible to all company executives. So, when an opportunity is spotted, the executives can promote their products to the customers, thus maximizing up-selling and cross selling.
   - **Better internal communication:** Following a CRM strategy helps in building up better communication within the company. The sharing of customer data between different departments will enable them to work as a team. This is better than functioning as an isolated entity, as it will help in increasing the company's profitability and enabling better service to customers.
   - **Optimize marketing:** CRM enables to understand the customer needs and behaviour in a better way, thereby allowing any enterprise to identify the correct

time to market its product to the customers. CRM will also give an idea about the most profitable customer groups, and by using this information, similar prospective groups, at the right time will be targeted. In this way, marketing resources can be optimized efficiently and time is not wasted on less profitable customer groups.

5. **eXtensible Business Reporting Language (XBRL)** is an open international standard for digital business reporting that provides a language in which reporting terms can be authoritatively defined. Those terms can be used to uniquely represent the contents of financial statements or other kinds of compliance, performance and business reports. XBRL lets reporting information move between organizations rapidly, accurately and digitally. XBRL is a standard-based way to communicate and exchange business information between business systems. These communications are defined by metadata set out in taxonomies, which capture the definition of individual reporting concepts as well as the relationships between concepts and other semantic meaning. Information being communicated or exchanged is provided within an XBRL instance.

Important features of XBRL are as follows:

- **Clear Definitions:** XBRL allows the creation of reusable, authoritative definitions, called taxonomies, that capture the meaning contained in all the reporting terms used in a business report, as well as the relationships between all the terms.
- **Testable Business Rules:** XBRL allows the creation of business rules that constrain what can be reported. Business rules can be logical or mathematical, or both and can be used, for example, these business rules can be used to stop poor quality information being sent to a regulator or third party, by being run by the preparer while the report is in draft; stop poor quality information being accepted by a regulator or third party, by being run at the point that the information is being received.
- **Multi-lingual Support:** XBRL allows concept definitions to be prepared in as many languages as necessary. Translations of definitions can also be added by third parties. This means that it's possible to display a range of reports in a different language to the one that they were prepared in, without any additional work. The XBRL community makes extensive use of this capability as it can automatically open up reports to different communities.
- **Strong Software Support:** XBRL is supported by a very wide range of software from vendors large and small, allowing a very wide range of stakeholders to work with the standard.

6. Fire Damage is one of the major threat to the physical security of a computer installation. Some of the major ways of protecting the installation against fire damage are as follows:

- Both automatic and manual fire alarms may be placed at strategic locations and a control panel may be installed to clearly indicate this.

- Besides the control panel, master switches may be installed for power and automatic fire suppression system. Different fire suppression techniques like Dry-pipe sprinkling systems, water based systems, halon etc., depending upon the situation may be used.
- Manual fire extinguishers can be placed at strategic locations.
- Fireproof Walls; Floors and Ceilings surrounding the Computer Room and Fire Resistant Office Materials such as wastebaskets, curtains, desks, and cabinets should be used.
- Fire exits should be clearly marked. When a fire alarm is activated, a signal may be sent automatically to permanently manned station.
- All staff members should know how to use the system. The procedures to be followed during an emergency should be properly documented are Fire Alarms, Extinguishers, Sprinklers, Instructions / Fire Brigade Nos., Smoke detectors, and Carbon dioxide based fire extinguishers.
- Less wood and plastic should be in computer rooms.
- Use a gas based fire suppression system.
- To reduce the risk of firing, the location of the computer room should be strategically planned and should not be in the basement or ground floor of a multi-storey building.
- Regular Inspection by Fire Department should be conducted.
- Fire suppression systems should be supplemented and not replaced by smoke detectors.
- **Documented and Tested Emergency Evacuation Plans:** Relocation plans should emphasize human safety, but should not leave information processing facilities physically unsecured. Procedures should exist for a controlled shutdown of the computer in an emergency. In all circumstances saving human life should be given paramount importance.
- **Smoke Detectors:** Smoke detectors are positioned at places above and below the ceiling tiles. Upon activation, these detectors should produce an audible alarm and must be linked to a monitored station (for example, a fire station).
- **Wiring Placed in Electrical Panels and Conduit:** Electrical fires are always a risk. To reduce the risk of such a fire occurring and spreading, wiring should be placed in the fire-resistant panels and conduit. This conduit generally lies under the fire-resistant raised floor in the computer room.

7. (a) As an Information Systems (IS) Auditor, various Audit Tools that can be used to perform IS Auditing are as follows:

(i) **Snapshots:** Tracing a transaction is a computerized system can be performed with the help of snapshots or extended records. The snapshot software is built into the system at those points where material processing occurs which takes images of the flow of any transaction as it moves through the application. These images can be utilized to assess the authenticity, accuracy, and completeness of the processing carried out on the transaction. The main areas to dwell upon while involving such a system are to locate the snapshot points based on materiality of transactions when the snapshot will be captured and the reporting system design and implementation to present data in a meaningful way.

(ii) **Integrated Test Facility (ITF):** The ITF technique involves the creation of a dummy entity in the application system files and the processing of audit test data against the entity as a means of verifying processing authenticity, accuracy, and completeness. This test data would be included with the normal production data used as input to the application system. In such cases, the auditor must decide what would be the method to be used to enter test data and the methodology for removal of the effects of the ITF transactions.

(iii) **System Control Audit Review File (SCARF):** The SCARF technique involves embedding audit software modules within a host application system to provide continuous monitoring of the system's transactions. The information collected is written onto a special audit file- the SCARF master files. Auditors then examine the information contained on this file to see if some aspect of the application system needs follow-up. In many ways, the SCARF technique is like the snapshot technique along with other data collection capabilities.

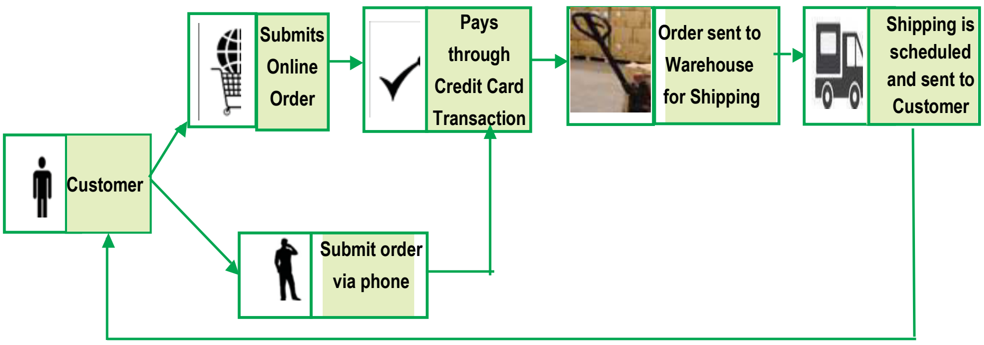
(iv) **Continuous and Intermittent Simulation (CIS):** This is a variation of the SCARF continuous audit technique. This technique can be used to trap exceptions whenever the application system uses a database management system. The advantage of CIS is that it does not require modifications to the application system and yet provides an online auditing capability.

(v) **Audit Hooks:** There are audit routines that flag suspicious transactions. For example, internal auditors at Insurance Company determined that their policyholder system was vulnerable to fraud every time a policyholder changed his or her name or address and then subsequently withdrew funds from the policy. They devised a system of audit hooks to tag records with a name or address change. The internal audit department will investigate these tagged records for detecting fraud. When audit hooks are employed, auditors can be informed of questionable transactions as soon as they occur. This approach of real-time notification displays a message on the auditor's terminal.

(b) Some of the advantages of continuous audit techniques are as under:

- **Timely, Comprehensive and Detailed Auditing** – Evidence would be available more timely and in a comprehensive manner. The entire processing can be evaluated and analyzed rather than examining the inputs and the outputs only.
- **Surprise test capability** – As evidences are collected from the system itself by using continuous audit techniques, auditors can gather evidence without the systems staff and application system users being aware that evidence is being collected at that particular moment. This brings in the surprise test advantages.
- **Information to system staff on meeting of objectives** – Continuous audit techniques provides information to systems staff regarding the test vehicle to be used in evaluating whether an application system meets the objectives of asset safeguarding, data integrity, effectiveness, and efficiency.
- **Training for new users** – Using the Integrated Test Facilities (ITF)s, new users can submit data to the application system, and obtain feedback on any mistakes they make via the system's error reports.

8. The work flow Diagram for any E-Commerce transaction is as follows:



Description of E-Commerce Work Flow Diagram is as follows:

Step 1 - Customers Login: Few e-commerce merchants may allow same transactions to be done through phone, but the basic information flow is e-mode.

Step 2 - Product / Service: Customer selects products / services from available options.

Step 3 - Customer Places: Order is placed for selected product / service by customer. This step leads to next important activity 'Payment Gateway'.

Step 4 - Payment Gateway: Customer selects the payment method. In case payment methods is other than Cash on Delivery (COD), the merchant gets the update from payment gateway about payment realization from customer. In case of COD, e-commerce vendor may do an additional check to validate customer.

Step 5 - Dispatch and Shipping Process: This process may be executed at two different ends. First if product / service inventory is managed by e-commerce vendor, then dispatch shall be initiated at merchant warehouse. Second, many e-commerce merchants allow third party vendors to sale through merchant websites.

Step 6 - Delivery Tracking: Another key element denoting success of e-commerce business is timely delivery. Merchants keep a track of this. All merchants have provided their delivery staff with hand held devices, where the product / service delivery to customers are immediately updated.

Step 7 - COD Tracking: In case products are sold on COD payment mode, merchants need to have additional check on matching delivery with payments.

9. All e-commerce transactions are commercial business transactions. All these transactions are covered under multiple laws, including commercial laws. Following commercial laws are applicable to e-commerce and m-commerce transactions.

- **Income Tax Act, 1961:** Income Tax Act, has detailed provisions regarding taxation of income in India. In respect of e-commerce / m-commerce transactions, the issue of deciding place of origin transaction for tax purpose is critical.
- **Companies Act, 2013:** Companies Act, 2013, regulates the corporate sector. The law defines all regulatory aspects for companies in India. Most of the merchants in e-commerce/m-commerce business are companies, both private and public.
- **Foreign Trade (Development and Regulation) Act, 1992:** An Act to provide for the development and regulation of foreign trade by facilitating imports into, augmenting exports from, India and for matters connected therewith or incidental thereto. Amazon has recently allowed Indian citizens to purchase from its global stores. All these shall be regulated through above law.
- **The Factories Act, 1948:** Act to regulate working conditions of workers. The act extends to place of storage as well as transportation. Most of the merchants in e-commerce / m-commerce business need to comply with provisions of the act.
- **The Custom Act, 1962:** The act that defines import / export of goods / services from India and provides for levy of appropriate customs duty. India being a signatory to General Agreement on Trade and Tariff (GATT) under World Trade Organization, cannot levy any custom duty that GATT non-compliant.
- **The Goods and Services Tax Act, 2017 (GST):** This Act requires each applicable business, including e-commerce/ m-commerce, to upload each sales and purchase invoice on one central IT infrastructure, mandating reconciliations of transactions between business, triggering of tax credits on payments of GST, facilitating filling of e-returns, etc.

- **Indian Contract Act,1872:** The act defines constituents of a valid contract. In case of e-commerce / m-commerce business it becomes important to define these constituents.
- **The Competition Act, 2002:** Law to regulate practices that may have adverse effect on competition in India. Competition Commission have been vigilant to ensure that e-commerce / m-commerce merchants do not engage in predatory practices.
- **Foreign Exchange Management Act (FEMA 1999):** The law to regulate foreign direct investments, flow of foreign exchange in India. The law has important implications for e-commerce / m-commerce business. Foreign investment in Business to Customer (B2C) e-commerce activities has been opened in a calibrated manner and an entity is permitted to undertake retail trading through e-commerce under certain circumstances.
- **Consumer Protection Act, 1986:** The law to protect consumer rights has been source of most of litigations for transaction done through e-commerce and m-commerce.

10. (a) In Core Banking Systems (CBS), the possible risks and their controls around the CASA (Current and Savings Account) Process are as follows:

Risks	Controls
Credit Line setup is unauthorized and not in line with the banks policy.	The credit committee checks that the Financial Ratios, the Net-worth, the Risk factors and its corresponding mitigating factors, the Credit Line offered and the Credit amount etc. is in line with Credit Risk Policy and that the Client can be given the Credit Line.
Credit Line setup in CBS is unauthorized and not in line with the banks policy.	Access rights to authorize the credit limit in case of account setup system should be restricted to authorized personnel.
Customer Master defined in CBS is not in accordance with the Pre-Disbursement Certificate.	Access rights to authorize the customer master in CBS should be restricted to authorized personnel.
Inaccurate interest / charge being calculated in CBS.	Interest on fund based facilities are automatically calculated in the CBS as per the defined rules.
Unauthorized personnel approving the CASA's transaction in CBS.	Segregation of Duties to be maintained between the initiator and authorizer of the transaction for processing transaction in CBS.

Inaccurate accounting entries generated in CBS.	Accounting entries are generated by CBS basis the facilities requested by the customer and basis defined configurations for those facilities in CBS.

(b) Money Laundering: Money Laundering is the process by which the proceeds of the crime and the true ownership of those proceeds are concealed or made opaque so that the proceeds appear to come from a legitimate source. The objective in money laundering is to conceal the existence, illegal source, or illegal application of income to make it appear legitimate. Money laundering is commonly used by criminals to make 'dirty' money appear 'clean' or the profits of criminal activities are made to appear legitimate. Money Laundering involves three stages namely – Placement, Layering and Integration.

SECTION – B: STRATEGIC MANAGEMENT

Brief answers

1. Briefly answer the following questions:
   (a) Define strategic management.
   (b) What is an opportunity?
   (c) How a company can deal with strategic uncertainty?
   (d) Explain the meaning of the Combination strategies.
   (e) Explain Best-cost provider strategy.
   (f) Define logistics strategy.
   (g) Explain the concept of Network structure.
   (h) Define Refreezing in Kurt Lewin's change process

Statement type of question (Correct / Incorrect)

2. State with reasons which of the following statements are correct/incorrect:
   (a) Strategic management involves huge cost.
   (b) Key success factors determine competitive success.
   (c) Information gathering and deep analysis can eliminate uncertainty.
   (d) Turnaround should succeed liquidation strategy.
   (e) Substitutes can also exert significant competitive pressures.
   (f) Publicity is personal form of promotion.
   (g) Network Structures eliminate many in-house functions.
   (h) Strategic surveillance is highly focussed and organised control activity.

Short notes

3. Write short notes on the following:
   (a) Strategy is partly proactive and partly reactive
   (b) Advantages of Cost leadership strategy
   (c) Production system
   (d) Implementation control

Differences between the two concepts

4. Distinguish between the following:
   (a) Inbound logistics and outbound logistics
   (b) Transformational and transactional leadership

(c) Mergers and acquisitions

(d) Vision and Mission

Descriptive answers

Chapter 1-Introduction to Strategic Management

5. Health Wellnow is a Delhi based charitable organisation promoting healthy lifestyle amongst the office-goers. It organises programmes to encourage and guide office-goers on matters related to stress relief, yoga, exercises, healthy diet, weight management, work-life balance and so on. Many business organisations and resident welfare associations take services of Health Wellnow. Its daily yoga sessions are very popular in some of the big companies located in Delhi, Noida and Gurgaon. The Health Wellnow has no commercial interest and does not charge any fees for its services. However, the organisation is able to get good charities and has sufficient funds to meet its routine expenses.

   Do you think the concepts of strategic management are relevant for Health Wellnow? Discuss.

6. The presence of strategic management cannot counter all hindrances and always achieve success for an organisation. What are the limitations attached to strategic management?

Chapter 2-Dynamics of Competitive Strategy

7. Suresh Singhania is the owner of an agri-based private company in Sangrur, Punjab. His unit is producing puree, ketchups and sauces. While its products have significant market share in the northern part of country, the sales are on decline in last couple of years. He seeks help of a management expert who advises him to first understand the competitive landscape.

   Explain the steps to be followed by Suresh Singhania to understand competitive landscape.

8. Explain the concept of experience curve and highlight its relevance in strategic management.

Chapter 3-Strategic Management Process

9. Rohit Seth in an informal discussion with his friend shared that he has to move very cautiously in his organisation as the decisions taken by him have organisation wide impact and involve large commitments of resources. He also said that his decisions decide the future of his organisation.

   Where will you place Rohit Seth in organisational hierarchy? What are the dimensions of the decisions being taken by him?

10. Define strategic intent. Briefly explain the elements of strategic intent.

Chapter 4-Corporate Level Strategies

11. Swift Insurance is a company engaged in the business of providing medical insurance maintaining a market share of 25 to 30 per cent in last five years. Recently, the company decided to enter into the business of auto insurance by having foreign collaboration. Identify the strategy being followed by the Swift Insurance with its advantages.

12. Strategic alliances are formed if they provide an advantage to all the parties in the alliance. Do you agree? Explain in brief the advantages of a strategic alliance.

Chapter 5-Business Level Strategies

13. Airlines industry in India is highly competitive with several players. Businesses face severe competition and aggressively market themselves with each other. Luxury Jet is a private Delhi based company with a fleet size of 9 small aircrafts with seating capacity ranging between 6 seats to 9 seats. There aircrafts are chartered by big business houses and high net worth individuals for their personalised use. With customised tourism packages their aircrafts are also often hired by foreigners. Identify and explain the Michael Porter's Generic Strategy followed by Luxury Jet.

14. What are the common barriers that are faced by new entrants when an existing firm earns higher profits?

Chapter 6-Functional Level Strategies

15. Ronit Roy has started a new business of manufacturing washing powder. Make a plan for him to promote his product.

16. State the factors of human resource that have influence on employee's competence.

Chapter 7-Organisation and Strategic Leadership

17. Suresh Sinha has been recently appointed as the head of a strategic business unit of a large multiproduct company. Advise Mr Sinha about the leadership role to be played by him in execution of strategy.

18. Define Entrepreneur. What are the characteristics of an entrepreneur?

Chapter 8-Strategy Implementation and Control

19. Kewal Kapadia is the Managing Director of KK industries located in Kanpur. In a review meeting with the head of finance, Kuldeep Khaitan he said that in the first five years of last decade the company grew between 8-10 percent every year, then the growth rate started falling and in previous year the company managed 1 per cent. Kuldeep replied that the company is facing twin issues, one the strategy is not being implemented as planned; and two the results produced by the strategy are not in conformity with the intended goals. There is mismatch between strategy formulation and implementation. Kewal disagreed and stated that he takes personal care in implementing all strategic plans.

    You have been hired as a strategy consultant by the KK Industries. Advise way forward for the company to identify problem areas and correct the strategic approaches that have not been effective.

20. What is Benchmarking? Explain briefly the elements involved in Benchmarking process.

SUGGESTED ANSWERS / HINTS

1 **(a)** The term 'strategic management' refers to the managerial process of developing a strategic vision, setting objectives, crafting a strategy, implementing and evaluating the strategy, and initiating corrective adjustments where deemed appropriate.

(b) An opportunity is a favourable condition in the organization's environment which enables it to consolidate and strengthen its position. An example of opportunity is growing demand for the products or services that are offered by company.

(c) Strategic uncertainty denotes the uncertainty that has crucial implications for the organisation. An approach to deal with strategic uncertainty is by grouping them 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.

(d) Combination Strategies refer to a mix of different strategies like stability; expansion, diversification or retrenchment to suit particular situations that an enterprise is facing. For instance, a strategy of diversification/acquisition may call for retrenchment in some obsolete product lines.

(e) Best-cost provider strategy involves providing customers more value for the money by emphasizing low cost and better quality difference. It can be done:

(a) through offering products at lower price than what is being offered by rivals for products with comparable quality and features or

(b) charging similar price as by the rivals for products with much higher quality and better features.

(f) Logistics is a process that integrates the flow of supplies into, through and out of an organization to achieve a level of service that facilitate movement and availability of materials in a proper manner. When a company creates a logistics strategy, it is defining the service levels at which its logistics is smooth and is cost effective.

(g) Network structure is a newer and somewhat more radical organizational design. The network structure could be termed as 'non-structure' as it virtually eliminates in-house business functions and outsource many of them. A corporation organized in this manner is a virtual organization because it is composed of a series of project groups or collaborations linked by constantly changing non-hierarchical, cobweb-like networks.

(h) Kurt Lewin proposed three phases of the change process – Unfreezing, changing and then refreezing. Refreezing occurs when the new behaviour becomes a normal way of life. The new behaviour must replace the former behaviour completely for successful and permanent change to take place. It may be achieved through continuous reinforcement.

2 **(a)** **Correct**: Strategic management is a costly process. Strategic management adds a lot of expenses to an organization. Expert strategic planners need to be engaged. Efforts are made for analysis of external and internal environments, devise strategies and properly implement them. These can be really costly for organisations with limited

resources particularly when small and medium organisation create strategies to compete.

(b) **Correct**: The purpose of identifying Key Success Factors is to make judgments about things that are more important to competitive success and the things that are less important. To compile a list of every factor that matters even a little bit defeats the purpose of concentrating management attention on the factors truly critical to long-term competitive success.

(c) **Incorrect**: Strategic uncertainty is often represented by a future trend or event that has inherent unpredictability. Information gathering and additional analysis is not able to eliminate uncertainty.

(d) **Incorrect**: A retrenchment strategy considered the most extreme and unattractive is liquidation strategy, which involves closing down a firm and selling its assets. It is considered as the last resort because it leads to serious consequences such as loss of employment for workers and other employees, termination of opportunities where a firm could pursue any future activities, and the stigma of failure. In an ideal scenario, turnaround should be attempted first and should precede option of liquidation.

(e) **Correct**: According to porter's five forces model, a final force that can influence industry profitability is the availability of substitutes for an industry's product. To predict profit pressure from this source, firms must search for products that perform the same, or nearly the same, function as their existing products.

(f) **Incorrect**: Publicity is a non-personal form of promotion similar to advertising. However, no payments are made to the media as in case of advertising. Organizations skilfully seek to promote themselves and their products without payment. Publicity is communication of a product, brand or business by placing information about it in the media without paying for the time or media space directly.

(g) **Correct**: The network structure can be termed a "non-structure" by its virtual elimination of in-house business functions. Many activities are outsourced. A corporation organized in this manner is often called a virtual organization because it is composed of a series of project groups or collaborations linked by constantly changing non-hierarchical, cobweb-like networks.

(h) **Incorrect**: The strategic surveillance is unfocussed. It involves general monitoring of various sources of information to uncover unanticipated information having a bearing on the organizational strategy. It involves casual environmental browsing. Reading financial and other newspapers, business magazines, attending meetings, conferences, discussions and so on. Strategic surveillance, a loose form of strategic control, is capable of uncovering information relevant to strategy.

3 **(a)** It is true that strategies are 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 the 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.

(b) A cost leadership strategy may help to remain profitable in the presence of rivalry, new entrants, suppliers' power, substitute products, and buyers' power.

(i) **Rivalry** – Competitors are likely to avoid a price war, since the low cost firm will continue to earn profits after competitors compete away their profits.

(ii) **Buyers** – Powerful buyers/customers would not be able to exploit the cost leader firm and will continue to buy its product.

(iii) **Suppliers** – Cost leaders are able to absorb greater price increases before it must raise price to customers.

(iv) **Entrants** – Low cost leaders create barriers to market entry through its continuous focus on efficiency and reducing costs.

(v) **Substitutes** – Low cost leaders are more likely to lower costs to induce customers to stay with their product, invest to develop substitutes, purchase patents.

(c) Production System is concerned with the capacity, location, layout, product or service design, work systems, degree of automation, extent of vertical integration, and such factors. Strategies related to production system are significant as they deal with vital issues affecting the capability of the organisation to achieve its objectives.

Strategy implementation would have to take into account the production system factors as they involve decisions which are long-term in nature and influence not only the operations capability of an organisation but also its ability to implement strategies and achieve objectives.

(d) Managers implement strategy by converting major plans into concrete, sequential actions that form incremental steps. Implementation control is directed towards assessing the need for changes in the overall strategy in light of unfolding events and results associated with incremental steps and actions.

Strategic implementation control is not a replacement to operational control. Strategic implementation control, unlike operational controls continuously monitors the basic direction of the strategy. The two basic forms of implementation control are:

(i) **Monitoring strategic thrusts:** Monitoring strategic thrusts help managers to determine whether the overall strategy is progressing as desired or whether there is need for readjustments.

(ii) **Milestone reviews.** All key activities necessary to implement strategy are segregated in terms of time, events or major resource allocation. It normally involves a complete reassessment of the strategy. It also assesses the need to continue or refocus the direction of an organization.

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

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

(b) 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. 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.

On the other hand, 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 is more suitable in settled environment, in growing or mature industries, and in organizations that are performing well.

(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 it 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.

(d) The vision describes a future identity while the Mission serves as an on-going and time-independent guide.

The vision statement can galvanize the people to achieve defined objectives, even if they are stretch objectives, provided the vision is specific, measurable, achievable, and relevant and time bound. A mission statement provides a path to realize the vision in line with its values. These statements have a direct bearing on the bottom line and success of the organization.

A mission statement defines the purpose or broader goal for being in existence or in the business and can remain the same for decades if crafted well while a vision statement is more specific in terms of both the future state and the time frame. Vision describes what will be achieved if the organization is successful.

5. The concepts of strategic management are relevant for Health Wellnow.

Organizations can be classified as commercial and non-commercial on the basis of the interest they have. Health Wellnow falls in the category of a non-commercial organisation. While non-commercial organisations may have objectives that are different from the commercial organisations, they need to employ the strategic management tools to efficiently use their resources, generate sufficient surpluses to meet daily expenses and achieve their objectives. In fact, many non-profit and governmental organizations outperform private firms and corporations on innovativeness, motivation, productivity, and human relations.

The strategic management in Health Wellnow needs to cover aspects such as:

(i) Generate sufficient funds for meeting its objectives.

(ii) Efficiently reach office-goers and help them to have health in life.

(iii) Promote itself to cover more offices, resident welfare associations.

(iv) Have a deep collaboration with health experts, including dieticians, psychologist, fitness trainers, yoga experts.

6. The presence of strategic management cannot counter all hindrances and always achieve success as there are limitations attached to strategic management. These can be explained in the following lines:

- Environment is highly complex and turbulent. It is difficult to understand the complex environment and exactly pinpoint how it will shape-up in future. The organisational estimate about its future shape may awfully go wrong and jeopardise all strategic plans. The environment affects as the organisation has to deal with suppliers, customers, governments and other external factors.

- Strategic Management is a time-consuming process. Organisations spend a lot of time in preparing, communicating the strategies that may impede daily operations and negatively impact the routine business.

- Strategic Management is a costly process. Strategic management adds a lot of expenses to an organization. Expert strategic planners need to be engaged, efforts are made for analysis of external and internal environments devise strategies and properly implement. These can be really costly for organisations with limited resources particularly when small and medium organisation create strategies to compete.
- In a competitive scenario, where all organisations are trying to move strategically, it is difficult to clearly estimate the competitive responses to the strategies.

7. Steps to understand the competitive landscape

(i) **Identify the competitor:** The first step to understand the competitive landscape is to identify the competitors in the firm's industry and have actual data about their respective market share.

(ii) **Understand the competitors:** Once the competitors have been identified, the strategist can use market research report, internet, newspapers, social media, industry reports, and various other sources to understand the products and services offered by them in different markets.

(iii) **Determine the strengths of the competitors:** What are the strength of the competitors? What do they do well? Do they offer great products? Do they utilize marketing in a way that comparatively reaches out to more consumers. Why do customers give them their business?

(iv) **Determine the weaknesses of the competitors:** Weaknesses (and strengths) can be identified by going through consumer reports and reviews appearing in various media. After all, consumers are often willing to give their opinions, especially when the products or services are either great or very poor.

(v) **Put all of the information together:** At this stage, the strategist should put together all information about competitors and draw inference about what they are not offering and what the firm can do to fill in the gaps. The strategist can also know the areas which need to be strengthen by the firm.

8. Experience curve is similar to learning curve which explains the efficiency gained by workers through repetitive productive work. Experience curve is based on the commonly observed phenomenon that unit costs decline as a firm accumulates experience in terms of a cumulative volume of production. The implication is that larger firms in an industry would tend to have lower unit costs as compared to those of smaller organizations, thereby gaining a competitive cost advantage. Experience curve results from a variety of factors such as learning effects, economies of scale, product redesign and technological improvements in production.

The concept of experience curve is relevant for a number of areas in strategic management. For instance, experience curve is considered a barrier for new firms contemplating entry in an industry. It is also used to build market share and discourage competition.

9. As the decisions taken by Rohit Seth have organisation wide impact, involves large commitments and have implication on the future, he is at the top level in organisational hierarchy. These characteristics also indicate that he is taking strategic decisions in the organisation. The major dimensions of strategic decisions are as follows:

   - **Strategic decisions require top-management involvement:** Strategic decisions involve thinking in totality of the organization. Hence, problems calling for strategic decisions require to be considered by the top management.
   - **Strategic decisions involve commitment of organisational resources:** For example, Strategic decisions to launch a new project by a firm requires allocation of huge funds and assignment of a large number of employees.
   - **Strategic decisions necessitate consideration of factors in the firm's external environment:** Strategic focus in organization involves orienting its internal environment to the changes of external environment.
   - **Strategic decisions are likely to have a significant impact on the long-term prosperity of the firm:** Generally, the results of strategic implementation are seen on a long-term basis and not immediately.
   - **Strategic decisions are future oriented:** Strategic thinking involves predicting the future environmental conditions and how to orient for the changed conditions.
   - **Strategic decisions usually have major multifunctional or multi-business consequences:** As they involve organization in totality they affect different sections of the organization with varying degree.

10. Strategic Management is defined as a dynamic process of formulation, implementation, evaluation, and control of strategies to realise the organization's strategic intent. Strategic intent refers to purposes for what organization strives for. Top management must define "what they want to do" and "why they want to do". "Why they want to do" represents strategic intent of the firm. Clarity in strategic intent is extremely important for the future success and growth of the enterprise, irrespective of its nature and size.

    Strategic intent can be understood as the philosophical base of strategic management. It implies the purposes, which an organization endeavours to achieve. It is a statement that provides a perspective of the means, which will lead the organization, reach its vision in the long run. Strategic intent gives an idea of what the organization desires to attain in future.

    Strategic intent provides the framework within which the firm would adopt a predetermined direction and would operate to achieve strategic objectives. Strategic intent could be in the form of vision and mission statements for the organisation at the corporate level. It could be expressed as the business definition and business model at the business level of the organisation.

    Strategic intent is generally stated in broad terms but when stated in precise terms it is an expression of aims to be achieved operationally i.e., goals and objectives.

Elements of Strategic Intent

(i) **Vision**: Vision implies the blueprint of the company's future position. It describes where the organisation wants to land. It depicts the organisation's aspirations and provides a glimpse of what the organization would like to become in future. Every sub system of the organization is required to follow its vision.

(ii) **Mission**: Mission delineates the firm's business, its goals and ways to reach the goals. It explains the reason for the existence of the firm in the society. It is designed to help potential shareholders and investors understand the purpose of the company. A mission statement helps to identify, 'what business the company undertakes.' It defines the present capabilities, activities, customer focus and business makeup.

(iii) **Business definition**: It seeks to explain the business undertaken by the firm, with respect to the customer needs, target markets, and alternative technologies. With the help of business definition, one can ascertain the strategic business choices. Organisational restructuring also depends upon the business definition.

(iv) **Business model**: Business model, as the name implies is a strategy for the effective operation of the business, ascertaining sources of income, desired customer base, and financial details. Rival firms, operating in the same industry rely on the different business model due to their strategic choice.

(v) **Goals and objectives**: These are the base of measurement. Goals are the end results, that the organization attempts to achieve. On the other hand, objectives are time-based measurable targets, which help in the accomplishment of goals. These are the end results which are to be attained with the help of an overall plan, over the particular period. However, in practice no distinction is made between goals and objectives and both terms are used interchangeably.

The vision, mission, business definition, and business model explain the philosophy of the organisation but the goals and objectives represent the results to be achieved in multiple areas of business.

11. Overall Swift Insurance is following growth or expansion strategy as it is redefining the business and enlarging its scope. The step will also substantially increase investment in the business.

The new business is related and at the same time caters to a different segment and accordingly can be termed as related diversification. The new business falls within the scope of general insurance and horizontally related to the existing business.

In the process of expansion, the company will be able to exploit:

- Its brand name.
- The marketing skills available.
- The existing sales and distribution infrastructure.
- Research and development.
- Economies of scale

12. Strategic alliances are formed if they provide an advantage to all the parties in the alliance. These advantages can be broadly categorised as follows:

(i) **Organizational:** Strategic alliances may be formed to learn necessary skills and obtain certain capabilities from the strategic partner. Strategic partners may also help to enhance productive capacity, provide a distribution system, or extend supply chain. A strategic partner may provide a good or service that complements each other, thereby creating a synergy. If one partner is relatively new or untried in a certain industry, having a strategic partner who is well-known and respected will help add legitimacy and creditability to the venture.

(ii) **Economic:** Alliances can reduce costs and risks by distributing them across the members of the alliance. Partners can obtain greater economies of scale in an alliance, as production volume increase, causing the cost per unit to decline. Finally, partners can take advantage of co-specialization, where specializations are bundled together, creating additional value.

(iii) **Strategic:** Organizations may join to cooperate instead of compete. Alliances may also create vertical integration where partners are part of supply chain. Strategic alliances may also be useful to create a competitive advantage by the pooling of resources and skills. This may also help with future business opportunities and the development of new products and technologies. Strategic alliances may also be used to get access to new technologies or to pursue joint research and development.

(iv) **Political:** Sometimes there is need to form a strategic alliance with a local foreign business to gain entry into a foreign market either because of local prejudices or legal barriers to entry. Forming strategic alliances with politically-influential partners may also help improve overall influence and position.

13. The Airlines industry faces stiff competition. However, Luxury Jet has attempted to create a niche market by adopting focused differentiation strategy. A focused differentiation strategy requires offering unique features that fulfil the demands of a narrow market.

Luxury Jet compete in the market based on uniqueness and target a narrow market which provides business houses, high net worth individuals to maintain strict schedules. The option of charter flights provided several advantages including, flexibility, privacy, luxury and many a times cost saving. Apart from conveniences, the facility will provide time flexibility. Travelling by private jet is the most comfortable, safe and secure way of flying your company's senior business personnel.

Chartered services in airlines can have both business and private use. Personalized tourism packages can be provided to those who can afford it.

14. A firm's profitability tends to be higher when other firms are blocked from entering the industry. New entrants can reduce industry profitability because they add new production capacity leading to increase supply of the product even at a lower price and can substantially erode existing firm's market share. Barriers to entry represent economic forces (or 'hurdles') that slow down or impede entry by other firms. Common barriers to entry include:

(i) **Capital requirements:** When a large amount of capital is required to enter an industry, firms lacking funds are effectively barred from the industry, thus enhancing the profitability of existing firms in the industry.

(ii) **Economies of scale:** Many industries are characterized by economic activities driven by economies of scale. Economies of scale refer to the decline in the per-unit cost of production (or other activity) as volume grows. A large firm that enjoys economies of scale can produce high volumes of goods at successively lower costs. This tends to discourage new entrants.

(iii) **Product differentiation:** Production differentiation refers to the physical or perceptual differences, or enhancements, that make a product special or unique in the eyes of customers. Firms in the personal care products and cosmetics industries actively engage in product differentiation to enhance their products' features. Differentiation works to reinforce entry barriers because the cost of creating genuine product differences may be too high for the new entrants.

(iv) **Switching costs:** To succeed in an industry, new entrant must be able to persuade existing customers of other companies to switch to its products. To make a switch, buyers may need to test a new firm's product, negotiate new purchase contracts, and train personnel to use the equipment, or modify facilities for product use. Buyers often incur substantial financial (and psychological) costs in switching between firms. When such switching costs are high, buyers are often reluctant to change.

(v) **Brand identity:** The brand identity of products or services offered by existing firms can serve as another entry barrier. Brand identity is particularly important for infrequently purchased products that carry a high unit cost to the buyer. New entrants often encounter significant difficulties in building up the brand identity, because to do so they must commit substantial resources over a long period.

(vi) **Access to distribution channels:** The unavailability of distribution channels for new entrants poses another significant entry barrier. Despite the growing power of the internet, many firms may continue to rely on their control of physical distribution channels to sustain a barrier to entry to rivals. Often, existing firms have significant influence over the distribution channels and can retard or impede their use by new firms.

(vii) **Possibility of aggressive retaliation:** Sometimes the mere threat of aggressive retaliation by incumbents can deter entry by other firms into an existing industry. For example, introduction of products by a new firm may lead existing firms to reduce their product prices and increase their advertising budgets.

15. Promotion stands for activities that communicate the merits of the product and persuade target consumers to buy it. Strategies are needed to combine individual methods such as advertising, personal selling, and sales promotion into a coordinated campaign. Modern marketing is highly promotional oriented.

Ronit needs to cover four major direct promotional methods or tools – personal selling, advertising, publicity and sales promotion. They are briefly explained as follows:

(i) **Personal selling:** Personal Selling involves face-to-face interaction of sales force with the prospective customers and provides a high degree of personal attention to them. In personal selling, oral communication is made with potential buyers of a product with the intention of making a sale.

Ronit may engage a sales team to reach potential customers, explain the benefits of the product and make a sale.

While personal selling is highly effective it suffers from very high costs as sales personnel are expensive. Considering the product is a new launch in a competitive environment having a sales team would be essential.

(ii) **Advertising:** Advertising is a non-personal, highly flexible and dynamic promotional method.

Ronit needs to advertise washing powder through hoardings, display boards particularly near the point of sale. He may also consider having advertisements through handouts, newspapers, magazines and internet. Television and radio are costly alternatives that may be considered according to his budget.

(iii) **Publicity:** Publicity is also a non-personal form of promotion similar to advertising. He may organize a launch party where journalists are invited. It is way of reaching customers with negligible cost. Basic tools for publicity are press releases, press conferences, reports, stories, and internet releases. These releases must be of interest to the public.

(iv) **Sales promotion:** Sales promotion is an omnibus term that includes all activities that are undertaken to promote the business but are not specifically included under personal selling, advertising or publicity. Ronit may offer free trial packs to generate interest in the product. Activities like discounts, contests, money refunds, instalments, kiosks, exhibitions and fairs constitute sales promotion. All these are meant to give a boost to the sales. Sales promotion done periodically may help in getting a larger market share.

16. Human resource management has been accepted as a strategic partner in the formulation of organization's strategies and in the implementation of such strategies through human resource planning, employment, training, appraisal and reward systems. The following points should be kept in mind as they can have a strong influence on employee competence:

i. **Recruitment and selection:** The workforce will be more competent if a firm can successfully identify, attract, and select highly competent applicants.

ii. **Training:** The workforce will be more competent if employees are well trained to perform their jobs properly.

iii. **Appraisal of performance:** The performance appraisal is to identify any performance deficiencies experienced by employees due to lack of competence. Such deficiencies, once identified, can often be solved through counselling, coaching or training.

iv. **Compensation:** A firm can usually increase the competency of its workforce by offering pay, benefits and rewards that are not only attractive than those of their competitors but also recognizes merit.

17. Leading change has to start with diagnosing the situation and then deciding which of several ways to handle it. Managers have five leadership roles to play in pushing for good strategy execution:

(i) Staying on top of what is happening, closely monitoring progress, solving out issues, and learning what obstacles lie in the path of good execution.

(ii) Promoting a culture of esprit de corps that mobilizes and energizes organizational members to execute strategy in a competent fashion and perform at a high level.

(iii) Keeping the organization responsive to changing conditions, alert for new opportunities, bubbling with innovative ideas, and ahead of rivals in developing competitively valuable competencies and capabilities.

(iv) Exercising ethical leadership and insisting that the company conduct its affairs like a model corporate citizen.

(v) Pushing corrective actions to improve strategy execution and overall strategic performance.

18. An entrepreneur is an individual who conceives the idea of starting a new venture, takes all types of risks, not only to put the product or service into reality but also to make it an extremely demanding one. An entrepreneur is one who:

- Initiates and innovates a new concept.
- Recognises and utilises opportunity.
- Arranges and coordinates resources such as man, material, machine and capital.
- Faces risks and uncertainties.
- Establishes a startup company.
- Adds value to the product or service.
- Takes decisions to make the product or service a profitable one.
- Is responsible for the profits or losses of the company.

19. The company needs to conduct strategy audit.

A strategy audit is needed under the following conditions:

- When the performance indicators reflect that a strategy is not working properly or is not producing desired outcomes.
- When the goals and objectives of the strategy are not being accomplished.
- When a major change takes place in the external environment of the organization.
- When the top management plans:
  - to fine-tune the existing strategies and introduce new strategies and

- to ensure that a strategy that has worked in the past continues to be in-tune with subtle internal and external changes that may have occurred since the formulation of strategies.

Adequate and timely feedback is the cornerstone of effective strategy audit. Strategy audit can be no better than the information on which it is based.

Strategy Audit includes three basic activities:

(i) Examining the underlying bases of a firm's strategy,

(ii) Comparing expected results with actual results, and

(iii) Taking corrective actions to ensure that performance conforms to plans.

20. Benchmarking is an approach of setting goals and measuring productivity of firms based on best industry practices or against the products, services and practices of its competitors or other acknowledged leaders in the industry. It developed out of need to have information against which performance can be measured. Benchmarking helps businesses in improving performance by learning from the best practices and the processes by which they are achieved. Thus, benchmarking is a process of continuous improvement in search for competitive advantage. Firms can use benchmarking practices to achieve improvements in diverse range of managerial functions like product development, customer services, human resources management, etc.

The various steps in Benchmarking Process are as under:

(i) **Identifying the need for benchmarking:** This step will define the objectives of the benchmarking exercise. It will also involve selecting the type of benchmarking. Organizations identify realistic opportunities for improvements.

(ii) **Clearly understanding existing decisions processes:** The step will involve compiling information and data on performance.

(iii) **Identify best processes:** Within the selected framework best processes are identified. These may be within the same organization or external to them.

(iv) **Comparison of own process and performance with that of others:** Benchmarking process also involves comparison of performance of the organization with performance of other organization. Any deviation between the two is analysed to make further improvements.

(v) **Prepare a report and implement the steps necessary to close the performance gap:** A report on benchmarking initiatives containing recommendations is prepared. Such a report also contains the action plans for implementation.

(vi) **Evaluation:** Business organizations evaluate the results of the benchmarking process in terms of improvements vis-à-vis objectives and other criteria set for the purpose. It also periodically evaluates and reset the benchmarks in the light of changes in the conditions that impact the performance.

PAPER – 8A: FINANCIAL MANAGEMENT AND ECONOMICS FOR FINANCE

PART A: FINANCIAL MANAGEMENT

QUESTIONS

Ratio Analysis

1. Following figures are available in the books Tirupati Ltd.

Fixed assets turnover ratio	8 times
Capital turnover ratio	2 times
Inventory Turnover	8 times
Receivable turnover	4 times
Payable turnover	6 times
G P Ratio	25%

Gross profit during the year amounts to ₹ 8,00,000. There is no long-term loan or overdraft. Reserve and surplus amount to ₹ 2,00,000. Ending inventory of the year is ₹ 20,000 above the beginning inventory.

Required:

CALCULATE various assets and liabilities and PREPARE a Balance sheet of Tirupati Ltd.

Cost of Capital

2. Navya Limited wishes to raise additional capital of ₹10 lakhs for meeting its modernisation plan. It has ₹ 3,00,000 in the form of retained earnings available for investments purposes. The following are the further details:

Debt/ equity mix	40%/60%
Cost of debt (before tax)	
Upto ₹ 1,80,000	10%
Beyond ₹ 1,80,000	16%
Earnings per share	₹ 4
Dividend pay out	₹ 2
Expected growth rate in dividend	10%
Current market price per share	₹ 44
Tax rate	50%

Required:

(i) To DETERMINE the pattern for raising the additional finance.

(ii) To CALCULATE the post-tax average cost of additional debt.

(iii) To CALCULATE the cost of retained earnings and cost of equity, and

(iv) To DETERMINE the overall weighted average cost of capital (after tax).

Capital Structure Decisions

3. Company P and Q are identical in all respects including risk factors except for debt/equity, company P having issued 10% debentures of ₹ 18 lakhs while company Q is unlevered. Both the companies earn 20% before interest and taxes on their total assets of ₹ 30 lakhs.

   Assuming a tax rate of 50% and capitalization rate of 15% from an all-equity company.

   Required:

   CALCULATE the value of companies' P and Q using (i) Net Income Approach and (ii) Net Operating Income Approach.

Leverage

4. CALCULATE the operating leverage, financial leverage and combined leverage from the following data under Situation I and II and Financial Plan A and B:

Installed Capacity	4,000 units
Actual Production and Sales	75% of the Capacity
Selling Price	₹30 per unit
Variable Cost	₹15 per unit

Fixed Cost:

Under Situation I	₹ 15,000
Under Situation-II	₹ 20,000

Capital Structure:

	Financial Plan	
	A (₹)	**B (₹)**
Equity	10,000	15,000
Debt (Rate of Interest at 20%)	10,000	5,000
	20,000	20,000

Capital Budgeting

5. A company has to make a choice between two projects namely A and B. The initial capital outlay of two Projects are ₹ 1,35,000 and ₹ 2,40,000 respectively for A and B. There will be no scrap value at the end of the life of both the projects. The opportunity Cost of Capital of the company is 16%. The annual incomes are as under:

Year	Project A (₹)	Project B (₹)	Discounting factor @ 16%
1	--	60,000	0.862
2	30,000	84,000	0.743
3	1,32,000	96,000	0.641
4	84,000	1,02,000	0.552
5	84,000	90,000	0.476

Required:

CALCULATE for each project:

(i) Discounted payback period

(ii) Profitability index

(iii) Net present value

DECIDE which of these projects should be accepted?

Management of Payables (Creditors)

6. A Ltd. is in the manufacturing business and it acquires raw material from X Ltd. on a regular basis. As per the terms of agreement the payment must be made within 40 days of purchase. However, A Ltd. has a choice of paying ₹ 98.50 per ₹ 100 it owes to X Ltd. on or before 10th day of purchase.

Required:

EXAMINE whether A Ltd. should accept the offer of discount assuming average billing of A Ltd. with X Ltd. is ₹ 10,00,000 and an alternative investment yield a return of 15% and company pays the invoice.

Financing of Working Capital

7. Following information is forecasted by the Puja Limited for the year ending 31st March, 20X8:

	Balance as at 1st April, 20X7 (₹)	Balance as at 31st March, 20X8 (₹)
Raw Material	45,000	65,356
Work-in-progress	35,000	51,300
Finished goods	60,181	70,175
Debtors	1,12,123	1,35,000
Creditors	50,079	70,469

Annual purchases of raw material (all credit)		4,00,000
Annual cost of production		7,50,000
Annual cost of goods sold		9,15,000
Annual operating cost		9,50,000
Annual sales (all credit)		11,00,000

You may take one year as equal to 365 days.

Required:

CALCULATE

(i) Net operating cycle period.

(ii) Number of operating cycles in the year.

(iii) Amount of working capital requirement using operating cycles.

Risk Analysis in Capital Budgeting

8. From the following details relating to a project, analyse the sensitivity of the project to changes in initial project cost, annual cash inflow and cost of capital:

Initial Project Cost (₹)	1,20,000
Annual Cash Inflow (₹)	45,000
Project Life (Years)	4
Cost of Capital	10%

Required:

EXAMINE which of the three factors, the project is most sensitive? (Use annuity factors: for 10% 3.169 and 11% 3.103).

Dividend Decisions

9 The following information relates to Navya Ltd:

Earnings of the company	₹ 20,00,000
Dividend pay-out ratio	60%
No. of Shares outstanding	4,00,000
Rate of return on investment	15%
Equity capitalization rate	12%

Required:

(i) DETERMINE what would be the market value per share as per Walter's model.

(ii) COMPUTE optimum dividend pay-out ratio according to Walter's model and the market value of company's share at that pay-out ratio.

Lease Financing

10. A Company is planning to acquire a machine costing ₹5,00,000. Effective life of the machine is 5 years. The Company is considering two options, one is to take the machine on lease and the other is to borrow ₹ 5,00,000 from its bankers at 10% interest p.a. The Principal amount of loan will be paid in 5 equal instalments to be paid annually. The machine will be sold at ₹50,000 at the end of 5th year. Following further information are given:

    (i) Principal, interest, lease rentals are payable on the last day of each year.

    (ii) The machine will be fully depreciated over its effective life.

    (iii) Tax rate is 30% and after tax. Cost of capital is 8%.

    Required:

    COMPUTE the lease rentals payable which will make the firm indifferent to the loan option.

11. **Miscellaneous**

    (i) "The profit maximization is not an operationally feasible criterion. DISCUSS

    (ii) EXPLAIN the followings:

    (a) Bridge Finance

    (b) Floating Rate Bonds

    (c) Packing Credit.

    (iii) "Financial Leverage is a double-edged sword" DISCUSS

SUGGESTED HINTS/ANSWERS

1. **(a)** G.P. ratio $= \frac{\text{Gross Profit}}{\text{Sales}} = 25\%$

$$\text{Sales} = \frac{\text{Gross Profit}}{25} \times 100 = \frac{₹\,8,00,000}{25} \times 100 = ₹\,32,00,000$$

(b) Cost of Sales = Sales – Gross profit

= ₹ 32,00,000 - ₹ 8,00,000

= ₹ 24,00,000

(c) Receivable turnover $= \frac{\text{Sales}}{\text{Receivables}} = 4$

= Receivables $= \frac{\text{Sales}}{4} = \frac{₹32,00,000}{4} = ₹\,8,00,000$

(d) Fixed assets turnover $= \frac{\text{Cost of Sales}}{\text{Fixed Assets}} = 8$

Fixed assets $= \frac{\text{Cost of Sales}}{8} = \frac{₹\,24,00,000}{8} = ₹\,3,00,000$

(e) Inventory turnover $= \frac{\text{Cost of Sales}}{\text{Average Stock}} = 8$

Average Stock $= \frac{\text{Cost of Sales}}{8} = \frac{₹24,00,000}{8} = ₹\,3,00,000$

Average Stock $= \frac{\text{Opening Stock} + \text{Closing Stock}}{2}$

Average Stock $= \frac{\text{Opening Stock} + \text{Opening Stock} + 20,000}{2}$

Average Stock = Opening Stock + ₹ 10,000

Opening Stock = Average Stock - ₹ 10,000

= ₹ 3,00,000 - ₹10,000

= ₹ 2,90,000

Closing Stock = Opening Stock + ₹ 20,000

= ₹ 2,90,000 + ₹ 20,000

= ₹ 3,10,000

(f) Payable turnover $= \frac{\text{Purchases}}{\text{Payables}} = 6$

Purchases = Cost of Sales + Increase in Stock

= ₹ 24,00,000 + ₹ 20,000

= ₹ 24,20,000

Payables $= \frac{\text{Purchase}}{6} = \frac{₹24,20,000}{6} = ₹\,4,03,333$

(g) Capital turnover $= \frac{\text{Cost of Sales}}{\text{Capital Employed}} = 2$

Capital Employed = $\frac{\text{Cost of Sales}}{2} = \frac{₹24,00,000}{2}$ = ₹12,00,000

(h) Share Capital = Capital Employed – Reserves & Surplus

= ₹ 12,00,000 – ₹ 2,00,000 = ₹ 10,00,000

Balance Sheet of Tirupati Ltd as on...............

Liabilities	Amount (₹)	Assets	Amount (₹)
Share Capital	10,00,000	Fixed Assets	3,00,000
Reserve & Surplus	2,00,000	Closing Inventories	3,10,000
Payables	4,03,333	Receivables	8,00,000
		Other Current Assets	1,93,333
	16,03,333		16,03,333

(Fixed Asset turnover, inventory turnover capital turnover is calculated on cost of sales)

2. (i) Pattern of Raising Additional Finance

Equity = 10,00,000 × 60/100 = ₹ 6,00,000

Debt = 10,00,000 × 40/100 = ₹ 4,00,000

Capital structure after Raising Additional Finance

Sources of fund	Amount (₹)
Shareholder's funds	
Equity capital (6,00,000 – 3,00,000)	3,00,000
Retained earnings	3,00,000
Debt at 10% p.a.	1,80,000
Debt at 16% p.a. (4,00,000 –1,80,000)	2,20,000
Total funds	10,00,000

(ii) Post-tax Average Cost of Additional Debt

$K_d = I(1 – t)$, where 'K_d' is cost of debt, 'I' is interest and 't' is tax rate.

On ₹ 1,80,000 = 10% (1 - 0.5) = 5% or 0.05

On ₹ 2,20,000 = 16% (1 – 0.5) = 8% or 0.08

Average Cost of Debt (Post tax) i.e.

$$K_d = \frac{(1,80,000 \times 0.05) + (2,20,000 \times 0.08)}{4,00,000} \times 100 = 6.65\%$$

(iii) Cost of Retained Earnings and Cost of Equity applying Dividend Growth Model

$$K_e = \frac{D_1}{P_0} + g \quad \text{or} \quad \frac{D_0(1+g)}{P_0} + g$$

$$\text{Then, } K_e = \frac{2(1.1)}{44} + 0.10 = \frac{2.2}{44} + 0.10 = 0.15 \text{ or } 15\%$$

(iv) Overall Weighted Average Cost of Capital (WACC) (After Tax)

Particulars	Amount (₹)	Weights	Cost of Capital	WACC
Equity (including retained earnings)	6,00,000	0.60	15%	9.00
Debt	4,00,000	0.40	6.65%	2.66
Total	10,00,000	1.00		11.66

3. (i) Valuation under Net Income Approach

Particulars	P Amount (₹)	Q Amount (₹)
Earnings before Interest & Tax (EBIT) (20% of ₹ 30,00,000)	6,00,000	6,00,000
Less: Interest (10% of ₹ 18,00,000)	1,80,000	
Earnings before Tax (EBT)	4,20,000	6,00,000
Less: Tax @ 50%	2,10,000	3,00,000
Earnings after Tax (EAT) (available to equity holders)	2,10,000	3,00,000
Value of equity (capitalized @ 15%)	14,00,000 (2,10,000 × 100/15)	20,00,000 (3,00,000 × 100/15)
Add: Total Value of debt	18,00,000	Nil
Total Value of Company	32,00,000	20,00,000

(ii) Valuation of Companies under Net Operating Income Approach

Particulars	P Amount (₹)	Q Amount (₹)
Capitalisation of earnings at 15% $\left(\frac{₹6,00,000(1-0.5)}{0.15}\right)$	20,00,000	20,00,000

Less: Value of debt {18,00,000 (1 – 0.5)}	9,00,000	Nil
Value of equity	11,00,000	20,00,000
Add: Total Value of debt	18,00,000	Nil
Total Value of Company	29,00,000	20,00,000

4. (i) Operating leverages:

Particulars	Situation-I (₹)	Situation-II (₹)
Sales (S) (3,000 units @ ₹ 30/- per unit)	90,000	90,000
Less: Variable Cost (VC) @ ₹15 per unit	(45,000)	(45,000)
Contribution (C)	45,000	45,000
Less: Fixed Cost (FC)	15,000	20,000
EBIT	30,000	25,000
Operating Leverage $\left(\frac{C}{EBIT}\right)$	$\frac{45,000}{30,000}$	$\frac{45,000}{25,000}$
	= 1.5	= 1.8

(ii) Financial Leverages:

	A (₹)	B (₹)
Situation I:		
EBIT	30,000	30,000
Less: Interest on debt	(2,000)	(1,000)
EBT	28,000	29,000
Financial Leverage $\left(\frac{EBIT}{EBT}\right)$	$\frac{30,000}{28,000}$	$\frac{30,000}{29,000}$
	= 1.07	= 1.03
Situation-II:		
EBIT	25,000	25,000
Less: Interest on debt	(2,000)	(1,000)
EBT	23,000	24,000
Financial Leverage $\left(\frac{EBIT}{EBT}\right)$	$\frac{25,000}{23,000}$	$\frac{25,000}{24,000}$
	= 1.09	= 1.04

(iii) Combined Leverages:

		A (₹)	B (₹)
(a)	Situation I	1.5 × 1.07 = 1.61	1.5 × 1.03 = 1.55
(b)	Situation II	1.8 × 1.09 = 1.96	1.8 × 1.04 = 1.87

5. Working notes

1 Computation of Net Present Values of Projects

Year	*Cash flows*		*Disct. factor @ 16 %*	*Discounted Cash flow*	
	Project A (₹)	*Project B (₹)*		*Project A (₹)*	*Project B (₹)*
	(1)	*(2)*	*(3)*	*(3) × (1)*	*(3) × (2)*
0	(1,35,000)	(2,40,000)	1.000	(1,35,000)	(2,40,000)
1	--	60,000	0.862	--	51,720
2	30,000	84,000	0.743	22,290	62,412
3	1,32,000	96,000	0.641	84,612	61,536
4	84,000	1,02,000	0.552	46,368	56,304
5	84,000	90,000	0.476	39,984	42,840
Net present value				58,254	34,812

2 Computation of Cumulative Present Values of Projects Cash inflows

Year	*Project A*		*Project B*	
	PV of cash inflows (₹)	*Cumulative PV (₹)*	*PV of cash inflows (₹)*	*Cumulative PV (₹)*
1	--	--	51,720	51,720
2	22,290	22,290	62,412	1,14,132
3	84,612	1,06,902	61,536	1,75,668
4	46,368	1,53,270	56,304	2,31,972
5	39,984	1,93,254	42,840	2,74,812

(i) Discounted payback period: *(Refer to Working note 2)*

Cost of Project A = ₹ 1,35,000

Cost of Project B = ₹ 2,40,000

Cumulative PV of cash inflows of Project A after 4 years = ₹ 1,53,270

Cumulative PV of cash inflows of Project B after 5 years = ₹ 2,74,812

A comparison of projects cost with their cumulative PV clearly shows that the project A's cost will be recovered in less than 4 years and that of project B in less than 5 years. The exact duration of discounted payback period can be computed as follows*:*

	Project A	Project B
Excess PV of cash inflows over the project cost (₹)	18,270 (₹ 1,53,270 – ₹ 1,35,000)	34,812 (₹ 2,74,812 – ₹ 2,40,000)
Computation of period required to recover excess amount of cumulative PV over project cost (Refer to Working note 2)	0.39 year (₹ 18,270 ÷₹ 46,368)	0.81 years (₹ 34,812 ÷ ₹ 42,840)
Discounted payback period	3.61 year (4 – 0.39) years	4.19 years (5 – 0.81) years

(ii) Profitability Index(PI): $= \frac{\text{Sum of discounted cash inflows}}{\text{Initian cash outlay}}$

Profitability Index (for Project A) = $\frac{₹\ 1,93,254}{₹\ 1,35,000}$ = 1.43

Profitability Index (for Project B) = $\frac{₹\ 2,74,812}{₹\ 2,40,000}$ = 1.15

(iii) Net present value(NPV) *(for Project A)* = ₹ 58,254

Net present value(NPV) *(for Project B)* = ₹ 34,812

(Refer to Working note 1)

Conclusion: As the NPV, PI of Project A is higher and Discounted Pay back is lower, therefore Project a should be accepted.

6. Annual Benefit of accepting the Discount

$$\frac{₹1.5}{₹100 - ₹1.50} \times \frac{365\,\text{days}}{40 - 10\,\text{days}} = 18.53\%$$

Annual Cost = Opportunity Cost of foregoing interest on investment = 15%

If average invoice amount is ₹ 10,00,000

	If discount is	
	Accepted (₹)	Not Accepted (₹)
Payment to Supplier (₹)	9,85000	10,00,000
Return on investment of ₹9,85,000 for 30 days {₹ 9,85,000 × (30/365) × 15%}		(12,144)
	9,85,000	9,87,856

Thus, from above table it can be seen that it is cheaper to accept the discount.

7. Working Notes:

1. **Raw Material Storage Period (R)**

$$= \frac{\text{Average Stock of Raw Material}}{\text{Annual Consumption of Raw Material}} \times 365$$

$$= \frac{\frac{₹\,45{,}000 + ₹\,65{,}356}{2}}{₹\,3{,}79{,}644} \times 365$$

= 53 days.

Annual Consumption of Raw Material = Opening Stock + Purchases - Closing Stock

= ₹ 45,000 + ₹ 4,00,000 – ₹ 65,356

= ₹ 3,79,644

2. **Work-in-Progress (WIP) Conversion Period (W)**

$$\text{WIP Conversion Period} = \frac{\text{Average Stock of WIP}}{\text{Annual Cost of Production}} \times 365$$

$$= \frac{\frac{₹\,35{,}000 + ₹\,51{,}300}{2}}{₹\,7{,}50{,}000} \times 365$$

= 21 days

3. **Finished Stock Storage Period (F)**

$$= \frac{\text{Average Stock of Finished Goods}}{\text{Cost of Goods Sold}} \times 365$$

$$= \frac{₹\ 65,178}{₹9,15,000} \times 365 \quad = 26 \text{ days.}$$

$$\text{Average Stock} = \frac{₹60,181 + ₹70,175}{2}$$

$$= ₹\ 65,178.$$

4. **Debtors Collection Period (D)**

$$= \frac{\text{Average Debtors}}{\text{Annual Credit Sales}} \times 365$$

$$= \frac{₹\ 1,23,561.50}{₹\ 11,00,000} \times 365$$

$$= 41 \text{ days}$$

$$\text{Average debtors} = \frac{₹1,12,123 + ₹1,35,000}{2} = ₹1,23,561.50$$

5. **Creditors Payment Period (C)**

$$= \frac{\text{Average Creditors}}{\text{Annual Net Credit Purchases}} \times 365$$

$$= \frac{\left(\frac{₹50,079 + ₹70,469}{2}\right)}{₹4,00,000} \times 365$$

= 55 days

(i) Operating Cycle Period

= R + W + F+ D - C

= 53 + 21 + 26 + 41 - 55

= 86 days

(ii) Number of Operating Cycles in the Year

$$= \frac{365}{\text{Operating Cycle Period}} = \frac{365}{86} = 4.244$$

(iii) Amount of Working Capital Required

$$= \frac{\text{Annual Operating Cost}}{\text{Number of Operating Cycles}} = \frac{₹\ 9,50,000}{4.244} = ₹\ 2,23,845.42$$

8. CALCULATION OF NET PRESENT VALUE

	(₹)
PV of Annual cash inflows (₹ 45,000 × 3.169)	1,42,605
Initial Project Cost	1,20,000
NPV (PV of Cash flow – Initial Cost)	22,605
If initial project cost is varied adversely by 10%*	
Initial Project Cost (1,20,000 × 110%)	₹ 1,32,000
NPV (Revised) (₹ 1,42,605 - ₹ 1,32,000)	₹ 10,605
Change in NPV (₹ 22,605 – ₹ 10,605)/ ₹ 22,605 i.e	53.08%
If annual cash inflow is varied adversely by 10%*	
Revised annual inflow (₹45,000 × 90%)	₹ 40,500
NPV (Revised) (₹ 40,500 × 3.169) – (₹ 1,20,000)	(+) ₹ 8,345
Change in NPV (₹ 22,605 – ₹ 8,345) / ₹ 22,605	63.08%
If cost of capital is varied adversely by 10%*	
NPV (Revised) (₹ 45,000 × 3.103) – ₹ 1,20,000	(+) ₹ 19,635
Change in NPV (₹ 22,605 – ₹ 19,635) / ₹ 22,605	13.14 %

Conclusion: Project is most sensitive to 'annual cash inflows'

(*It is assumed that adverse variation is 10%)

9. Navya Ltd.

(i) Walter's model is given by –

$$P = \frac{D + (E - D)(r / K_e)}{K_e}$$

Where, P = Market price per share,

E = Earnings per share = ₹20,00,000 ÷ 4,00,000 = ₹ 5

D = Dividend per share = 60% of 5 = ₹ 3

r = Return earned on investment = 15%

K_e = Cost of equity capital = 12%

$$\therefore \text{ P} = \frac{3+(5-3)\times\frac{0.15}{0.12}}{0.12} = \frac{3+2\times\frac{0.15}{0.12}}{0.12} = ₹\ 45.83$$

(ii) According to Walter's model when the return on investment is more than the cost of equity capital, the price per share increases as the dividend pay-out ratio decreases. Hence, the optimum dividend pay-out ratio in this case is Nil. So, at a payout ratio of zero, the market value of the company's share will be:-

$$\frac{0+(5-0)\times\frac{0.15}{0.12}}{0.12} = ₹\ 52.08$$

10. (i) Borrowing option:

Annual Instalment = ₹5,00,000/ 5 = ₹1,00,000/-

Annual depreciation = ₹5,00,000/ 5 = ₹1,00,000/-

Computation of net cash outflow:

Year	Principal (₹)	Interest @10% (₹)	Total (₹)	Tax Saving on Depreciation. & Interest (₹)	Net cash Outflow (₹)	PV @ 8%	Total PV (₹)
1	1,00,000	50,000	1,50,000	45,000 (30% of 1,50,000)	1,05,000	0.926	97,230
2	1,00,000	40,000	1,40,000	42,000 (30% of 1,40,000)	98,000	0.857	83,986
3	1,00,000	30,000	1,30,000	39,000 (30% of 1,30,000)	91,000	0.794	72,254
4	1,00,000	20,000	1,20,000	36,000 (30% of 1,20,000)	84,000	0.735	61,740
5	1,00,000	10,000	1,10,000	33,000 (30% of 1,10,000)	77,000	0.681	52,437
							3,67,647
Less: Present value of Inflows at the end of 5th year (₹ 50,000 × 0.7) or ₹ 35,000 × 0.681 =							23,835
PV of Net Cash outflows							3,43,812

Calculation of lease rentals:

Therefore, Required Annual after tax outflow = ₹ 3,43,812/3.993 = ₹ 86,104/-*
Therefore, Annual lease rental = ₹ 86,104/0.70 = ₹ 1,23,006/-

In Case If it is assumed that installment is payable in the beginning of the year then lease rent shall be computed as follows:

Required Annual after tax outflow = 3,43,812/4.31 = ₹79,734/-

Therefore, Annual lease rental = 79,734/0.70 = ₹1,13,906/-

11 (i) "The profit maximisation is not an operationally feasible criterion." This statement is true because Profit maximisation can be a short-term objective for any organisation and cannot be its sole objective. Profit maximization fails to serve as an operational criterion for maximizing the owner's economic welfare. It fails to provide an operationally feasible measure for ranking alternative courses of action in terms of their economic efficiency. It suffers from the following limitations:

(a) **Vague term:** The definition of the term profit is ambiguous. Does it mean short term or long term profit? Does it refer to profit before or after tax? Total profit or profit per share?

(b) **Timing of Return:** The profit maximization objective does not make distinction between returns received in different time periods. It gives no consideration to the time value of money, and values benefits received today and benefits received after a period as the same.

(c) It ignores the risk factor.

(d) The term maximization is also vague

(ii) (a) **Bridge Finance**: Bridge finance refers, normally, to loans taken by the business, usually from commercial banks for a short period, pending disbursement of term loans by financial institutions. Normally it takes time for the financial institution to finalise procedures of creation of security, tie-up participation with other institutions etc. even though a positive appraisal of the project has been made. However, once the loans are approved in principle, firms in order not to lose further time in starting their projects arrange for bridge finance. Such temporary loan is normally repaid out of the proceeds of the principal term loans. It is secured by hypothecation of moveable assets, personal guarantees and demand promissory notes. Generally rate of interest on bridge finance is higher as compared with that on term loans.

(b) **Floating Rate Bonds**: These are the bonds where the interest rate is not fixed and is allowed to float depending upon the market conditions. These are ideal instruments which can be resorted to by the issuers to hedge themselves against the volatility in the interest rates. They have become more popular as a money market instrument and have been successfully issued by financial institutions like IDBI, ICICI etc.

(c) **Packing Credit**: Packing credit is an advance made available by banks to an exporter. Any exporter, having at hand a firm export order placed with him by his foreign buyer on an irrevocable letter of credit opened in his favour, can approach a bank for availing of packing credit. An advance so taken by an exporter is required to be liquidated within 180 days from the date of its commencement by negotiation of export bills or receipt of export proceeds in an approved manner. Thus Packing Credit is essentially a short-term advance.

(iii) On one hand when cost of 'fixed cost fund' is less than the return on investment financial leverage will help to increase return on equity and EPS. The firm will also benefit from the saving of tax on interest on debts etc. However, when cost of debt will be more than the return it will affect return of equity and EPS unfavourably and as a result firm can be under financial distress. This is why financial leverage is known as "double edged sword".

Effect on EPS and ROE:

When, ROI > Interest – Favourable – Advantage

When, ROI < Interest – Unfavourable – Disadvantage

When, ROI = Interest – Neutral – Neither advantage nor disadvantage.

SECTION: B: ECONOMICS FOR FINANCE

QUESTIONS

1. (a) Define National Income. Draw the basis of distinction between GDP at current and constant prices.

   (b) You are given the following data on an economy in millions:

Consumer Expenditure (inclusive of indirect taxes)	110 m
Investment	20 m
Government Expenditure (inclusive of transfer payments)	70 m
Exports	20 m
Imports	50 m
Net Property Income from abroad	10 m
Transfer payments	20 m
Indirect taxes	30 m
Population	0.5 m

   (i) Calculate the Gross Domestic Product at market prices.

   (ii) Calculate the Gross National Income at market prices.

   (iii) Calculate the Gross Domestic Product at factor cost.

   (iv) Calculate the per capita Gross National Income at factor cost.

2. (a) Define consumption function? Examine what would happen if aggregate expenditures were to exceed the economy's production capacity?

   (b) For an Economy with the following specifications

   Consumption, $C = 50+0.75\ Y_d$

   Investment, $I = 100$

   Government Expenditure, $G = 200$

   Transfer Payments, $R= 110$

   Income Tax = $0.2Y$

   (i) Find out the equilibrium of income and the value of expenditure multiplier.

   (ii) If autonomous taxes worth ₹ 25 Crores are added. Find out equilibrium level of Income.

   (iii) If the economy is opened up with exports $X = 25$ and imports $M = 5+0.25Y$ Calculate the new level of Income and balance of Trade (Assume that there are no autonomous Taxes.)

3. (a) Define the concept of market failure. Describe the different sources of market failure.

   (b) Identify the market outcomes for each of the following situations

   i. A few youngsters play loud music at night. Neighbours may not be able to sleep.

   ii. Ram buys a large SUV which is very heavy.

   iii. X smokes in a public place.

   iv. Rural school students are given vaccination against measles.

   v. Traffic congestion making travel very uncomfortable.

4. Examine what types of fiscal policy measures are useful for redistribution of income in an economy?

5 (a) Analyse what should be the tax policy during recession and depression?

   (b) Explain the term quasi-public goods.

6 (a) Explain how speculative motive for holding cash is related to market interest rate.

   (b) Describe the treatment of transactions demand for money as per Baumol and Tobin's model.

7. (a) Describe the different determinants of money supply in a country.

   (b) What role does Market Stabilization Scheme (MSS) play in our economy?

   (c) Examine what would be the effect on money multiplier if banks hold excess reserves?

   (d) Write a note on Cash Reserve Ratio (CRR). Explain the operation of CRR.

8. Define foreign direct investment (FDI). Mention two arguments made in favour of FDI to developing economies like India?

9. Explain the nature of changes in exchange rates and their impact on real economy?

10. (a) What are the major functions of the WTO? What do you understand by the term 'Most-favored-nation' (MFN)?

    (b) Define 'dumping'? What is meant by an 'Anti-dumping' measure?

SUGGESTED ANSWERS /HINTS

1. (a) National Income is defined as the net value of all economic goods and services produced within the domestic territory of a country in an accounting year plus the net factor income from abroad. According to the Central Statistical Organization (CSO) 'National income is the sum total of factor incomes generated by the normal residents of a country in the form of wages, rent, interest and profit in an accounting year'.

   National income may be measured at current prices or at constant prices. If goods and services produced in a year are valued at current prices, i.e., market prices prevailing in the year in which goods and services are produced, we get national income at current prices or nominal national income. If goods and services produced in a year are valued at 'fixed' prices, i.e., prices that prevailed during a previous year chosen as base year, we get national income at constant prices or real national income. Thus GDP at constant prices is the value of domestic product in terms of constant prices of a chosen base year. A base year is a carefully chosen year which is a normal year free from price fluctuations.

The GDP market prices is sensitive to changes in average price level. The same physical output will correspond to a different GDP level if the average level of market prices changes. That is, if prices rise, GDP measured at market prices will also rise without any real increase in physical output. This is misleading because it does not reflect changes in the actual volume of output. GDP at current prices makes no adjustment for inflation or deflation. GDP at constant prices is inflation /deflation corrected and can be used to measure true growth of GDP. For example, the GDP of 2015-16 may be expressed either at prices of that year or at prices that prevailed in 2011-12. In the former case, GDP will be affected by price changes, but in the latter case GDP will change only when there has been a change in physical output. Since real national income accurately reflects the real change in physical output of a country, it can be used to make a year to year comparison of changes in the volume of output of goods and services.

(b) (i) **GDP_{MP}=** C + I + G + (X – Z)

110 + 20 + (70 – 20) + (20 – 50) = 150 million

(ii) **GNP_{MP}=** GDP at market prices + net property income from abroad

150 + 10 = 160 million

(iii) **GDP $_{\text{at factor cost}}$** = GDP market prices – indirect taxes

150 – 30 = 120 million

(iv) Per Capita Income = $\frac{\text{GNP at Factor Cost}}{\text{Population}}$ =(160m – 30m) / 0.5 million

= 130 / 0.5 = 260

2. (a) Consumption function is the functional relationship between aggregate consumption expenditure and aggregate disposable income, expressed as ***C = f (Y)***; shows the level of consumption (C) corresponding to each level of disposable income (Y)

Aggregate expenditures in excess of output lead to a higher price level once the economy reaches full employment. Nominal output will increase, but it merely reflects higher prices, rather than additional real output.

(b) (i) Level of Disposable income Y_d is given by

Y_d = Y-Tax + Transfer Payments, Where, Transfer Payment = 110

= Y -0.2 Y +110 = 0.8Y +110,

and C = 50+0.75 Y_d

= 50+0.75(0.8Y +110)(where Y_d = 0.8Y +110)

=50+(0.75×0.8Y) + (0.75X110) =132.50+0.6Y

C = 132.50+0.6 Y

Now Y = C+I+G, Where C = 132.50+0.6Y, I = 100, G = 200(Given)

Y= (132.50+0.6Y)+100+200

= 432.50+0.6Y

Y-0.6Y= 0.4Y = 432.50

or Y = 432.50/0.4 = ₹ 1,081.25 Crores

Expenditure Multiplier =$\frac{1}{1-b}$ = $\frac{1}{1-0.6}$ = 2.5 (Multiplier in closed economy = $\frac{1}{1\text{-b}}$)

(Here b = MPC= $\frac{\Delta C}{\Delta Y}$)

(ii) If autonomous taxes worth of ₹ 25 Crores added, this will reduce disposable income by ₹ 25 crores

Level of Disposable income Y_d is given by

Y_d = Y – Tax + Transfer payments

Thus Y_d = Y-0.2Y +(110-25)= 0.8Y +85 (Income Tax Given = 0.2Y , Transfer Payments = 110)

C= 50+0.75(0.8Y +85) (Given C = 50+0.75 Y_d)

C= 50+(0.75×0.8Y)+(0.75×85)

= 50+0.6Y+63.75 = 113.75+0.6Y

Y = C+I+G

= (113.75+0.6Y) +100+200= 413.75+0.6Y(C= 113.75+0.6Y , I = 100, G = 200)

Y-0.6Y = 413.75

0.4Y = 413.75

Y= $\frac{413.75}{0.4}$ =₹ 1034.375 Crores.

(iii) Y = C+I + G+ (X-M), Where Consumption, (C) = 132.50+0.6 Y, Investment(I) = 100, Government Expenditure (G) = 200

Since X = 25, M = 5+0.25 Y

Y = (132.50+0.6Y) +100+200+ {25-(5+0.25Y)} (Given X = 25 crores and M

= 5+0.25Y)

Y = (132.50+0.6Y) +100+200+ (25-5-0.25Y)

= (1-0.6+0.25) Y = 452.50

$$Y= \frac{452.50}{0.65} = ₹\ 696.15 \text{ Crores}$$

Imports = 5+0.25Y = 5+ (0.25×696.15) = ₹179.04 Crores

Balance of trade = Exports – Imports

Balance of Trade = 25- M = 25-179.04= -₹154.04 crores.

Thus, there is adverse balance in Trade of ₹ 154.04 crores

3. **(a)** Market failure is a situation in which the free market fails to allocate resources efficiently in the sense that there is either overproduction or underproduction of particular goods and services leading to less than optimal market outcomes. The reason for market failure lies in the fact that though perfectly competitive markets work efficiently, most often the prerequisites of competition are unlikely to be present in an economy. There are two aspects of market failures namely, demand-side market failures and supply side market failures. Demand-side market failures are said to occur when the demand curves do not take into account the full willingness of consumers to pay for a product. Supply-side market failures happen when supply curves do not incorporate the full cost of producing the product.

There are four major reasons for market failure. They are: market power, externalities, public goods, and incomplete information.

(1) Excess market power or monopoly power causes the single producer or small number of producers to produce and sell less output than would be produced in a competitive market and to charge higher prices that give them positive economic profits.

(2) Externalities, also referred to as 'spillover effects', 'neighbourhood effects' 'third-party effects' or 'side-effects', occur when the actions of either consumers or producers result in costs or benefits that do not reflect as part of the market price. Externalities cause market inefficiencies because they hinder the ability of market prices to convey accurate information about how much to produce and how much to buy.

(3) Public goods (also referred to as a collective consumption good or a social good) are indivisible goods which all individuals enjoy in common and are non excludable and non rival in consumption. Each individual's consumption of such a good leads to no subtraction from any other individual's consumption and consumers cannot (at least at less than prohibitive cost) be excluded from consumption benefits of that good. Public goods do not conform to the settings

of market exchange and left to the market, they will not be produced at all or will be under produced.

(4) Incomplete information: The assumption of complete information which is a feature of competitive markets is not fully satisfied in real markets due to highly complex nature of products and services, inability of consumers to quickly / cheaply find sufficient information, inaccurate or incomplete data, ignorance, lack of alertness and uncertainty about true costs and benefits. Misallocation of scarce resources occurs due to information failure and equilibrium price and quantity is not established through price mechanism. Asymmetric information also referred to as the 'lemons problem' which occurs when there is an imbalance in information between buyer and seller i.e. when the buyer knows more than the seller or the seller knows more than the buyer also distort choices and cause market failure. Adverse selection, another source of market failure, is a situation in which asymmetric information about quality eliminates high-quality goods from a market. Moral hazard i.e. opportunism characterized by an informed person's taking advantage of a less-informed person through an unobserved action arises from lack of information about someone's future behavior also causes market failure. In short, asymmetric information, adverse selection and moral hazard affect the ability of markets to efficiently allocate resources and therefore lead to market failure because the party with better information has a competitive advantage.

(b) The market outcomes of different situations are given below;

(i) Negative consumption externality; social cost not accounted for; market failure; overproduction

(ii) Negative consumption externality; environmental externality; wear and tear of roads; increased fuel consumption; added insecurity imposed on others; social cost not accounted for; overproduction.

(iii) Negative consumption externality; overproduction.

(iv) Public good, merit good; positive consumption externality; under production; scope for government intervention.

(v) Negative externality; social cost not accounted for; overproduction.

4. Many developed and developing economies are facing the challenge of rising inequality in incomes and opportunities. Redistribution of income to ensure distributive justice is essentially a fiscal function. Fiscal policy is a chief instrument available for governments to influence income distribution and plays a significant role in reducing inequality and achieving equity and social justice. The distribution of income in the society is influenced by fiscal policy both directly and indirectly. While current disposable incomes of individuals and corporates are dependent on direct taxes, the potential for future earnings is indirectly influenced by the nation's fiscal policy choices.

Government revenues and expenditure have traditionally been regarded as important instruments for carrying out desired redistribution of income. Each of these can be manipulated to achieve desired distributional effects.

- A progressive direct tax system appropriately designed to protect incentives ensures that those who have greater ability to pay contribute more towards defraying the expenses of government and that the tax burden is distributed fairly among the population.
- Indirect taxes can be differential: for example, the commodities which are primarily consumed by the richer income group, such as luxuries, are taxed heavily and the commodities the expenditure on which form a larger proportion of the income of the lower income group, such as necessities, are taxed light. Property taxes act both as a source of revenue and as an efficient redistributive instrument.
- A carefully planned policy of public expenditure helps in redistributing income from the rich to the poorer sections of the society. This is done through spending programmes targeted on welfare measures for the disadvantaged, such as :

  (i) poverty alleviation programmes

  (ii) free or subsidized medical care, education, housing, essential commodities etc. to improve the quality of living of poor

  (iii) infrastructure provision on a selective basis

  (iv) various social security schemes and more efficient social transfers under which people are entitled to noncontributory, means-tested social pensions, conditional cash transfer programs, unemployment relief, sickness allowance etc.

  (v) subsidized production of products of mass consumption

  (vi) public production and/ or grant of subsidies to ensure sufficient supply of essential goods, and

  (vii) strengthening of human capital for enhancing employability etc.

  The design of redistribution policies should justify both redistributive and efficiency objectives. Choice of a progressive tax system with high marginal taxes may act as a strong deterrent to work, save and invest. Therefore, the tax structure has to be carefully framed to mitigate possible adverse impacts on production and efficiency. Additionally, the redistributive fiscal policy and the extent of spending on redistribution should be consistent with the macroeconomic policy objectives, especially macroeconomic stability of the nation.

5. **(a)** A recession is said to occur when overall economic activity declines, or in other words, when the economy 'contracts'. A recession sets in with a period of declining real income, as measured by real GDP, simultaneously with a situation of rising unemployment. If an economy experiences a fall in aggregate demand during a recession, it is said to be in a demand-deficient recession. Economic depression is a condition of the economy resulting from an extended period of negative economic activity as measured by GDP. It is an extremely severe form of recession that leads to extended unemployment, increased credit defaults, extensive decline in output and income and a deflationary economy.

Taxation, though less effective compared to public expenditure, is a powerful instrument of fiscal policy in the hands of governments to combat recession and depression. Reduction in corporate and personal income taxation is a useful measure to overcome contractionary tendencies in the economy. A tax cut increases disposable incomes of households. Their inclination to spend a portion of the additional disposable income determined by their marginal propensity to consume and the multiplier effect of spending would set out a chain reaction of spending, increased incomes, and consequent increased output. Reduction in the rates of commodity taxes like excise duties, sales tax and import duty promote consumption and ultimately boost investments. Moreover, tax measures can provide incentives, or reduce disincentives, for firms and households to engage in investment and consumer spending.

(b) Quasi-public goods or services, also called a near public good (for e.g. education, health services) possess nearly all the qualities of private goods and some of the benefits of public good. These goods are, in some measure excludable for example, it is possible to exclude non paying consumers from the use of a highway by incurring the cost of building and maintaining a toll booth. Similarly beaches, parks and wifi networks become partially rival and partially diminishable at times of peak demand. These are rejectable to some extent. It is possible to keep people away from them by charging a price or fee. However, it is undesirable to keep people away from such goods because the society would be better off if more people consume them. This particular characteristic namely, the combination of virtually infinite benefits and the ability to charge a price results in some quasi-public goods being sold through markets and others being provided by government. As such, people argue that these should not be left to the market alone. Markets for the quasi-public goods are considered to be incomplete markets and their lack of provision by free markets would be considered as inefficiency and market failure.

6. (a) According to Keynes' theory of liquidity preference, speculative motive for holding cash is related to market interest. The market value of bonds and the market rate of interest are inversely related. A rise in the market rate of interest leads to a decrease in the market value of the bond, and vice versa. Investors have a relatively fixed conception of the 'normal' or 'critical' interest rate and compare the current rate of interest with such 'normal' or 'critical' rate of interest.

If wealth-holders consider that the current rate of interest is high compared to the 'normal or critical rate of interest', they expect a fall in the interest rate (rise in bond prices). At the high current rate of interest, they will convert their cash balances into bonds because:

(i) they can earn high rate of return on bonds

(ii) they expect capital gains resulting from a rise in bond prices consequent upon an expected fall in the market rate of interest in future.

Conversely, if the wealth-holders consider the current interest rate as low, compared to the 'normal or critical rate of interest', i.e., if they expect the rate of interest to rise in future (fall in bond prices), they would have an incentive to hold their wealth in the form of liquid cash rather than bonds because:

(i) the loss suffered by way of interest income forgone is small,

(ii) they can avoid the capital losses that would result from the anticipated increase in interest rates, and

(iii) the return on money balances will be greater than the return on alternative assets

(iv) If the interest rate does increase in future, the bond prices will fall and the idle cash balances held can be used to buy bonds at lower price and can thereby make a capital-gain.

Summing up, so long as the current rate of interest is higher than the critical rate of interest, a typical wealth-holder would hold in his asset portfolio only government bonds while if the current rate of interest is lower than the critical rate of interest, his asset portfolio would consist wholly of cash. When the current rate of interest is equal to the critical rate of interest, a wealth-holder is indifferent to holding either cash or bonds. The inference from the above is that the speculative demand for money and interest are inversely related.

(b) Baumol (1952) and Tobin (1956) developed a deterministic theory of transaction demand for money, known as Inventory Theoretic Approach, in which money was essentially viewed as an inventory held for transaction purposes.

Inventory models assume that there are two media for storing value: money and an interest-bearing alternative asset. Baumol's propositions in his theory of transaction demand for money hold that receipt of income, say Y takes place once per unit of time but expenditure is spread at a constant rate over the entire period of time. There is an opportunity cost of holding money: the interest forgone on an interest-bearing asset such as a bond. In order to maximize interest earnings, a person would like to hold as much of his wealth as possible in the form of bonds, while still being able to finance the flow of monetary expenditures. If there is no cost to doing so, he would keep all of his wealth in the form of "bond" and hold zero money balances. However, making these transfers generally incurs some kind of cost, either explicitly through a transaction fee or implicitly through the time and inconvenience of making the transfer.

The level of inventory holding depends upon the carrying cost, which is the interest forgone by holding money and not bonds, net of the cost to the individual of making a transfer between money and bonds, say for example brokerage fee. If an individual, say X, decided to invest in bonds. If r is the return on bond holding; c is the cost of each transaction in the bond market; (i.e. for converting it to liquid cash) and n is the number of bond transactions, then the net profit for the individual would be

$$R- (n\ c)$$

where R is the interest earning on the average bond holding which is equal to r times average bond holdings and *nc* the transaction costs which equal the cost of each transaction multiplied by the number of bond transactions.

Therefore, for a given income, the choice of the split of total money into money and bond holdings is determined by the choice of *n.* The individual will choose n in such a way that the net profits from bond transactions are maximized. The Baumol-Tobin model derives the optimal frequency of bond-money transactions that minimizes the sum of the two components of cost: the forgone interest cost (which rises as average money balances increase) and the transaction cost (which falls as fewer transactions are made or more money is held).

The individual will apply the marginalist principle and will increase the number of transactions in the bond market until the point at which the marginal interest earnings from one additional transaction just equals the constant marginal cost, which will be equal to the brokerage fee etc. Beyond this point, the marginal gain in interest earned from increasing the number of bond market transactions is not sufficient to cover the brokerage cost of the transaction. To sum up, the choice of n determines the split of money and bond holdings for a given income.

The optimal average money holding is:

(i) a positive function of income Y,

(ii) a positive function of the price level P,

(iii) a positive function of transactions costs c, and

(iv) a negative function of the nominal interest rate i

7. (a) There are two alternate theories in respect of determination of money supply. According to the first view, money supply is determined exogenously by the central bank. The second view holds that the money supply is determined endogenously by changes in the economic activities which affect people's desire to hold currency relative to deposits, rate of interest, etc. The current practice is to explain the determinants of money supply based on 'money multiplier approach' which focuses on the relation between the money stock and money supply in terms of the monetary base or high-powered money. This approach holds that total supply of nominal money in the economy is determined by the joint behaviour of the central bank, the commercial banks and the public.

The money supply is defined as

$$M = m \times MB$$

Where M is the money supply, *m* is money multiplier and MB is the monetary base or high powered money.

$$\text{Money Multiplier}(m) = \frac{\text{Money Supply}}{\text{Monetary Base}}$$

Money multiplier ***m*** is defined as a ratio that relates the change in the money supply to a given change in the monetary base. It denotes by how much the money supply will change for a given change in high-powered money. The multiplier indicates what multiple of the monetary base is transformed into money supply.

If some portion of the increase in high-powered money finds its way into currency, this portion does not undergo multiple deposit expansion. In other words, as a rule, an increase in the monetary base that goes into currency is not multiplied, whereas an increase in monetary base that goes into supporting deposits is multiplied.

(b) Market Stabilization scheme (MSS), introduced in April 2004, is a monetary policy intervention by the RBI to withdraw excess liquidity (or money supply) by selling government securities in the economy. Under the Market Stabilisation Scheme (MSS) the Government of India borrows from the RBI (such borrowing being additional to its normal borrowing requirements) and issues treasury-bills/dated securities that are utilized for absorbing from the market excess liquidity of a more enduring nature arising from large capital inflows. The bills/bonds issued under MSS would have all the attributes of the existing treasury bills and dated securities. The bills and securities will be issued by way of auctions to be conducted by the Reserve Bank. These bonds are issued by RBI on the behalf of Government in order to mop out excess liquidity from the market (Banks) and not for raising capital for government.

(c) The money multiplier approach to money supply considers the ratio of deposit to reserve, e = *{ER/D)* which represent the behaviour of commercial banks as one of the determinants of money supply. The commercial banks are required to keep only a part or fraction of their total deposits in the form of cash reserves. For the commercial banking system as a whole, the actual reserves ratio may be greater than the required reserve ratio since the banks keep with them a higher than the statutorily required percentage of their deposits in the form of cash reserves. The additional units of high-powered money that goes into 'excess reserves' of the commercial banks do not lead to any additional loans, and therefore, these excess reserves do not lead to creation of money. Therefore, if the central bank injects money into the banking system and these are held as excess reserves by the banking system, there will be no effect on deposits or currency and hence no effect on money multiplier and therefore on money supply.

(d) Cash Reserve Ratio (CRR) refers to the fraction of the total net demand and time liabilities (NDTL) of a scheduled commercial bank in India which it should maintain as cash deposit with the Reserve Bank. The RBI may set the ratio in keeping with the broad objective of maintaining monetary stability in the economy. The credit creation capacity of commercial banks is inversely related the cash reserve ratio. Higher the CRR, lower will be the credit creation and vice versa.

CRR has, in recent years, assumed significance as one of the important quantitative tools aiding in liquidity management. Higher the CRR with the RBI, lower will be the liquidity in the system and vice versa. During deflation, the RBI reduces the CRR in order to enable the banks to expand credit and increase the supply of money available in the economy. In order to contain credit expansion during periods of inflation, the RBI increases the CRR.

8. Foreign direct investment is defined as a process whereby the resident of one country (i.e. home country) acquires ownership of an asset in another country (i.e. the host country) and such movement of capital involves ownership, control as well as management of the asset in the host country. Direct investments are real investments in factories, assets, land, inventories etc. and have three components, viz., equity capital, reinvested earnings and other direct capital in the form of intra-company loans. Foreign direct investment also includes all subsequent investment transactions between the investor and the enterprise and among affiliated enterprises, both incorporated and unincorporated. FDI involves long term relationship and reflects a lasting interest and control. According to the IMF and OECD definitions, the acquisition of at least ten percent of the ordinary shares or voting power in a public or private enterprise by non-resident investors makes it eligible to be categorized as FDI. FDI may be categorized as horizontal, vertical, conglomerate and two-way direct foreign investments which are reciprocal investments.

Benefits of Foreign Direct Investment

Following are the benefits ascribed to foreign investments:

(i) Entry of foreign enterprises usually fosters competition and generates a competitive environment in the host country. The domestic enterprises are compelled to compete with the foreign enterprises operating in the domestic market. This results in positive outcomes in the form of cost-reducing and quality-improving innovations, higher efficiency and increasing variety of better products and services at lower prices ensuring wider choice and welfare for consumers.

(ii) International capital allows countries to finance more investment than can be supported by domestic savings resulting in higher productivity and enhanced output.

From the perspective of emerging and developing countries, FDI can accelerate growth and foster economic development by providing the much needed capital, technological know-how, management skills and marketing methods and critical human capital skills in the form of managers and technicians. The spill-over effects as the new technologies usually spread beyond the foreign corporations. In addition, the new technology can clearly enhance the recipient country's production possibilities.

9. Changes in exchange rates portray depreciation or appreciation of one currency against another. The terms, `currency appreciation' and 'currency depreciation' describe the movements of the exchange rate. Currency appreciates when its value increases with respect to the value of another currency or a basket of other currencies. On the contrary, currency depreciates when its value falls with respect to the value of another currency or a basket of other currencies. If the Rupee dollar exchange rate changes from \$1 = ₹ 65 to \$1 = ₹ 68, the value of the Indian Rupee has diminished or Indian Rupee has depreciated and the US dollar has appreciated. On the contrary, home-currency appreciation or foreign-currency depreciation takes place when there is a decrease in the home currency price of foreign currency (or alternatively, an increase in the foreign currency price of home currency). The home currency thus becomes relatively more valuable. Under a floating rate system, if for any reason, the demand curve for foreign currency shifts to the right representing increased demand for foreign currency, and supply curve remains unchanged, then the exchange value of foreign currency rises and the domestic currency depreciates in value.

Following are the impact of exchange rate changes on the real economy:

The developments in the foreign exchange markets affect the domestic economy both directly and indirectly. All else equal, an appreciation(depreciation) of a country's currency raises (decreases) the relative price of its exports and lowers (increases) the relative price of its imports leading to changes in import and export volumes and consequently on import spending and export revenue. Depreciation adversely affects importers as they have to pay more domestic currency on the same quantity of imports ad benefits exporters as forex earnings will fetch more in terms of domestic currency.

For an economy where exports are significantly high, a depreciated currency would mean a lot of gain. Depreciation of domestic currency primarily decreases the relative price of domestically produced goods and diverts spending from foreign goods to domestic goods. Increased demand, both for domestic import-competing goods and for exports encourages economic activity and creates output expansion. Overall, the outcome of exchange rate depreciation is an expansionary impact on the economy at an aggregate level.

As a result of depreciation or devaluation, the terms of trade of the nation can rise, fall or remain unchanged, depending on whether price of exports rises by more than, less than or same percentages as price of imports. Depreciation also can have a positive impact on country's trade deficit as it makes imports more expensive for domestic consumers and exports cheaper for foreigners. However, the fiscal health of a country whose currency depreciates is likely to be affected with rising import payments and consequent rising current account deficit (CAD) and diminished growth prospects of overall economy.

Depreciation is also likely to fuel consumer price inflation, directly through its effect on prices of imported consumer goods and also due to increased demand for domestic goods. The impact will be greater if the composition of domestic consumption baskets consists more of imported goods. Indirectly, cost push inflation may result through possible escalation in the cost of imported components and intermediaries used in production.

When a country's currency depreciates, production of export goods and import substitutes becomes more profitable. Therefore, factors of production will be induced to move into the tradable goods sectors and out of the non tradable goods sectors. By lowering export prices, currency depreciation helps increase the international competitiveness of domestic industries, increases the volume of exports, augments windfall profits in export oriented sectors and import-competing industries and promotes trade balance. If exports originate from labour-intensive industries, increased export prices will have spiraling effects on wages, employment and income. If inputs and components for manufacturing are mostly imported and cannot be domestically produced, increased import prices will increase firms' cost of production, push domestic prices up and decrease real output.

Foreign capital inflows are characteristically vulnerable to exchange rate fluctuations. Depreciating currency hits investor sentiments and has radical impact on patterns of international capital flows. Foreign investors are likely to be indecisive or highly cautious before investing in a country which has high exchange rate volatility. Foreign direct investment flows are likely to shrink and foreign portfolio investments are likely to flow into debt and equity. This may shoot up capital account deficits affecting the country's fiscal health. Reduced foreign investments also widen the gap between investments required for growth and actual investments. Over a period of time, unemployment is likely to mount in the economy.

If investor sentiments are such that they anticipate further depreciation, there may be large scale withdrawal of portfolio investments and huge redemptions through global exchange traded funds leading to further depreciation of domestic currency. This may result in a highly volatile domestic equity market affecting the confidence of domestic investors.

Companies that have borrowed in foreign exchange through external commercial borrowings (ECBs) but have not sufficiently hedged against foreign exchange risks would also be negatively impacted as they would require more domestic currency to repay their loans. A depreciated domestic currency would also increase their debt burden and lower their profits and impact their balance sheets adversely. Exchange rate fluctuations make financial forecasting more difficult for firms and larger amounts will have to be earmarked for insuring against exchange rate risks through hedging.

Investors who have purchased a foreign asset, or the corporation which floats a foreign debt, will find themselves facing foreign exchange risk. However, remittances to homeland by non residents and businesses abroad fetches more in terms of domestic currency.

In case of foreign currency denominated government debts, currency depreciation will increase the interest burden and cause strain to the exchequer for repaying and servicing foreign debt.

Depreciation would enhance government revenues from import related taxes, especially if the country imports more of essential goods. Depreciation would also result in higher amount of local currency for a given amount of foreign currency borrowings of government.

10. (a) The principal objective of the WTO is to facilitate the flow of international trade smoothly, freely, fairly and predictably. To achieve this, the WTO endeavors:

(i) to set and enforce rules for international trade,

(ii) to provide a forum for negotiating and monitoring further trade liberalization

(iii) to resolve trade disputes

(iv) to increase the transparency of decision-making processes

(v) to cooperate with other major international economic institutions involved in global economic management, and

(vi) to help developing countries benefit fully from the global trading system.

When a country enjoys the best trade terms given by its trading partner it is said to enjoy the Most Favored Nation (MFN) status. Originally formulated as Article 1 of GATT, this principle of non discrimination states that any advantage, favour, privilege or immunity granted by any contracting party to any product originating in or destined for any other country shall be extended immediately and unconditionally to the like product originating or destined for the territories of all other contracting parties. Under the WTO agreements, countries cannot normally discriminate between their trading partners. If a country improves the benefits that it gives to one trading partner, (such as a lower a trade barrier, or opens up a market), it has to give the same best treatment to all the other WTO members too in respect of the same goods or services so that they all remain 'most-favoured'. As per the WTO agreements, each member treats all the other members equally as "most-favoured" trading partners.

(b) Dumping occurs when manufacturers sell goods in a foreign country below the sales prices in their domestic market or below their full average cost of the product. Dumping may be persistent, seasonal, or cyclical. Dumping may also be resorted to as a predatory pricing practice to drive out established domestic producers from the market and to establish monopoly position. Dumping is international price discrimination favouring buyers of exports, but in fact, the exporters deliberately forego money in order to harm the domestic producers of the importing country and to gain market share. This is an unfair trade practice and constitutes a threat to domestic producers.

Anti-dumping measures consist of imposition of additional import duties to offset the effects of dumping. These measures are initiated as safeguards to offset the foreign firm's unfair price advantage. This is justified only if the domestic industry is seriously injured by import competition, and protection is in the national interest (that is, the associated costs to consumers would be less than the benefits that would accrue to producers).