PAPER – 4: COST AND MANAGEMENT ACCOUNTING

*Question No. **1** is compulsory.*

*Attempt any **four** questions out of the remaining **five** questions.*

In case, any candidate answers extra question(s)/ sub-question(s) over and above the required number, then only the requisite number of questions first answered in the answer book shall be valued and subsequent extra question(s) answered shall be ignored.

Working notes should form part of the answer.

Question 1

(a) *Tesco cycles Ltd. used about 3,60,000 cycle locks per annum and the usage is fairly constant at 30,000 per month. The cycle lock costs ₹ 240 each at wholesale rate and carrying cost is estimated to be 10% of the annual average inventory value. The cost to place an order is ₹ 1200. It takes 45 days to receive delivery from the date of order. In order to avoid any kind of disruption in assembly line, safety stock of 6,500 cycle locks is always maintained by Tesco Cycles Ltd.*

(Assume 360 days in a year).

Compute:

(i) E.O.Q.

(ii) The re-order level.

(iii) The company has been offered a quantity discount of 2% on the purchase of cycle locks provided the order size is 30,000 units at a time. Advise whether quantity discount offer can be accepted?

(b) *A company produces two products, A and B, through a joint production process. The total joint production cost incurred is as under:*

Material	*₹ 20,000*
Labour	*₹ 10,000*

Variable overheads	*₹ 6,000*
Fixed Overheads	*₹ 24,000*

Product A and B can be sold for ₹ 20 per unit and ₹ 15 per unit respectively at split off point. The produced quantities are Product A-2,000 units and Product B – 4,000 units.

(i) You are required to calculate the joint production cost allocation for each product using the:

(a) Physical unit method.

(b) Contribution margin method.

(ii) Product B can be further processed by incurring expenditure of ₹ 12,000. Loss in further processing is 2%. It can be sold @ ₹ 18 per unit. Explain the impact on profitability if Product B is further processed.

(c) Following data is available for XYZ Ltd. for the month of February 2024:

Standard working hours	*8 hours per day of 6 days per week*
No. of weeks in the month	*4*
Maximum capacity	*150 employees*
Actual working	*125 employees*
Actual usage of Budgeted Capacity Ratio	*86%*
Efficiency Ratio	*110%*

You are required to calculate the following:

(i) Actual Hours worked.

(ii) Standard Hours for actual output.

(iii) Activity Ratio.

(iv) Standard Capacity Usage Ratio.

Answer

(a) (i) Calculation of Economic Order Quantity

$$\text{EOQ} = \sqrt{\frac{2AO}{C}} = \sqrt{\frac{2 \times 3,60,000 \text{ units} \times ₹1200}{₹24}} = \textbf{6,000 units}$$

Where,

A = Annual Demand = 3,60,000 units

O = Ordering cost per order = ₹1200

C = Inventory carrying cost per unit per annum = 10% of ₹240 = ₹ 24

(ii) Re-order Level = Safety Stock + Lead Time Consumption

= 6,500 + (1,000 x 45) units = **51,500 units**

Or,

Minimum level of cycle locks + [Average rate of consumption × Average time required to obtain fresh delivery]

= 6,500 + (1,000 x 45) units = **51,500 units**

(iii) Evaluation of Profitability of Different Options of Order Quantity

(a) When EOQ is ordered (order size of 6,000 units)

		(₹)
Purchase Cost	(3,60,000 units × ₹ 240)	8,64,00,000
Ordering Cost	[(3,60,000 units/6,000 units) × ₹ 1,200]	72,000
Carrying Cost	(6,000 units × ₹240 ×½ × 10/100)	72,000
Total Cost		**8,65,44,000**

(b) When Quantity Discount is accepted (order size of 30,000 units)

		(₹)
Purchase Cost	[3,60,000 units × ₹ 235.2 (240-4.8)]	8,46,72,000
Ordering Cost	[(3,60,000 units/30,000 units) × ₹1,200]	14,400
Carrying Cost	(30,000 units × ₹ 235.2 ×½ × 10/100)	3,52,800
Total Cost		**8,50,39,200**

Advise – The total cost of inventory is lower if discount is accepted. Hence, the company is advised to accept the quantity discount.

(b) Working

Calculation of joint cost

Description	**Amount (₹)**
Material	20,000
Labour	10,000
Variable overheads	6,000
Total variable cost	**36,000**
Fixed overheads	24,000
Total joint cost	**60,000**

(i) (a) Allocation of joint cost using physical unit method:

Product A = ₹60,000 × 2,000/6,000 = ₹ 20,000

Product B = ₹60,000 × 4,000/6,000 = ₹ 40,000

(b) Allocation of joint cost using contribution margin method:

	Description	**Product-A**	**Product-B**
	Units produced	2,000	4,000
	Selling price per unit (₹)	20	15
A.	Sales value (₹)	40,000	60,000
B.	**Allocation of joint variable cost on the basis of physical unit**		
	₹36,000 × 2,000/6,000	(12,000)	
	₹36,000 × 4,000/6,000		(24,000)
C= A-B	**Contribution**	**28,000**	**36,000**
D	Allocation of fixed joint cost on the basis of contribution margin		
	₹24,000 × 28,000/64,000	(10,500)	
	₹24,000 × 36,000/64,000		(13,500)
C-D	Profit at split off point	**17,500**	**22,500**

Allocation of Joint Cost on the basis of Contribution Margin Method:

Particulars	Product A	Product B
Allocation of Variable Cost	₹ 12,000	₹ 24,000
Allocation of Fixed Cost	₹ 10,500	₹ 13,500
Total Joint Cost	**₹ 22,500**	**₹ 37,500**

(ii) Profitability after further processing of Product B

Description	Amount (₹)
Units produced and sold 98% of 4,000 units	3,920
Selling price per unit (₹)	18
Sales value (₹)	70,560
Joint cost upto split off point	(37,500)
Further processing cost	(12,000)
Profit after further processing	**21,060**

Calculation of the profitability after further processing of product B can also be done in the following manner:

Profitability after further processing of Product B

Description	Amount (₹)
Incremental revenue on further processing (3,920 x ₹18)- (4,000 x ₹15)	10,560
Further processing cost	(12,000)
Incremental loss after further processing	**1,440**

Impact on profitability on Product B

If Product B is sold at split off point it earns profit of ₹ 22,500, but after further processing the profit is reduced to ₹ 21,060/- i.e. an opportunity loss of ₹ 1,440/-.

(c) (i) Actual Hours worked

Actual Usage of Budgeted Capacity Ratio = $\frac{\text{Actual working Hours}}{\text{Budgeted Hours}} \times 100$

86% = (Actual working hours÷ Budgeted hours) × 100

Budgeted hours=125 workers × 8 hours× 6 days × 4 weeks = 24,000 hours

Actual hours= 24,000 × 86% = 20,640 hours

(ii) Standard hours for actual output

Efficiency ratio = $\frac{\text{Standard Hrs}}{\text{Actual Hrs}} \times 100$

110% = Standard hours÷ Actual hours

Standard hours= 20,640 × 110% = 22,704 hours

(iii) Activity ratio = $\frac{\text{Standard Hrs}}{\text{Budgeted Hrs}} \times 100$

= (22,704 ÷ 24,000) × 100 = 94.6%

(iv) Standard capacity usage ratio

= $\frac{\text{Budgeted Hours}}{\text{Max. possible hours in the budgeted period}} \times 100$

= {24,000 hours÷ (150 workers × 8 hours× 6 days × 4 weeks)} × 100

= (24,000 ÷ 28,800) × 100 = 83.33%

Question 2

(a) Luxury Designer Pvt. Ltd. is a manufacturing company, which manufactures readymade designer shirts. It has four customers: two wholesale category customers and two retail category customers. It has developed the following Activity- Based Costing system:

Activity	*Cost Driver Rate (₹)*
Order Processing	*1,260 per purchase order*
Customer Visits	*1,500 per customer visit*

Regular Delivery	*30 per delivery Km. travelled*
Expedited Delivery	*4,490 per expedited delivery*

List selling price per shirt is ₹ 1,000 and average cost per shirt is ₹ 600. CEO of Luxury Designer Pvt. Ltd. wants to evaluate the profitability of each of the four customers for the year 2023, to explore opportunities for increasing profitability of his Company in the next year 2024. The following data in context of four customers are available for 2023:

	Wholesale Customers		*Retail Customers*	
	WC-1	*WC-2*	*RC-1*	*RC-2*
Number of Purchase orders	50	65	224	245
Number of Customer visits	10	13	25	22
Regular Deliveries	46	52	175	198
Kilometers travelled per delivery	20	15	10	25
Expedited Deliveries	5	16	50	62
Average Number of Shirts per Shirt	215	110	18	15
Average Selling Price per Shirt	₹ 700	₹ 800	₹ 900	₹ 950

You are required to:

Calculate the customer-level operating income and operating income as a % of revenues in 2023 and rank them on the basis of relative profitability.

(b) *Star Airlines operates a single aircraft of 180 seats capacity between city 'ND' and 'GA'. The average normal occupancy is estimated at 70% per flight. The average one-way fare is ₹ 12,500 from city 'ND" to 'GA'. The costs of operation of the flight as collected by an expert analyst are:*

Fuel cost (Variable) per flight from 'ND' to 'GA'	*₹ 2,28,000 per flight*
Food served on flight from 'ND' to 'GA' *(no charge to passenger)*	*₹ 270 per passenger*
Commission paid to Travel Agents *(All ticket booking through agents)*	*7.5% of fare*

Fixed costs:	
Lease & landing charges per flight 'ND' to 'GA'	*₹ 9,12,000*
Salaries of flight crew per flight 'ND' to 'GA'	*₹ 90,000*

Note: Assume that fuel costs are unaffected by the actual number of passengers on a flight.

You are required to:

(i) Calculate the net operating income that Star Airlines makes per flight from 'ND' to 'GA'.

(ii) Star Airlines expects that its occupancy will increase to 144 passengers per flight if the fare is reduced to ₹ 11,670. Advise whether this proposal should be implemented or not.

Answer

(a) Working note:

Computation of revenues (at listed price), discount, cost of goods sold and customer level operating activities costs:

	Wholesale Category Customers		Retail Category Customers	
	WC-1	**WC-2**	**RC-1**	**RC-2**
Number of shirts sold (a)	10,750 (215x50)	7,150 (110x65)	4,032 (18x224)	3,675 (15x245)
Revenues (at listed price) (₹): (b) {(a) × ₹ 1,000)}	1,07,50,000	71,50,000	40,32,000	36,75,000
Discount (₹): (c) {(a) × Discount per shirt}	32,25,000	14,30,000	4,03,200	1,83,750
Cost of shirts (₹) : (d) {(a) × ₹ 600}	64,50,000	42,90,000	24,19,200	22,05,000
Order taking costs (₹):	63,000	81,900	2,82,240	3,08,700

(No. of purchase × ₹1,260)				
Customer visits costs (₹) (No. of customer visits × ₹ 1,500)	15,000	19,500	37,500	33,000
Delivery vehicles travel costs (₹) (Kms travelled by delivery vehicles × ₹ 30 per km.)	27,600	23,400	52,500	1,48,500
Cost of expediting deliveries (₹) {No. of expedited deliveries × ₹ 4,490}	22,450	71,840	2,24,500	2,78,380
Total cost of customer level operating activities (₹)	1,28,050	1,96,640	5,96,740	7,68,580

Computation of Customer level operating income

	Wholesale Category Customers		Retail Category Customers	
	WC-1	**WC-2**	**RC-1**	**RC-2**
Revenues (At list price) (Refer to working note)	1,07,50,000	71,50,000	40,32,000	36,75,000
Less: Discount (Refer to working note)	32,25,000	14,30,000	4,03,200	1,83,750
Revenue	75,25,000	57,20,000	36,28,800	34,91,250

(At actual price)				
Less: Cost of shirts (Refer to working note)	64,50,000	42,90,000	24,19,200	22,05,000
Gross margin	10,75,000	14,30,000	12,09,600	12,86,250
Less: Customer level operating activities costs (Refer to working note)	1,28,050	1,96,640	5,96,740	7,68,580
Customer level operating income	9,46,950	12,33,360	6,12,860	5,17,670
Operating income as a % of revenues	12.584%	21.562%	16.889%	14.828%
Rank	IV	I	II	III

(b) (i) No. of passengers 180 seats × 70% = 126

	(₹)	(₹)
Fare collection (126 passengers × ₹12,500)		15,75,000
Variable costs:		
Fuel	2,28,000	
Food (126 passengers × ₹270)	34,020	
Commission (7.5 % of ₹15,75,000)	1,18,125	3,80,145
Contribution per flight		11,94,855
Fixed costs:		
Lease and Landing Charges	9,12,000	
Salaries of flight Crew	90,000	10,02,000
Net income per flight		1,92,855

(ii)

Fare collection (144 passengers × ₹11,670)		16,80,480
Variable costs:		
Fuel	2,28,000	
Food (144 passengers × ₹270)	38,880	
Commission (7.5% of ₹16,80,480)	1,26,036	3,92,916
Contribution		12,87,564
Fixed costs:		
Lease and Landing Charges	9,12,000	
Salaries of flight Crew	90,000	10,02,000
Net income per flight		2,85,564

There is an increase in contribution by ₹ 92,709. Hence the proposal is acceptable.

Question 3

(a) *A factory is currently working at 60% capacity and produces 12,000 units of a product. Management is thinking to increase the working capacity either to 70% or 90% level. It is estimated that at both the levels, it will be able to sell all the produced units. The other details are as under:*

- *At 70% capacity, the cost of raw materials increases by 4% and the selling price falls by 3%.*
- *At 90% capacity, the cost of raw materials increases by 5% and selling price falls by 4%.*
- *At 60% capacity, the product cost is ₹ 360 per unit and it is sold at ₹ 400 per unit.*
- *The unit cost of 360 consists of the following:*

Material	*₹ 200*
Labour	*₹ 60*
Factory overhead	*₹ 60 (50 % fixed)*
Administrative & Selling overhead	*₹ 40 (60 % fixed)*

- *Additional advertising cost of ₹ 20,000 is to be incurred for selling the product above 80% capacity.*

You are required to:

(i) Calculate the profits of the company when the factory works at 60%, 70% and 90% capacity level.

(ii) Offer your comments regarding increase in the capacity based on profit calculated.

(b) S.K. Manufacturing Co. Ltd. showed a net profit of ₹ 5,40,400 as per their cost accounts for the year ended 31.03.2004. However, the financial books disclosed a net profit of ₹ 2,60,500 for the same period. The following information was revealed as a result of scrutiny of the figures of both the sets of books:

	₹
Factory overheads under absorbed	*84,800*
Administrative overheads over absorbed	*24,000*
Interest paid on bank borrowings	*50,000*
Interest & Divided received	*65,200*
Notional rent of own premises charged in cost accounts	*60,000*
Losses on the sales of fixed assets and investments	*48,000*
Donations and subscriptions	*18,800*
Overvaluation of closing stock of finished goods in Cost accounts	*1,25,000*
Store adjustments (credited in financial books)	*7,500*
Depreciation over charged in cost accounts	*40,000*
Income tax provided	*1,50,000*

You are required to:

(i) Prepare a reconciliation statement taking net profit as per cost accounts as base.

(ii) State when is the reconciliation statement of Cost and Financial accounts not required?

Answer

(a) (i) Expense Budget at 60%, 70% & 90% level

	60% (12,000 units)		70% (14,000 units)		90% (18,000 units)	
	Per unit (₹)	Amount (₹)	Per unit (₹)	Amount (₹)	Per unit (₹)	Amount (₹)
Sales **(A)**	400	48,00,000	388	54,32,000	384	69,12,000
Variable Costs:						
Direct Material	200	24,00,000	208	29,12,000	210	37,80,000
Direct Wages	60	7,20,000	60	8,40,000	60	10,80,000
Variable Factory Overheads	30	3,60,000	30	4,20,000	30	5,40,000
Variable Administrative & Selling Overheads	16	1,92,000	16	2,24,000	16	2,88,000
Total Variable Cost **(B)**	306	36,72,000	314	43,96,000	316	56,88,000
Contribution **(C) = (A–B)**	94	11,28,000	74	10,36,000	68	12,24,000
Fixed Costs:						
Fixed Factory Overheads (50%)	--	3,60,000	--	3,60,000	--	3,60,000
Fixed Administrative & Selling Overheads (60%)	--	2,88,000	--	2,88,000	--	2,88,000
Adverting Cost	--	--	--	--	--	20,000
Total Fixed Costs **(D)**	--	6,48,000	--	6,48,000	--	6,68,000
Profit **(C – D)**	--	4,80,000	--	3,88,000	--	5,56,000

(ii) **Comment:** Increase of production capacity to 90% is likely to increase the profit to maximum of ₹ 5,56,000 due to increase in contribution while fixed cost is slightly increased due to in advertising cost. At 70% capacity, profit is reduced to minimum of ₹ 3,88,00 due to decrease in selling price by 3% along with increase in raw material cost by 4% resulting in decrease of contribution. Therefore, it is recommended that factory should operate at 90% capacity.

(b) (i) Statement of Reconciliation of profit as obtained under Cost and Financial Accounts

		(₹)	(₹)
	Profit as per Cost Records		**5,40,400**
Add:	Administrative Overhead over absorbed	24,000	
	Interest & Dividend Received	65,200	
	Notional rent of own premises	60,000	
	Stores adjustments (credited in financial books)	7,500	
	Depreciation over charged in cost accounts	40,000	1,96,700
			7,37,100
Less:	Factory overheads under absorbed	84,800	
	Interest paid on bank borrowings	50,000	
	Losses on sale of fixed assets and investments	48,000	
	Donations and subscriptions	18,800	
	Over-valuation of closing stock of finished goods in cost accounts	1,25,000	
	Income tax	1,50,000	(4,76,600)
	Profit as per Financial Records		**2,60,500**

(ii) **Circumstances where reconciliation statement can be avoided:** When the Cost and Financial Accounts are integrated - there is no need to have a separate reconciliation statement between the two sets of accounts. Integration means that the same set of accounts fulfil the requirement of both i.e., Cost and Financial Accounts.

Question 4

(a) Meta Company Ltd. is engaged in the production of product 'Trio' which passes through two different processes Process P and Process Q. Other information obtained from books of account for the year is as follows:

Particulars	*Process P*	*Process Q*
Raw material used	*10,000*	*---*
Raw material cost per unit	*₹ 80*	*---*
Direct wages	*₹ 52,000*	*₹ 78,000*
Direct Expenses	*₹ 8,600*	*₹ 11,100*
Selling price per unit of output	*₹ 130*	*₹ 190*

Production overheads of ₹ 3,00,000 are recovered as percentage of direct wages.

Actual output of the two processes was:

P-9,200 units and Q-6,400 units. 3/4th of the output of Process P was passed on to the Process Q and the balance was sold. The entire output of process Q was sold.

Management & Selling expenses during the year were ₹ 1,70,000.

These are not allocable to the processes.

The normal loss of the two processes, calculated on the input of every process was:

Process P- 6% and Process Q-10%

The Loss of Process P was sold at ₹ 5 per unit and that of Q at ₹ 8 per unit. Assume that Process P and Process Q are not the responsibility centres.

You are required to prepare:

(i) Process P Account

(ii) Process Q Account

(iii) Abnormal Loss and Abnormal Gain Account

(iv) Costing Profit & Loss Account.

(b) The cost variance report was being discussed at a review meeting where in Cost Accountant of the company reported under-absorption of production overheads.

The following information was available from the cost records of the company at the end of financial year 2023-24:

- *Actual production overheads incurred were ₹ 4,50,000 which included ₹ 42,000 on account of 'written off obsolete stores.*
- *18,000 units were produced during the year out of which 10,000 units were sold and 8,000 units of finished goods were in stock.*
- *There were also 5,000 units in progress which may be reckoned as 40% complete.*
- *The actual machine hours worked during the period were 43,000.*

ABC Ltd. absorbs the production overheads at a predetermined rate of ₹ 8 per machine hour.

On investigation, it has been found that 20% of the under-absorption of production overheads was due to defective planning and the rest was attributable to normal increase in costs of indirect materials and indirect labour.

You are required to:

(i) Calculate the amount of under-absorption of production overheads during the year 2023-24; and

(ii) Show the treatment of under-absorption of production overheads in cost accounts.

Answer

(a) **Process- P Account**

Particulars	**Units**	**Amount (₹)**	**Particulars**	**Units**	**Amount (₹)**
To Material	10,000	8,00,000	By Normal Loss	600	3,000
To Wages		52,000	By Process Q		

To Direct Exp.		8,600	(9,200 × 3/4)	6,900	7,17,600
To Production Overheads (3,00,000 × 2/5)		1,20,000	By Costing Profit and Loss (P&L) (9,200 × 1/4)	2,300	2,39,200
			By Abnormal Loss	200	20,800
	10,000	9,80,600		10,000	9,80,600

Cost per unit = $\frac{9{,}80{,}600-3{,}000}{10{,}000-600}$ = ₹ 104 per unit

Process- Q Account

Particulars	Units	Amount (₹)	Particulars	Units	Amount (₹)
To Process P	6,900	7,17,600	By Normal Loss	690	5,520
To Wages		78,000			
To Direct Exp.		11,100	By Costing P&L	6,400	10,11,200
To Production Overheads (3,00,000 × 3/5)		180,000			
To Abnormal Gain	190	30,020			
	7,090	10,16,720		7,090	10,16,720

Cost per unit = $\frac{9{,}86{,}700-5{,}520}{6900-690}$ = ₹158 per unit

Abnormal Loss Account

Particulars	Units	Amount (₹)	Particulars	Units	Amount (₹)
To Process- P	200	20,800	By Bank	200	1,000
			By Costing P&L		19,800
	200	20,800		200	20,800

Abnormal Gain Account

Particulars	Units	Amount (₹)	Particulars	Units	Amount (₹)
To Normal Loss	190	1,520	By Process Q	190	30,020
To Costing Profit and Loss		28,500			
	190	30,020		190	30,020

Costing Profit & Loss Account for the year

Dr. **Cr.**

Particulars	Amount (₹)	Particulars	Amount (₹)
To Cost of Sales P - 2,39,200 Q - 10,11,200	12,50,400	By Sales P 2300 @ 130 Q 6400 @ 190	15,15,000
To Abnormal Loss	19,800	By Abnormal Gain	28,500
To Selling Expense	1,70,000		
To Net Profit	1,03,300		
	15,43,500		15,43,500

(b) (i) Amount of under-absorption of production overheads during the current year

	(₹)
Total production overheads actually incurred during the current year	4,50,000
Less : 'Written off' obsolete stores	42,000
Net production overheads actually incurred : **(A)**	4,08,000
Production overheads absorbed by 43,000 machine hours@ ₹ 8 per hour : **(B)**	3,44,000

Amount of under – absorption of production overheads :

[(A) – (B)] **<u>64,000</u>**

(ii) Accounting treatment of under absorption of production overheads

It is given in the statement of the question that 18,000 units were produced, and 5,000 units were 40% complete, 20% of the under-absorbed overheads were due to defective planning and the rest were attributable to normal increase in costs of indirect materials and indirect labour.

1.	(20 % of ₹ 64,000) i.e., ₹ 12,800 of under-absorbed overheads were due to defective planning. This being abnormal, should be debited to the Costing Profit and Loss A/c.	₹ 12,800
2.	Balance (80% of ₹ 64,000) i.e., ₹ 51,200 of under-absorbed overheads should be distributed over work-in-progress, finished goods and cost of sales by using supplementary rate.	₹ 51,200
	Total under-absorbed overheads	₹ 64,000

Apportionment of unabsorbed overheads of ₹ 51,200 over, work-in progress, finished goods and cost of sales

	Equivalent Completed Units	**(₹)**
Work-in-Progress		
(5,000 units × 40%×₹ 2.56)	2,000	5,120
(Refer to working note)		
Finished goods		
(8,000 units × ₹ 2.56)	8,000	20,480
Cost of sales		
(10,000 units × ₹ 2,56)	10,000	25,600
	20,000	51,200

Working Note

Supplementary rate per unit = $\frac{51,200}{20,000}$ = ₹ 2.56

Question 5

(a) *Super Ltd, a manufacturing company is facing the problem of high labour turnover in the factory. Before analysing the causes and taking remedial steps, the management of the company wants to ascertain the profit lost for the year 2022-23 on account of labour turnover. For this purpose, it has given you the following information:*

(i) *Sales for the last year 2022-23 was ₹ 2,16,80,000 and P/V ratio was 15%.*

(ii) *The total number of actual hours worked by the direct labour force was 5,00,000 hours. The actual direct labour hours included 60,000 hours attributable to training new recruits, out of which 40% of the hours were unproductive.*

(iii) *Due to delays by the Personnel Department in filling vacancies on account of labour turnover, 95,000 potential productive hours (excluding unproductive training hours) were lost.*

(iv) *1,500 units of the output produced during training period were defective. Cost of rectification of defective units was ₹ 40 per unit.*

(v) *Settlement cost of the workers leaving the organization was ₹ 2,37,880.*

(vi) *Recruitment and Selection cost was ₹ 1,40,000.*

(vii) *Cost of Training and Induction was ₹ 1,61,950.*

Assuming that the potential production lost as a consequence of labour turnover could have been sold at prevailing prices, find the profit lost for the year 2022-23 on account of labour turnover.

(b) *The following information is given by PQR Ltd:*

Year	*Sales (₹)*	*Profit (Loss (₹)*
2022-23	*1,80,00,000*	*(3,80,000)*
2023-24	*2,40,00,000*	*11,20,000*

You are required to:

(i) *Calculate the Break even sales.*

(ii) *In 2024-25, it is estimated that the variable cost will go up by 5% and fixed cost will reduce by ₹ 4,80,000. Selling price will remain same. Calculate the sales volume to earn a profit of ₹ 15,00,000.*

(c) *Discuss Feedback Control and Feedforward Control system of budgetary control.*

Answer

(a) Workings:

(i) Computation of productive hours

Actual hours worked (given)	5,00,000
Less: Unproductive training hours	24,000
Actual productive hours	4,76,000

(ii) Productive hours lost:

Loss of potential productive hours+ Unproductive training hours

= 95,000 + 24,000 = 1,19,000 hours

(iii) Loss of contribution due to unproductive hours :

$$= \frac{\text{Sales value}}{\text{Actual productive hours}} \times \text{Total unproductive hours}$$

$$= \frac{₹\ 2,16,80,000}{4,76,000\ \text{hrs}} \times 1,19,000\ \text{hours} = ₹\ 54,20,000$$

Contribution lost for 1,19,000 hours= ₹ 54,20,000 x 15% = ₹8,13,000

Computation of profit forgone on account of employee turnover

	(₹)
Contribution foregone (as calculated above)	8,13,000
Settlement cost due to leaving	2,37,880
Recruitment and Selection cost	1,40,000
Training and Induction costs	1,61,950
Cost of Rectification (1500 units x ₹40)	60,000
Profit foregone	**14,12,830**

The above question can also be solved in alternative way after taking proper assumptions

Workings:

(i) Computation of productive hours

Actual hours worked (given)	5,00,000
Less: Unproductive training hours	24,000
Actual productive hours	4,76,000

(ii) Productive hours lost:

Loss of potential productive hours

= 95,000 hours

(iii) Loss of contribution due to unproductive hours :

$$= \frac{\text{Sales value}}{\text{Actual productive hours}} \times \text{Total unproductive hours}$$

$$= \frac{₹\, 2,16,80,000}{4,76,000\ \text{hrs}} \times 95,000 \text{ hours} = ₹\ 43,26,891$$

Contribution lost for 95,000 hours= ₹ 43,26,891 x 15% = ₹ 6,49,034(approx.)

Computation of profit forgone on account of employee turnover

	(₹)
Contribution foregone (as calculated above)	6,49,034
Settlement cost due to leaving	2,37,880
Recruitment and Selection cost	1,40,000
Training and Induction costs	1,61,950
Cost of Rectification (1500 units x ₹40)	60,000
Profit foregone	**12,48,864**

(b) **(i)** Break-even sales = $\frac{\text{Fixed Cost}}{\text{P/V Ratio}}$

P/V Ratio = $\frac{\text{Change in Profit}}{\text{Change in Sales}} \times 100$ or, $\frac{15,00,000}{2,40,00,000-1,80,00,000} \times 100$

Or, $\frac{15,00,00}{60,00,000} \times 100$ or, 25%

Fixed Cost = Contribution – Profit

= ₹ 2,40,00,000 × 25% - ₹ 11,20,000

= ₹ 60,00,000 – ₹ 11,20,000 = ₹ 48,80,000

Break-even sales = $\frac{48,80,000}{25\%}$ = ₹ 1,95,20,000

(iii) Desired Contribution in 2024-25 = Revised Fixed Cost + Target Profit

= (₹ 48,80,000- ₹ 4,80,000) + ₹ 15,00,000

= ₹ 59,00,000

Earlier P/V ratio = 25%. So Variable Cost ratio =75%.

Selling price remain the same.

Variable cost increased by 5% i.e. Variable Cost ratio will be 78.75% (75+5%of 75).

Now revised P/V ratio=21.25%

Sales Volume in 2024-25=$\frac{59,00,000}{21.25\%}$ = ₹ 2,77,64,706(approx.)

If it is assumed that variable cost will go up by 5% on total. So, it will be increased from 75% to 80% and solution can be done in following way:

(i) Desired Contribution in 2024-25 = Revised Fixed Cost + Target Profit

= (₹ 48,80,000-₹ 4,80,000) + ₹ 15,00,000

= ₹ 59,00,000

Earlier P/V ratio = 25%. So Variable Cost ratio =75%.

Selling price remain the same.

Variable cost increased by 5% i.e. Variable Cost ratio will be 80% (75%+5%).

Now revised P/V ratio=20%

Sales Volume in 2024-25== $\frac{59,00,000}{20\%}$ = ₹ 2,95,00,000

(c) There are two types of budgetary control system based on timing of action:

Feedback Control: The feedback system of budgetary control, the actual results for the budgeted period are collected and compared with the budgeted figures. The exercise of variance identification is done after the completion of the budget period. The variances are reported and based on the report corrective actions are taken, responsibility is fixed and based on experience, modification in future targets is implemented. As the name suggests, it is an Ex-post Corrective control system of budget.

This system of budgetary control is common in organistions where Management Information System (MIS) is not so robust and where data is obtained only after the finalisation of books of account. Though this type of control system is less expensive to maintain but has limitations.

Feedforward Control: This the opposite of feedback control system of budgetary control. It is Ex-Ante Preventive control mechanism of budgetary control. The budgets are set at the inception of the budgeted period and the actual results are continuously monitored and compared. The targets are kept realistic as far as possible and the targets are reviewed and reset if necessary.

This budgetary control system requires a robust MIS supported by integrated ERP system enabling an entity to get data as and when desired basis. This system is very expensive and beneficial for the organisations where the business environment is dynamic and information has important role in getting edge in competition and todays data warfare.

Question 6

(a) Distinguish between cost control and cost reduction.

(b) Distinguish between Waste and Scrap. Discuss the treatment of normal and abnormal scrap in Cost Accounts.

(c) *Describe Unit Costing and Batch Costing. Give three examples of industries for each method where these are used.*

OR

(d) *Describe briefly idle time and explain the treatment of idle time in cost accounts in following situations:*

(i) *The setting up time for the machine in case of Direct Worker Mr. A.*

(ii) *Normal break time for lunch in case of Indirect Worker Mr. B.*

(iii) *Time lost due to breakdown of machine in case of Worker Mr. C.*

Answer

(a)

Cost Control	Cost Reduction
1. Cost control aims at maintaining the costs in accordance with the established standards.	1. Cost reduction is concerned with reducing costs. It challenges all standards and endeavours to improvise them continuously
2. Cost control seeks to attain lowest possible cost under existing conditions.	2. Cost reduction recognises no condition as permanent, since a change will result in lower cost.
3. In case of cost control, emphasis is on past and present	3. In case of cost reduction, it is on present and future.
4. Cost control is a preventive function	4. Cost reduction is a corrective function. It operates even when an efficient cost control system exists.
5. Cost control ends when targets are achieved.	5. Cost reduction has no visible end and is a continuous process.

(b) Difference between Waste and Scrap

Waste	Scrap
1. The portion of raw material which is lost during storage/ production and discarded.	1. The output which is discarded and disposed off without further treatment.
2. It is connected with raw material or inputs to the production process.	2. It is the loss connected with the output
3. Waste of materials may be visible or invisible.	3. Scraps are generally identifiable and has physical substance.
4. Generally, waste has no recoverable value.	4. Scraps are termed as by-products and has small recoverable value.

Treatment of Scrap

Normal- The cost of scrap is borne by good units and income arises on account of realisable value is deducted from the cost.

Abnormal- The scrap account should be charged with full cost. The credit is given to the job or process concerned. The profit or loss in the scrap account, on realisation, will be transferred to the Costing Profit and Loss Account.

(c) Unit costing is that method of costing where the output produced is identical and each unit of output requires identical cost. Under this method costs, are collected and analysed element wise and then total cost per unit is ascertained by dividing the total cost with the number of units produced.

Such a method of costing is used in the industries like paper, cement, steel works, mining, breweries etc.

Batch Costing: Batch Costing is a type of specific order costing where articles are manufactured in predetermined lots, known as batch. Cost per unit in a batch is ascertained by dividing the total cost of a batch by the number of units produced in that batch.

Such a method of costing is used in the case of pharmaceutical or drug industries, readymade garment industries, industries, manufacturing electronic parts of T.V. radio sets etc.

OR

(c) The time during which no production is carried-out because the worker remains idle but are paid. In other words, it is the difference between the time paid and the time booked. Idle time can be normal or abnormal.

Situation	Idle Time	Treatment
The setting up time for the machine in case of Direct Worker Mr. A	Normal idle time	It is treated as a part of cost of production. It is to be considered while setting of standard hours or standard rate.
Normal rest time, break time for lunch in case of Indirect Worker Mr. B	Normal idle time	It is to be considered for the computation of overhead rate.
Time lost due to break-down of machines in case of Worker Mr. C	Abnormal idle time	It is to be shown as a separate item in the Costing Profit and Loss Account.

PAPER – 5 : AUDITING AND ETHICS

*Question No.**1** is compulsory.*

*Attempt any **four** questions from the remaining **five** questions.*

Question 1

(a) *APR & Associates, a Chartered Accountant firm, are appointed as the auditors of Time Ltd. and Bakes Ltd. The volume and nature of business of both the companies are entirely different. CA R is the engagement partner for Bakes Ltd. CA P is the engagement partner for Time Ltd. CA R formulates an Audit Programme for conducting the audit of Bakes Ltd. He suggests CA P to use the same audit programme for Time Ltd. But CA P is of the opinion that this audit programme will not be useful for the audit of Time Ltd.*

In light of the above, mention the matters that should generally be considered while preparing an Audit Programme. Is CA P correct in emphasizing for a different Audit Programme for Time Ltd.? ***(4 Marks)***

(b) *ABC & Co. are in the business of manufacturing toys. The stock taking process has been done by the company as on 31.3.2024. The company has used FIFO method for valuation of its inventories. The cost of inventory as on 31.3.24 is ₹ 25,25,000/- and the net realizable value of the inventory on the same date is ₹ 25,24,000/-.*

The cost of inventory includes the following:

(1) Material purchase cost - ₹ 25,05,000/-

(2) Allocated transport cost - ₹ 18,000/-

(3) Abnormal wastage - ₹ 2,000/-

The management seeks your advice in arriving at the value of inventory to be shown in the financial statements of the company. What should be the value of inventory in accordance with AS-2? ***(4 Marks)***

(c) *Mr. Z, at the time of appointment as an independent director in EF Ltd. a listed company, came to know that the Companies Act, 2013 has placed a greater emphasis on the effective implementation and reporting on internal controls for a listed Company. He wants to know the responsibilities as casted* *under Companies Act, 2013 with regards to Internal Financial Control for (1) Directors (2) Independent directors and (3) Audit committee as per section 134(5)(e), 149(8) & 177(4) (vii) respectively of the Companies Act, 2013.*

(3 Marks)

(d) CA B, an auditor, after the completion of busy audit season, was occupied in assembling of final audit files of one of his client. First of all, he started preparing various documents of that client and then kept those documents in various folders. He was preparing documents as well as audit file in paper form because he believed that it is mandatory. He could complete documentation as well as assembling of final audit file of that client after three months from the date of audit report. Generally, he retains audit file of the clients for 4 years from the date of audit report. Check the validity of the action of CA B. ***(3 Marks)***

Answer

(a) Following matters should be considered generally while preparing an Audit Programme:

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

(2) Prepare a written audit programme setting forth the procedures that are needed to implement the audit plan.

(3) Determine the evidence reasonably available and identify the best evidence for deriving the necessary satisfaction.

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

(5) Include the audit objectives for each area and sufficient details which serve as a set of instructions for the assistants involved in audit and help in controlling the proper execution of the work.

(6) Consider all possibilities of error.

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

Evolving one audit programme- Not Practicable for All businesses: 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 business under all circumstances is not practicable.

In view of above mentioned provisions, CA. P is correct in emphasizing for a different audit programme for Time Ltd.

(b) Value of Inventory: Inventory to be recognized at the lower of cost and net realizable value in accordance with AS 2 - Inventories. Further, any costs that could not be reasonably allocated to the cost of production (e.g. general and administrative costs) and any abnormal wastage have been excluded from the cost of inventory. An acceptable valuation basis (e.g. FIFO, Weighted average etc.) has been used to value inventory as at the period-end.

In the given situation, ABC & Co. is using FIFO method for valuation of its inventories. Further, cost of inventory as on 31.03.2024 is rupees 25,25,000 which includes material purchase cost of rupees 25,05,000, allocated cost of transport of rupees 18,000 and abnormal wastage of rupees 2,000. Net realizable value of said inventory is ₹ 25,24,000. In view of provisions of AS 2, cost allocated to transport for inventory is relating to bringing the inventory to the location, thus it will be added in cost of material. However, abnormal wastage of rupees 2000 should be excluded from cost of inventory.

Thus, cost of inventory will be ₹ 25,25,000 – ₹ 2,000 = 25,23,000 rupees and Net realizable value of inventory is ₹ 25,24,000.

For valuation in accordance with AS 2, "Inventory", lower of cost and net realizable value will be considered. Accordingly, ₹ 25,23,000 to be considered as value of inventory in the given situation.

(c) Internal financial controls as per regulatory requirements: The Companies Act, 2013 has placed a greater emphasis on the effective implementation and reporting on the internal controls for a company. The term "internal financial controls" is used at some places in Companies Act, 2013 casting responsibilities as under: -

Relevant provision of Companies Act,2013	***Nature of Responsibility***
Section 134(5)(e)	In case of listed Companies, the Directors' responsibility statement shall state that the Directors had laid down Internal financial controls to be followed by the company and that such Internal financial controls are adequate and were operating effectively.
As per Section 149(8) of the Act	The company and independent directors shall abide by the provisions specified in Schedule IV which lays down the Code for independent Directors. As per this code, the role and functions of independent directors include that they shall satisfy themselves on the integrity of financial information and that financial controls and the systems of risk management are robust and defensible.
Section 177(4)(vii) of the Act	Every audit Committee shall act in accordance with the terms of reference specified in writing by the Board which shall, inter alia, include - evaluation of internal financial controls and risk management systems.

(d) Assembly of the Final Audit File:

Audit documentation may be recorded on paper or on electronic or other media. Audit file may be defined as one or more folders or other storage media, in physical or electronic form, containing the records that comprise the audit documentation for a specific engagement. Hence the views of CA B that audit documentation should be maintained mandatorily in paper form is not correct.

The auditor shall prepare audit documentation on timely basis. Preparing sufficient and appropriate audit documentation on a timely basis helps to enhance the quality of the audit and facilitates the effective review and evaluation of the audit evidence obtained and conclusions reached before the auditor's report is finalized. Documentation prepared after the audit work has been performed is likely to be less accurate than documentation prepared at the time such work is performed. Completing the audit Documentation by CA B not on timely basis is not proper.

An appropriate time limit within which to complete the assembly of the final audit file is ordinarily not more than 60 days after the date of the auditor's report. In the given situation, CA. B, after completion of audit season, is completing the audit file as well as assembling of final audit files of his client after three months of the date of audit report which is not valid as per SQC 1.

SQC 1 "Quality Control for Firms that perform Audits and Review of Historical Financial Information, and other Assurance and Related Services", requires firms to establish policies and procedures for the retention of engagement documentation. The retention period for audit engagements ordinarily is no shorter than seven years from the date of the auditor's report, or, if later, the date of the group auditor's report. He retains audit file of the client for 4 years from the date of audit report is also non-compliance of SQC 1.

Question 2

(a) CA Q is the engagement partner for the audit of a Departmental store. As a part of the risk assessment procedure, he wants to make inquiries of the management and others within the entity. What kind of information can the auditor get by inquiring from the following?

(i) Internal audit personnel

(ii) In-house legal counsel

(iii) Marketing or sales personnel

(iv) Information systems personnel **(4 Marks)**

(b) CA Z, the auditor of MNO Ltd., during the course of audit, assesses a risk of material misstatements regarding the litigations and claims involving the company. CA Z is not convinced with the management's explanations regarding the status of the litigations or claims. It is considered unlikely that the entity's external legal counsel will respond appropriately to a letter of general enquiry. The auditor sent a letter of specific enquiry requesting the

entity's external legal counsel to communicate directly with the auditor. List out the inclusions in the letter of specific enquiry.

In certain circumstances the auditor may judge it necessary to meet with entity's external legal counsel to discuss the likely outcome of the litigations or claims. What will be auditor's reporting responsibility if the management refuses to give permission to the auditor to communicate or meet with the external legal counsel? ***(4 Marks)***

(c) JK Ltd. was having a 'Pager' manufacturing plant and looking at the demand it was of the view that the company will grow continuously in future. But, with the introduction of mobile phones in the market, the plant was shut down completely. The shareholders of the company were of the view that auditor failed to perform their duty and have not informed to them about the company's inability to continue its business, otherwise they might not have suffered the loss. List down the factors giving rise to the inherent limitations due to which auditor cannot provide a guarantee that the financial statements are free from material misstatement due to fraud or error.

(3 Marks)

(d) B Ltd. is a company manufacturing bed-sheets and pillow covers. They have appointed M/s C & Co., Chartered Accountants, as their auditors. The auditor is establishing audit strategy with his team members. As the work progressed, they came to know that the company has diversified its business and now they are also planning to manufacture wooden furniture. The auditor, in his professional judgement, considers this to be a significant factor in directing the engagement team's efforts. Give examples of factors that, in auditor's professional judgement, are significant in directing the engagement team's efforts. ***(3 Marks)***

Answer

(a) Inquiries of Management and Others Within the Entity:

(i) Inquiries directed toward internal audit personnel may provide information about internal audit procedures performed during the year relating to the design and effectiveness of the entity's internal control and whether management has satisfactorily responded to findings from those procedures.

(ii) Inquiries directed toward in-house legal counsel may provide information about such matters as litigation, compliance with laws and regulations, knowledge of fraud or suspected fraud affecting the entity, warranties, post-sales obligations, arrangements (such as joint ventures) with business partners and the meaning of contract.

(iii) Inquiries directed towards marketing or sales personnel may provide information about changes in the entity's marketing strategies, sales trends, or contractual arrangements with its customers.

(iv) Inquiries directed to information systems personnel may provide information about system changes, system or control failures, or other information system-related risks.

(b) A letter of specific inquiry includes:

(i) A list of litigation and claims;

(ii) Where available, management's assessment of the outcome of each of the identified litigation and claims and its estimate of the financial implications, including costs involved; and

(iii) A request that the entity's external legal counsel confirm the reasonableness of management's assessments and provide the auditor with further information if the list is considered by the entity's external legal counsel to be incomplete or incorrect.

In certain circumstances**,** the auditor also may judge it necessary to meet with the entity's external legal counsel to discuss the likely outcome of the litigation or claims. Further, if management refuses to give the auditor permission to communicate or meet with the entity's external legal counsel, or the entity's external legal counsel refuses to respond appropriately to the letter of inquiry, or is prohibited from responding, and the auditor is unable to obtain sufficient appropriate evidence by performing alternate audit procedures, the auditor shall modify the opinion in the auditor's report in accordance with SA 705.

Alternatively, if the auditor is able to perform alternate audit procedures and can obtain sufficient and appropriate audit evidence to resolve the issue, then he can give an unmodified opinion.

(c) Inherent limitations of audit: The process of audit suffers from certain inbuilt limitations due to which an auditor cannot obtain an absolute assurance that financial statements are free from misstatement due to fraud or error. These fundamental limitations arise due to the following factors: -

(1) Nature of financial reporting: Preparation of financial statements involves making many judgments by management. These judgments may involve subjective decisions or a degree of uncertainty. Therefore, auditor may not be able to obtain absolute assurance that financial statements are free from material misstatements due to frauds or errors.

(2) Nature of Audit procedures: The auditor carries out his work by obtaining audit evidence through performance of audit procedures. However, there are *practical and legal* limitations on ability of auditor to obtain audit evidence. For example, an auditor does not test all transactions and balances. He forms his opinion only by testing samples. It is an example of *practical limitation* on auditor's ability to obtain audit evidence.

Management may not provide complete information as requested by auditor. There is no way by which auditor can force management to provide complete information as may be requested by auditor. In case he is not provided with required information, he can only report. It is an example of *legal limitation* on auditor's ability to obtain audit evidence. Further, fraud may involve sophisticated and carefully organized schemes.

(3) Not in nature of investigation: Audit is not an official investigation. Hence, auditor cannot obtain absolute assurance that financial statements are free from material misstatements due to frauds or errors.

(4) Timeliness of financial reporting and decrease in relevance of information over time: The relevance of information decreases over time and auditor cannot verify each and every matter. Therefore, a balance has to be struck between reliability of information and cost of obtaining it.

(5) **Future events:** Future events or conditions may affect an entity adversely. Adverse events may seriously affect ability of an entity to continue its business. The business may cease to exist in future due to change in market conditions, emergence of new business models or products or due to onset of some adverse events.

(d) **Consider the factors that, in the auditor's professional judgment, are significant in directing the engagement team's efforts:** The auditor needs to direct efforts of engagement team towards matters that in his professional judgment are significant. Preliminary identification of material classes of transactions, account balances and disclosures help auditor in establishing overall audit strategy. More energies need to be devoted to significant matters to obtain desired outcomes. Few examples are listed as under: -

(i) Volume of transactions which may determine whether it is more efficient for the auditor to rely on internal control.

(ii) Significant industry developments such as changes in industry regulations and new reporting requirements.

(iii) Significant changes in the financial reporting framework, such as changes in accounting standards.

(iv) Other significant relevant developments, such as changes in the legal environment affecting the entity.

Question 3

(a) CA E is auditor of LM Ltd. Before commencing with current year's audit, he initiated planning for the audit. Planning includes the need to consider certain matters, prior to the identification and assessment of the risk of material misstatements. Enumerate such matters. ***(4 Marks)***

(b) The management of PQ Ltd. changed during the period under audit. Mr. G an auditor, at the time of receiving written representation on the management responsibilities from the management, was in a dilemma related to the date of and period(s) covered by the written representation. Further, new management was of the view that they can give written representation from the date they took over and not for the prior period when old management were managing affairs of the company. Guide the auditor & the management in this respect. ***(4 Marks)***

(c) *You are appointed as the auditor of a company manufacturing paints. The company has a robust system of internal control. Most of the controls in the company are automated and they are working effectively. However, in certain situations, manual elements in internal controls are more suitable. What are the circumstances where manual elements in internal controls may be more suitable?* ***(3 Marks)***

(d) *M/s PSR & Associates are the auditors of The Saturn Hotel, a chain of five-star hotels. Since the nature of their business is prone to frauds, the company has appointed internal auditors at various locations. The company has also devised a system of effective and efficient internal controls. The auditors, M/s PSR & Associates, want to use the work of the internal auditors. In order to ensure effectiveness, what kind of coordination should be there between the external auditor and the internal audit function?* ***(3 Marks)***

Answer

(a) **Nature of Audit Planning- A Continuous and iterative process:** Planning includes the need to consider, prior to the auditor's identification and assessment of the risks of material misstatement, such matters as: -

1. The analytical procedures to be applied as risk assessment procedures.
2. Obtaining a general understanding of the legal and regulatory framework applicable to the entity and how the entity is complying with that framework.
3. The determination of materiality.
4. The involvement of experts.
5. The performance of other risk assessment procedures.

(b) As per SA 580, "Written Representations", the date of the written representations shall be as near as practicable to, but not after, the date of the auditor's report on the financial statements. The written representations shall be for all financial statements and period(s) referred to in the auditor's report.

Furthermore, because the auditor is concerned with events occurring up to the date of the auditor's report that may require adjustment to or disclosure in the financial statements, the written representations are dated as near as practicable to, but not after, the date of the auditor's report on the financial statements.

The written representations are for all periods referred to in the auditor's report because management needs to reaffirm that the written representations it previously made with respect to the prior periods remain appropriate.

Situations may arise where current management were not present during all periods referred to in the auditor's report. Such persons may assert that they are not in a position to provide some or all of the written representations because they were not in place during the period. This fact, however, does not diminish such persons' responsibilities for the financial statements as a whole. Accordingly, the requirement for the auditor to request from them written representations that cover the whole of the relevant period(s) still applies. In view of above, management is required to provide the written representation for all the periods even when current management were not present during all periods referred to in the auditor's report.

(c) Manual elements vs automated elements in entity's internal control: Manual elements in internal control may be more suitable in the following circumstances:

- Where judgment and discretion are required.
- Large, unusual or non-recurring transactions.
- Circumstances where errors are difficult to define, anticipate or predict.
- In changing circumstances that require a control response outside the scope of an existing automated control.
- In monitoring the effectiveness of automated controls.

(d) As per SA 610, "Using the Work of Internal Auditors", coordination between the external auditor and the internal audit function is effective when, for example;

(i) Discussions take place at appropriate intervals throughout the period.

(ii) The external auditor informs the internal audit function of significant matters that may affect the function.

(iii) The external auditor is advised of and has access to relevant reports of the internal audit function and is informed of any significant matters that come to the attention of the function when such matters may affect the work of the external auditor so that the external auditor is able to consider the implications of such matters for the audit engagement.

Question 4

(a) *M/s KLM & Co. Chartered Accountants, a partnership firm, while designing tests of controls and tests of details in MN Ltd. has to determine the items for testing that can be effective in meeting the purpose of the audit procedure. For this, they decided to select specific items from a population. State the factors that can be considered by the audit firm for selecting specific items from a population and also state the specific items that can be included for such testing.* ***(4 Marks)***

(b) *Mr. L is a principal auditor of OP Ltd. There are several divisions of OP Ltd. that are audited by other auditors. State the procedures Mr. L should ordinarily perform to obtain sufficient and appropriate audit evidence that the work of other auditors is adequate for the principal auditor's purpose in the context of this assignment.* ***(4 Marks)***

(c) *LD Ltd. has given below loans to the following borrowers during the financial year 2023-24. Mr. B an auditor wants your guidance regarding additional regulatory information required to be provided under the Companies Act, 2013:*

Borrowers	***Maximum Loan granted during the year 2023-2024 (₹ in Lakh)***	***Outstanding Loan as at 31/03/2024 (₹ in Lakh)***
X (Promoter)	*20*	*15*
Y (Director)	*30*	*25*
Z (KMP)	*10*	*05*
A (Related Party)	*20*	*10*
Others	*80*	*65*
Total	***160***	***120***

(3 Marks)

(d) XY and Associates are auditors of PQR Ltd., which provides electrical components on project basis. The purchases are huge and the auditor wants to make sure that all the purchases made during the period are recorded and there is no understatement or overstatement. For this purpose the audit team have performed procedures like cut-off tests, correct treatment of goods in transit, obtaining written representations and performing analytical procedures. What are the analytical procedures required to be performed to obtain audit evidence as to overall reasonableness of purchase quantity and price? ***(3 Marks)***

Answer

(a) The auditor may decide to select specific items from a population. In making this decision, factors that may be relevant include:

(i) the auditor's understanding of the entity,

(ii) the assessed risks of material misstatement, and

(iii) the characteristics of the population being tested.

Specific items selected may include:

- **High value or key items:** The auditor may decide to select specific items within a population because they are of high value, or exhibit some other characteristic.
- **All items over a certain amount:** The auditor may decide to examine items whose recorded values exceed a certain amount so as to verify a large proportion of the total amount of a class of transactions or account balance.
- **Items to obtain information:** The auditor may examine items to obtain information about matters such as the nature of the entity or the nature of transactions.

(b) The principal auditor should perform procedures to obtain sufficient appropriate audit evidence, that the work of the other auditor is adequate for the principal auditor's purposes, in the context of the specific assignment. When using the work of another auditor, the principal auditor should ordinarily perform the following procedures:

(i) Advise the other auditor of the use that is to be made of the other auditor's work and report and make sufficient arrangements for co-ordination of their efforts at the planning stage of the audit. The principal auditor would inform the other auditor of matters such as are as requiring special consideration, procedures for the identification of inter -component transactions that may require disclosure and the time-table for completion of audit; and

(ii) advise the other auditor of the significant accounting, auditing and reporting requirements and obtain representation as to compliance with them.

(iii) The principal auditor might discuss with the other auditor the audit procedures applied or review a written summary of the other auditor's procedures and findings which may be in the form of a completed questionnaire or check-list. The principal auditor may also wish to visit the other auditor.

(c) As additional regulatory requirements, following disclosures shall be made where Loans or Advances in the nature of loans are granted to promoters, Directors, KMPs and the related parties (as defined under Companies Act, 2013,) either severally or jointly with any other person, that are:

(a) repayable on demand or

(b) without specifying any terms or period of repayment.

Type of Borrower	**Amount of loan or advance in the nature of loan outstanding (₹ In Lakhs)**	**Percentage to the total Loans and Advances in the nature of loans (₹ in Lakhs)**
X (Promoter)	15	**12.5%** =15/120 X 100
Y (Director)	25	**20.833%** =25/120 X 100
Z (KMP)	05	**4.167%** =5/120 X 100
A (Related Party)	10	**8.333%** =10/120 X 100

(d) **The auditor should perform analytical procedures to obtain audit evidence as to overall reasonableness of purchase quantity and price which may include:**

(i) **Consumption Analysis:** Auditor should scrutinize raw material consumed as per manufacturing account and compare the same with previous years with closing stock and ask for the reasons from the management, if any significant variations are found.

(ii) **Stock Composition Analysis:** Auditor to collect the reports from management for composition of stock i.e. raw materials as a percentage of total stock and compare the same with previous year and ask for reasons from management in case of significant variations.

(iii) **Ratios:** Auditor should compare the creditors turnover ratios and stock turnover ratios of the current year with previous years.

(iv) **Quantitative Reconciliation:** Auditor should review quantitative reconciliation of closing stocks with opening stock, purchases and consumption.

Question 5

(a) PQ & Co. want to diversify its business and for that purpose they want to raise money by issuing shares to the general public. The face value of the shares is ₹ 100 but the directors of the company propose to issue the shares at a discounted rate of ₹ 95/- so as to receive more response. The statutory auditor, however, objects to the same as it is not allowed as per the Companies Act, 2013. State the provisions of Section 53 of the Companies Act, 2013 with reference to shares issued at a discount and the consequences where the company fails to comply with the provisions of this section.

(4 Marks)

(b) HR & Associates are the auditors of a large manufacturing company. The company has recently invested huge amount in Property, Plant and Equipment (PPE) for its new unit. They have added many incidental expenses to the cost of PPE. The junior audit team members are not sure about which costs should be excluded from the cost of PPE. Give examples of costs that should not form part of costs of PPE. ***(4 Marks)***

(c) A professional accountant is expected to comply with the fundamental principles of professional ethics at all times. Explain which fundamental principle governing professional ethics is violated in the following situations?

(1) A chartered accountant in practice accepted the appointment as an auditor of a firm in which his sister was a partner.

(2) *A chartered accountant in practice was approached by his friend to seek some insider information about a company, which was a client of the chartered accountant. He could not refuse his friend's request.*

(3) *A chartered accountant in practice failed to inform his client about the change in laws applicable to his client.* ***(3 Marks)***

(d) *You have been appointed as the statutory auditor of a limited company. The company is registered as a Nidhi company. What are the reporting requirements of a Nidhi company under the Companies Auditor's Report Order, 2020?* ***(3 Marks)***

Answer

(a) Shares issued at a discount: According to Section 53 of the Companies Act, 2013,

(1) a company shall not issue shares at a discount, except in the case of an issue of sweat equity shares given under Section 54 of the Companies Act, 2013.

(2) any share issued by a company at a discounted price shall be void.

Notwithstanding anything contained in above sub-sections (1) and (2), a company may issue shares at a discount to its creditors when its debt is converted into shares in pursuance of any statutory resolution plan or debt restructuring scheme in accordance with any guidelines or directions or regulations specified by the Reserve Bank of India under the Reserve Bank of India Act, 1934 or the Banking (Regulation) Act, 1949.

(3) Where any company fails to comply with the provisions of this section, such company and every officer who is in default shall be liable to a penalty which may extend to an amount equal to the amount raised through the issue of shares at a discount or five lakh rupees, whichever is less, and the company shall also be liable to refund all monies received with interest at the rate of twelve per cent. per annum from the date of issue of such shares to the persons to whom such shares have been issued.

(b) Examples of costs that are not costs of an item of property, plant and equipment are:

(i) costs of opening a new facility or business, such as, inauguration costs;

(ii) costs of introducing a new product or service (including costs of advertising and promotional activities);

(iii) costs of conducting business in a new location or with a new class of customer (including costs of staff training); and

(iv) administration and other general overhead costs.

(c) Fundamental Principles:

(1) **Objectivity:** The principle of objectivity requires that a professional accountant shall not undertake a professional activity if a circumstance or relationship unduly influences the accountant's professional judgment regarding that activity. Objectivity principle will be violated in the given situation where a chartered accountant in practice accepted the appointment as an auditor of a firm in which his sister was a partner.

(2) **Confidentiality:** Confidentiality principle requires a professional accountant to respect the confidentiality of information acquired as a result of professional or business relationships. Confidentiality principle will be violated in the given situation where a chartered accountant in practice could not refuse his friends requested to seek some insider information about a client company of the chartered accountant.

(3) **Professional Competence and Due care:** A professional accountant shall comply with the principle of professional competence and due care, which requires an accountant to attain and maintain professional knowledge and skill at the level required to ensure that a client or employing organization receives competent professional service, based on current technical and professional standards and relevant legislation; and act diligently and in accordance with applicable technical and professional standards. Professional Competence and Due Care principle will be violated in the situation where a chartered accountant in practice failed to inform his client about the change in laws applicable to his client.

(d) Reporting requirements of a Nidhi Company under the CARO 2020: The auditor is required to report under clause (xii) of Paragraph 3 of CARO 2020:

(a) whether the Nidhi Company has complied with the Net Owned Funds to Deposits in the ratio of 1:20 to meet out the liability;

(b) whether the Nidhi Company is maintaining ten per cent. unencumbered term deposits as specified in the Nidhi Rules, 2014 to meet out the liability;

(c) whether there has been any default in payment of interest on deposits or repayment thereof for any period and if so, the details thereof.

Question 6

(a) CA M is the engagement partner of the firm M/s Y2Z LLP and he is auditing the financial statements of a listed entity ABC Ltd. The audit firm has determined that an engagement quality control review is required for this assignment. Discuss the responsibilities of CA M as an engagement partner for engagement quality control review as per SA-220. ***(4 Marks)***

OR

(a) Sanskar Foundation is a Non-Governmental Organisation (NGO) for orphan children. They have received voluntary contribution of ₹ 50 lacs from the promoters, specifying that ₹ 20 lacs are towards the Corpus contribution and ₹ 30 lacs are towards Revolving fund. Explain the terms "Corpus contribution" and "Revolving fund". ***(4 Marks)***

(b) MNB bank advanced certain loans guaranteed by government. State the prudential norms for asset classification and income recognition of such loans. ***(4 Marks)***

(c) Mr. D an auditor, while auditing ACE Ltd., identified certain misstatements in relation to particular class of transactions and account balances. He had communicated same to those charged with governance and also taken written representation for the same. State the audit documentation required by the auditor regarding misstatements identified during the audit.

(3 Marks)

(d) *JK Ltd. has opened a new manufacturing unit and for that they want plant & machinery. Since the capital outflow will be huge, they are considering of taking it on lease. They have approached several parties and have shortlisted one of them who is ready to give the plant on lease for 11 years, which is approximately the estimated economic life of the asset. As per the agreement, JK Ltd. will bear the insurance and maintenance expenses of the asset. Which kind of lease agreement have JK Ltd. entered into and what is the ownership status, the accounting treatment and the tax benefits of the same?*

(3 Marks)

Answer

(a) Engagement Performance: As per SA 220, for audits of financial statements of listed entities, and those other audit engagements, if any, for which the firm has determined that an engagement quality control review is required, the engagement partner shall:

(i) Determine that an engagement quality control reviewer has been appointed.

(ii) Discuss significant matters arising during the audit engagement, including those identified during the engagement quality control review, with the engagement quality control reviewer.

(iii) Not date the auditor's report until the completion of the engagement quality control review.

(iv) If differences of opinion arise within the engagement team, with those consulted or, where applicable, between the engagement partner and the engagement quality control reviewer, the engagement team shall follow the firm's policies and procedures for dealing with and resolving differences of opinion.

or

(a) A contribution made towards the capital or the corpus of an NGO is known as corpus contribution. The donors are generally required to specify whether the donation/grant given by him shall form part of the corpus of the NGO. Such contributions are generally given with reference to the total funds required by an NGO.

The objective of a contribution or grant towards a Revolving Fund is to rotate the amount by giving temporary loans from the fund to other NGO or beneficiaries for their projects and then recover the loan so as to give temporary loans again and so on. However, any interest earned from the beneficiary on such temporary loans from the revolving fund could be either added back to the fund or credited to the Income and Expenditure Account depending on restrictions laid down by the authority providing the contribution (for the revolving fund) or by the rules and regulations laid down by the concerned NGO in this regard.

(b) **Government Guaranteed Advances (In case of accounts overdue for more than 90 days):** Central Government. Guaranteed Advances, where the guarantee is not invoked/ repudiated would be classified as Standard Assets, but regarded as NPA for Income Recognition purpose.

The situation would be different if the advance is guaranteed by State Government, where advance is to be considered NPA if it remains overdue for more than 90 days for both Provisioning and Income recognition purposes.

Alternative Solution:

Government Guaranteed Advances (In case of accounts overdue for not more than 90 days):

Asset Classification: In case of advances guaranteed by both Central Government and State Government, they would be classified as Standard Advances in the following manner:

Classification of Advances	Particulars
Standard Regular	Accounts not overdue
Special Mention Accounts:	
1. SMA 0	Accounts showing stress signals
2. SMA 1	Accounts overdue between 31 to 60 days
3. SMA 2	Accounts overdue between 61 to 90 days

Income Recognition

Income would be recognised for all the accounts which are not overdue for more than 90 days, on accrual basis, in case of advances guaranteed by both Central Government and State Government.

(c) Documentation regarding misstatements identified during audit: The audit documentation shall include:

(i) The amount below which misstatements would be regarded as clearly trivial;

(ii) All misstatements accumulated during the audit and whether they have been corrected; and

(iii) The auditor's conclusion as to whether uncorrected misstatements are material, individually or in aggregate, and the basis for that conclusion.

(d) In the given situation, JK Ltd. has opened a new manufacturing unit and for that they want plant & machinery. They have taken the plant on lease for 11 years, which is approximately the estimated economic life of the asset. As per the agreement, JK Ltd. will bear the insurance and maintenance expenses of the asset.

Same will be considered as Finance Lease as per AS-19 since the lease term is for a major part of the economic life of the asset even if title is not transferred.

Status of Ownership: Ownership transfer option at the end of the lease period is with the lessee. Title may or may not be eventually transferred.

Accounting treatment: Finance lease is treated like loan arrangement. Hence, the asset ownership is considered of that of the lessee and thus appears on the balance sheet of the lessee.

Tax benefit: Lessee can claim both interest and depreciation expense as financial lease is treated like a loan.

PAPER – 6: FINANCIAL MANAGEMENT AND STRATEGIC MANAGEMENT

SECTION A: FINANCIAL MANAGEMENT

Question No. ***1*** *is compulsory.*

Attempt any ***two*** *questions out of the remaining* ***three*** *questions.*

In case, any candidate answers extra question(s)/ sub-question(s) over and above the required number, then only the requisite number of questions first answered in the answer book shall be valued and subsequent extra question(s) answered shall be ignored.

Working notes should form part of the answer.

Question 1

(a) Theme Ltd provides you the following information:

12.5 % Debt	*₹ 45,00,000*
Debt to Equity ratio	*1.5 : 1*
Return on Shareholder's fund	*54%*
Operating Ratio	*85%*
Ratio of operating expenses to Cost of Goods sold	*2 : 6*
Tax rate	*25%*
Fixed Assets	*₹ 39,00,000*
Current Ratio	*1.8 : 1*

You are required to calculate:

(i) Interest Coverage Ratio

(ii) Gross Profit Ratio

(iii) Current Assets

(b) *Alpha Limited has provided following information:*

Equity Share Capital	*25,000 Shares @ ₹ 100 per Share*
15% Debentures	*10,000 Debentures@ ₹ 750/- per Debenture*
Sales	*50 Lakhs units@ ₹ 20 per unit*
Variable Cost	*₹ 12.50 per unit*
Fixed Costs	*₹ 175.00 Lakhs*

Due to recent policy changes and entry of foreign competitors in the sector, Alpha Limited expects the sales may decline by 15-20%, However, selling price and other costs will remain the same. Corporate Taxes will continue@20%.

You are required to calculate the decrease in Earnings per share, Degree of Operating Leverage and Financial Leverage separately if sales are declined by (i) 15%; and (ii) 20%;

(c) *Following is the sales information in respect of Bright Ltd:*

Annual Sales (90 % on credit)	*₹ 7,50,00,000*
Credit period	*45 days*
Average Collection period	*70 days*
Bad debts	*0.75%*
Credit administration cost (out of which 2/5th is avoidable)	*₹ 18,60,000*

A factor firm has offered to manage the company's debtors on a non-recourse basis at a service charge of 2%. Factor agrees to grant advance against debtors at in interest rate of 14% after withholding 20% as reserve. Payment period guaranteed by factor is 45 days. The cost of capital of the company is 12.5%. One time redundancy payment of ₹ 50,000 is required to be made to factor.

Calculate the effective cost of factoring to the company. (Assume 360 days in a year)

Answer

(a) Working Notes:

Debt = ₹ 45,00,000

Interest = ₹ 45,00,000 x 12.5%= 5,62,500

Debt to Equity = 1.5:1 = $\frac{\text{Total Debt}}{\text{Shareholders' Equity}}$

Equity = ₹ 30,00,000

Return of Shareholder's funds = 54% = $\frac{\text{Net Profit after taxes}}{\text{Equity shareholders' fund}} \times 100$

Profit after tax (PAT) = 54% x Equity = ₹16,20,000

Profit before tax (PBT)(1-25%) = Profit after tax

= ₹16,20,000/75% = ₹21,60,000

Earning before interest and tax (EBIT) = PBT + Interest

= ₹21,60,000 + ₹ 5,62,500

= ₹27,22,500

(i) Interest Coverage Ratio = EBIT/Interest

= ₹27,22,500/₹5,62,500

= 4.84 Times

(ii) Operating Profit Ratio = 1 - Operating Ratio

= 1 – 0.85 = 0.15 or 15%

0.15 = $\frac{\text{Operating Profit}}{\text{Sales}} \times 100$

Sales = EBIT or Operating Profit /0.15

= ₹ 27,22,500 / 0.15

= ₹ 1,81,50,000

Operating ratio = $\frac{\text{Operating expenses}}{\text{Cost of goods sold (COGS)}}$ = 2 : 6 = 1 : 3

Operating expenses = 1/3COGS

Operating cost = Sales – Operating profit

= ₹ 1,81,50,000 - ₹ 27,22,500

= ₹ 1,54,27,500

₹ 1,54,27,500	= COGS + Operating expenses
₹ 1,54,27,500	= COGS + 1/3COGS
COGS	= ₹ 1,15,70,625
Gross profit	= Sales – COGS
	= 1,81,50,000 – 1,15,70,625
	= ₹ 65,79,375
Gross Profit ratio	$= \dfrac{\text{Gross Profit}}{\text{Sales}} \times 100$
	= 65,79,375/1,81,50,000
	= 0.3625 or 36.25%

Gross profit and sales can be calculated in alternative way also. However, there will be no change in GP ratio i.e 36.25%

(iii) Current Ratio $= \dfrac{\text{Current Assets}}{\text{Current Liabilities}}$

= 1.8

Current Assets	= 1.8 Current Liabilities
Total of Balance sheet liability	= Equity + Debt + Current Liabilities
	=30,00,000+45,00,000+CL ....(2)
Total Balance sheet asset	= Fixed Assets + Current Assets
	= 39 lakhs + CA= 39 + 1.8CL.......(3)

Equating 2 and 3,

75,00,000 + CL	= 39,00,000 + 1.8CL
0.8CL	= 36,00,000
CL	=₹ 45,00,000
Current Assets	= 1.8 CL **=** 1.8 x 45 lakhs= ₹ **81,00,000**

(b) Income Statement with required calculations

Particulars	**(₹)**	**(₹)**	**(₹)**
	Existing	**Sales declined by 15%**	**Sales declined by 20%**
Sales in units	50,00,000	42,50,000	40,00,000
Sales price per unit	20	20	20
Variable Cost per unit	(12.50)	(12.50)	(12.50)
Contribution per unit	7.5	7.5	7.5
Contribution	3,75,00,000	3,18,75,000	3,00,00,000
Fixed expenses	(1,75,00,000)	(1,75,00,000)	(1,75,00,000)
EBIT	2,00,00,000	1,43,75,000	1,25,00,000
Debenture Interest	(11,25,000)	(11,25,000)	(11,25,000)
EBT	1,88,75,000	1,32,50,000	1,13,75,000
Tax @ 20%	(37,75,000)	(26,50,000)	(22,75,000)
Profit after tax (PAT)	1,51,00,000	1,06,00,000	91,00,000
No. of shares	25,000	25,000	25,000
Earnings per share (EPS) $= \frac{\text{PAT}}{\text{No. of shares}}$	$\frac{₹1,51,00,000}{25,000}$ = ₹ 604	$\frac{₹1,06,00,000}{25,000}$ = ₹424	$\frac{₹91,00,000}{25,000}$ = ₹364
(i) Decrease in EPS		= ₹180 **Or** % Decrease in EPS $= \frac{180}{604} \times 100$ **= 29.80%**	= ₹240 **Or** % Decrease in EPS $= \frac{240}{604} \times 100$ **= 39.73%**
(ii) Operating leverage $= \frac{\text{Contribution}}{\text{EBIT}}$ Or		$= \frac{₹3,18,75,000}{₹1,43,75,000}$ **= 2.22** **Or** 28.125/15 =	$= \frac{₹3,00,00,000}{₹1,25,00,000}$ **= 2.40** **Or** 37.50/20 **1.875**

Degree of Operating leverage $= \frac{\text{Percentage change in EBIT}}{\text{Percentage change in sales}}$		**1.875**	
(iii) Financial Leverage $= \frac{\text{EBIT}}{\text{EBT}}$ Or Degree of Financial Leverage $= \frac{\text{Percentage change in EPS}}{\text{Percentage change in EBIT}}$		$= \frac{₹1,43,75,000}{₹1,32,50,000}$ **= 1.08** **Or** 29.80/28.125 **= 1.06**	$= \frac{₹1,25,00,000}{₹1,13,75,000}$ **= 1.10** **Or** 39.735/37.50 **= 1.06**

(c) Evaluation of Factoring Proposal

	Particulars	**₹**	**₹**
A.	**Savings due to factoring**		
	Bad Debts saved	0.75% x 7.5 crores x 90%	₹ 5,06,250
	Administration cost saved	18.6 lakhs x 2/5	₹ 7,44,000
	Interest saved due to reduction in average collection period	7.5 crores x 90% x (70-45)/ 360 x 12.5%	₹ 5,85,937.5
	Total		**₹ 18,36,187.5**
B.	**Costs of factoring:**		
	Service charge	7.5 crores x 90% x 2%	₹ 13,50,000
	Interest cost	₹ 1,15,171.875 x 360/45	₹ 9,21,375
	Redundancy Payment		₹ 50,000
	Total		**₹ 23.21,375**
C.	**Net Annual cost to the Firm: (A-B)**		**₹ 4,85,187.5**
	Rate of effective cost of factoring	₹ 4,85,187.5/ ₹ 64,66,078.125 x 100	**7.504%**

Advice: Since the rate of effective cost of factoring is less than the existing cost of capital, therefore, the proposal is acceptable.

Credit Sales = ₹ 7.5 crores x 90%	= ₹ 6,75,00,000
Average level of receivables = ₹ 6.75 crores x 45/360	= ₹ 84,37,500
Service charge = 2% of ₹ 84,37,500	₹ 1,68,750
Reserve = 20% of ₹ 84,37,500	₹ 16,87,500
Total (i)	₹ 18,56,250
Thus, the amount available for advance is	
Average level of receivables	₹ 84,37,500
Less: Total (i) from above	₹ 18,56,250
(ii)	₹ 65,81,250
Less: Interest @ 14% p.a. for 45 days	₹ 1,15,171.875
Net Amount of Advance available.	₹ 64,66,078.125

Note: Alternatively, if redundancy cost is taken as irrelevant for decision making, then Net Annual cost to the Firm will be ₹ 4,35,187.5 and Rate of effective cost of factoring will be ₹ 4,35,187.5/₹ 64,66,078.125 x 100 = 6.730%

If average level of receivables is considered for 70 days then the calculation can be done in following way:

Evaluation of Factoring Proposal

Credit Sales = ₹ 7.5 crores X 90%	= ₹ 6,75,00,000
Average level of receivables = ₹ 6.75 crores x 70/360	= ₹ 1,31,25,000
Service charge = 2% of ₹ 1,31,25,000	₹ 2,62,500
Reserve = 20% of ₹ 1,31,25,000	₹ 26,25,000
Total (i)	₹ 28,87,500
Thus, the amount available for advance is	
Average level of receivables	₹ 1,31,25,000
Less: Total (i) from above	₹ 28,87,500

(ii)	₹ 1,02,37,500
Less: Interest @ 14% p.a. for 45 days	₹ 1,79,156.25
Net Amount of Advance available.	₹ 1,00,58,343.75

Note 1: Accordingly, interest cost will be ₹ 14,33,250 cost of factoring will be ₹ 28,33,250. Therefore, Rate of effective cost of factoring is 9.913%

Note 2: Alternatively, if redundancy cost is taken as irrelevant for decision making, then Net Annual cost to the Firm will be ₹ 9,47,062.5 and Rate of effective cost of factoring will be ₹ 9,47,062.5/ ₹ 1,00,58,343.75 x 100 = 9.416%.

Advice: Since the rate of effective cost of factoring is less than the existing cost of capital, therefore, the proposal is acceptable.

Question 2

(a) The capital structure of Shine Ltd. as on 31.03.2024 is as under:

Particulars	***Amount (₹)***
Equity share capital off 10 each	*45,00,000*
15% Preference share capital of f 100 each	*36,00,000*
Retained earnings	*32,00,000*
13% Convertible Debenture off 100 each	*67,00,000*
11% Term Loan	*20,00,000*
Total	*2,00,00,000*

Additional information:

(A) Company issued 13% Convertible Debentures of ₹ 100 each on 01.04.2023 with a maturity period of 6 years. At maturity, the debenture holders will have an option to convert the debentures into equity shares of the company in the ratio of 1 : 4 (4 shares for each debenture). The market price of the equity share is ₹ 25 each as on 31.03.2024 and the growth rate of the share is 6% per annum.

(B) Preference stock, redeemable after eight years, is currently selling at ₹ 150 per share.

(C) *The prevailing default-risk free interest rate on 10-year GOI treasury bonds is 6%. The average market risk premium is 8% and the Beta (β) of the company is 1.54.*

Corporate tax rate is 25% and rate of personal income tax is 20%.

You are required to calculate the cost of:

(i) *Equity Share Capital*

(ii) *Preference Share Capital*

(iii) *Convertible Debenture*

(iv) *Retained Earnings*

(v) *Term Loan*

(b) *Following data is available in respect of Levered and Unlevered companies having same business risk:*

Capital employed = ₹ 2,00,000, EBIT = ₹ 25,000 and Ke = 12.5%

Sources	***Levered Company (₹)***	***Unlevered Company (₹)***
Debt (@8%)	*75,000*	*Nil*
Equity	*1,25,000*	*2,00,000*

An investor is holding 12% shares in levered company. Calculate the increase in annual earnings of investor if he switches over his holding from Levered to Unlevered company.

Answer

(a) (i) Cost of Equity Share capital

As per CAPM Model $K_e = R_f + ß (R_m - R_f)$

Rf = 6%

B = 1.54

Rm-Rf = 8%

Ke = 6% + 1.54(8%)

Ke = **18.32%**

(ii) Cost of Preference Share capital

n	=	8
Net Proceeds (NP)	=	150
Redemption Value (RV)	=	100
Preference Dividend (PD)	=	15

$$K_p = \frac{PD + \frac{(RV - NP)}{n}}{\frac{(RV + NP)}{2}}$$

$$K_p = \frac{15 + \left(\frac{100 - 150}{8}\right)}{\left(\frac{100 + 150}{2}\right)}$$

K_p = **7%**

Alternatively, if we take NP as 100 and RV as 100, then solution can be done in the following way:

Cost of Preference Share capital

n	=	8
Net Proceeds (NP)	=	100
Redemption Value (RV)	=	150
Preference Dividend (PD)	=	15

$$K_p = \frac{PD + \frac{(RV - NP)}{n}}{\frac{(RV + NP)}{2}}$$

$$K_p = \frac{15 + \left(\frac{150 - 100}{8}\right)}{\left(\frac{150 + 100}{2}\right)}$$

K_p = **17%**

(iii) Cost of convertible debenture

Cash Redemption Value (RV) = 100

Share Redemption Value (RV):

Value of share after 5 years = 25 x $(1.06)^5$ = 33.46

Share Redemption Value (RV) = 33.46 X 4=133.82

Therefore, investor will choose share redemption.

Redemption Value (RV) = 133.82

Net Proceeds (NP) = 100

n = 5

Interest (I) = 13

Tax (t) = 25%

$$K_d = \frac{I(1-t)+\frac{(RV-NP)}{n}}{\frac{(RV+NP)}{2}}$$

$$= \frac{13(1-0.25)+\frac{(133.82-100)}{5}}{\frac{(133.82+100)}{2}}$$

K_d = **14.13%**

(iv) Cost of Retained Earnings

$K_r = K_e (1-t_p)$ = 18.32 % x (1-0.20) = **14.66%**

We can also take cost of equity as cost of retained earnings,

Accordingly, $K_r = K_e$ = **18.32%**

(v) Cost of Term Loan

= 11% x (1-0.25) = **8.25%**

(b) 1. Valuation of firms

Particulars	**Levered Firm (₹)**	**Unlevered Firm (₹)**
EBIT	25,000	25,000
Less: Interest on debt (8% × ₹ 75,000)	6,000	Nil
Earnings available to Equity shareholders	19,000	25,000
K_e	12.5%	12.5%
Value of Equity (S) (Earnings available to Equity shareholders/ K_e)	1,52,000	2,00,000
Debt (D)	75,000	Nil
Value of Firm (V) = S + D	2,27,000	2,00,000

Value of Levered company is more than that of unlevered company. Therefore, investor will sell his shares in levered company and buy shares in unlevered company. To maintain the level of risk he will borrow proportionate amount and invest that amount also in shares of unlevered company.

2. Investment & Borrowings

	₹
Sell shares in Levered company (₹ 1,52,000 x 12%)	18,240
Borrow money (₹ 75,000 x 12%)	9,000
Buy shares in Unlevered company	27,240

3. Change in Return

	₹
Income from shares in Unlevered company	
(₹ 27,240 x 12.5%)	3,405
Less: Interest on loan (₹ 9,000 x 8%)	720
Net Income from unlevered firm	2,685
Less: Income from Levered firm (₹ 18,240 x 12.5%)	2,280
Incremental Income due to arbitrage	405

Solution can also be done in the following way:

Valuation of firms

Particulars	Levered Firm (₹)	Unlevered Firm (₹)
EBIT	25,000	25,000
Less: Interest on debt (8% × ₹ 75,000)	6,000	Nil
Earnings available to Equity shareholders	19,000	25,000
K_e	12.5%	12.5%
Value of Equity (S) (Earnings available to Equity shareholders/ K_e)	1,52,000	2,00,000
Debt (D)	75,000	Nil
Value of Firm (V) = S + D	2,27,000	2,00,000

Value of Levered company is more than that of unlevered company. Therefore, investor will sell his shares in levered company and buy shares in unlevered company.

Arbitrage Process:

If investor have 12% shares of levered company, value of investment in equity shares is 12% of ₹ 1,52,000 i.e. ₹ 18,240 and return will be 12% of ₹19,000 = ₹ 2,280.

Alternate Strategy will be:

Sell 12% shares of levered firm for ₹ 18,240 and borrow 12% of levered firm's debt i.e. ₹ 9,000 (12% of ₹ 75,000) and invest the money i.e. 12% in unlevered firm's stock:

Total resources /Money investor have = ₹ 18,240 + ₹ 9,000 = ₹ 27,240 and investor invest 12% of ₹ 2,00,000 = ₹ 24,000

Surplus cash available with investor is = ₹ 27,240 – ₹ 24,000 = ₹ 3,240

Investor return = 12% EBIT of unlevered firm – Interest to be paid on borrowed funds

i.e. = 12% of ₹ 25,000 – 8% of ₹ 9,000 = ₹ 3,000 – ₹ 720 = ₹ 2,280

Now, return remains the same i.e. ₹ 2,280 which investor is getting from levered company before investing in unlevered company but still have ₹ 3,240 excess money available with investor. Hence, investor is better off by doing arbitrage.

Question 3

(a) *HCP Ltd. is a leading manufacturer of railway parts for passenger coaches and freight wagons. Due to high wastage of material and quality issues in production, the General Manager of the company is considering the replacement of machine A with a new CNC machine B. Machine A has a book value of ₹ 4,80,000 and remaining economic life is 6 years. It could be sold now at ₹ 1,80,000 and zero salvage value at the end of sixth year. The purchase price of Machine B is ₹ 24,00,000 with economic life of 6 years. It will require ₹ 1,40,000 for installation and ₹ 60,000 for testing. Subsidy of 15% on the purchase price of the machine B will be received from Government at the end of 1st year. Salvage value at the end of sixth year will be ₹ 3,20,000.*

The General manager estimates that the annual savings due to installation of machine B include a reduction of three skilled workers with annual salaries of ₹ 1,68,000 each, ₹ 4,80,000 from reduced wastage of materials and defectives and ₹ 3,50,000 from loss in sales due to delay in execution of purchase orders. Operation of Machine B will require the services of a trained technician with annual salary of t 3,90,000 and annual operation and maintenance cost will increase by ₹ 1,54,000. The company's tax rate is 30% and it's required rate of return is 14%. The company follows straight line method of depreciation. Ignore tax savings on loss due to sale of existing machine.

The present value factors at 14% are:

Years	***0***	***1***	***2***	***3***	***4***	***5***	***6***
PV Factor	*1*	*0.877*	*0.769*	*0.675*	*0.592*	*0.519*	*0.456*

Required:

(i) *Calculate the Net Present Value and Profitability Index and advise the company for replacement decision.*

(ii) *Also calculate the discounted pay-back period.*

(b) *Vista Limited's retained earnings per share for the year ending 31.03.2023 being 40% is ₹3.60 per share. Company is foreseeing a growth rate of 10% per annum in the next two years. After that the growth rate is expected to stabilize at 8% per annum. Company will maintain its existing pay-out ratio. If the investor's required rate of return is 15%, Calculate the intrinsic value per share as of date using Dividend Discount model.*

Answer

(a) Calculation of Net Initial Cash Outflows:

Particulars	**₹**
Cost of new machine	24,00,000
Less: Sale proceeds of existing machine	(1,80,000)
Add: Installation	1,40,000
Add: Testing	60,000
Less: Subsidy from government (15% of 24,00,000) x 0.877	**(3,15,720)**
Net initial cash outflows	**21,04,280**

Calculation of Incremental Depreciation

Particulars	**₹**
Depreciation on existing machine (4,80,000/6) **(i)**	80,000
Depreciation base of New Machine	
Cost of new machine	24,00,000
Add: Installation	1,40,000
Add: Testing	60,000
Less: Subsidy from government	(3,60,000)
Less: Salvage value at the end of 6^{th} year	(3,20,000)
Depreciation base of New Machine	**19,20,000**
Depreciation on New Machine (19,20,000/6) **(ii)**	3,20,000
Incremental depreciation [(ii) – (i)]	2,40,000

Computation of Annual Operating Cash flow after tax (CFAT)

Particulars	Amount (₹)	Amount (₹)
Savings in cost		
Cost of 3 skilled workers (₹1,68,000 x 3)	5,04,000	
Reduced wastage of material	4,80,000	
Saving in loss of sales	3,50,000	
Total		13,34,000
Less: Increase in cost		
Salary to trained technician	3,90,000	
Increase in annual operation and maintenance cost	1,54,000	
Total		(5,44,000)
Incremental Saving before tax and depreciation		7,90,000
Less: Incremental Depreciation		(2,40,000)
Incremental PBT		5,50,000
Less: Tax @30%		(1,65,000)
PAT		3,85,000
Add: Depreciation		2,40,000
Incremental CFAT		6,25,000

Calculation of NPV

Particulars	Year	Net Cashflow (₹)	PVF @ 14%	PV (₹)
Net initial cash outflows	0	(24,20,000)	1	(21,04,280)
Incremental CFAT	1 to 6	6,25,000	3.888	24,30,000
Salvage Value of New Machine	6	3,20,000	0.456	1,45,920

PV of inflows				25,75,920
Net Present Value				**4,71,640**

$$\text{Profitability Index} = \frac{\text{Sum of discounted cash inflows}}{\text{Initial cash outlay or Total discounted cash outflow (as the case may)}}$$

= 25,75,920/21,04,280= **1.224**

Advise: Since the NPV is positive and PI is greater than 1, the company should replace the machine

Computation of Discounted Payback Period

Year	Cashflow	PVF @ 14%	PV of CFs (₹)	Cumulative PV (₹)
1	6,25,000	0.877	5,48,125	5,48,125
2	6,25,000	0.769	4,80,625	10,28,750
3	6,25,000	0.675	4,21,875	14,50,625
4	6,25,000	0.592	3,70,000	18,20,625
5	6,25,000	0.519	3,24,375	21,45,000
6	9,45,000	0.456	4,30,920	25,75,920

Discounted Payback Period

$$= 4 + \frac{21{,}04{,}280 - 18{,}20{,}625}{3{,}24{,}375}$$

= 4.87 years

If we take subsidy in cash inflow of 1st year, then solution can also be done in the following way:

Calculation of Net Initial Cash Outflows:

Particulars	₹
Cost of new machine	24,00,000
Less: Sale proceeds of existing machine	(1,80,000)
Add: Installation	1,40,000
Add: Testing	60,000
Net initial cash outflows	**24,20,000**

Note: However, Incremental Depreciation and CFAT will remain same.

Calculation of NPV

Particulars	**Year**	**Net Cashflow (₹)**	**PVF @ 14%**	**PV (₹)**
Net initial cash outflows	0	(24,20,000)	1	(24,20,000)
Subsidy	1	3,60,000	0.877	3,15,720
Incremental CFAT	1 to 6	6,25,000	3.888	24,30,000
Salvage Value of New Machine	6	3,20,000	0.456	1,45,920
PV of inflows				28,91,640
Net Present Value				**4,71,640**

$$\text{Profitability Index} = \frac{\text{Sum of discounted cash in flows}}{\text{Initial cash outlay or Total discounted cash outflow (as the case may)}}$$

= 28,91,640 /24,20,000 = **1.195**

Advise: Since the NPV is positive and PI is greater than 1, the company should replace the machine

Computation of Discounted Payback Period

Year	**Cashflow**	**PVF @ 14%**	**PV of CFs (₹)**	**Cumulative PV (₹)**
1	9,85,000	0.877	8,63,845	8,63,845
2	6,25,000	0.769	4,80,625	13,44,470
3	6,25,000	0.675	4,21,875	17,66,345
4	6,25,000	0.592	3,70,000	21,36,345
5	6,25,000	0.519	3,24,375	24,60,720
6	9,45,000	0.456	4,30,920	28,91,640

Discounted Payback Period

$$= 4 + \frac{24,20,000 - 21,36,345}{3,24,375}$$

= 4.87 years

(b) As per Dividend discount model, the price of share is calculated as follows:

Retained earning per share = ₹ 3.60

Dividend per share, $D_0 = \frac{₹\,3.60}{40\%} \times 60\% = ₹5.40$

$$P = \frac{D_1}{(1+K_e)^1} + \frac{D_2}{(1+K_e)^2} + \frac{D_3}{(K_e-g)} \times \frac{1}{(1+K_e)^2}$$

Where,

P = Price per share

K_e = Required rate of return on equity

g = Growth rate

$$P = \frac{5.4x1.1}{(1+0.15)^1} + \frac{5.94x1.1}{(1+0.15)^2} + \frac{6.534x1.08}{(0.15-0.08)} \times \frac{1}{(1+0.15)^2}$$

P= 5.17 + 4.94 + 76.23 = ₹86.33

Intrinsic value of share is ₹ 86.33

Question 4

(a) State with brief reasons whether the following statements are true or false:

(i) Maximising Market Price Per Share (MPS) as the financial objective which maximises the wealth of shareholders.

(ii) A combination of lower risk and higher return is known as risk return trade off and at this level of risk-return, profit is maximum.

(iii) Financial distress is a position when accounting profits of a firm are sufficient to meet its long-term obligations.

(iv) Angel investor is one who provides funds for start-up m exchange for an ownership/equity.

(b) ABC Ltd. is approaching the banks for financing its business activity. You are required to describe any four forms of bank credit for the consideration of the company.

(c) Discuss the relevance of Payback reciprocal in capital budgeting decisions.

OR

(c) *Explain the features of crowd funding.*

Answer

(a)

Statement	True or False	Reason
Maximising Market Price Per Share (MPS) as the financial objective which maximises the wealth of shareholders.	**True**	Maximizing MPS or Market value as the financial objective will ensure the maximizing shareholder's wealth.
A combination of lower risk and higher return is known as risk-return trade off and at this level of risk-return, profit is maximum.	**False**	There is a direct relationship between risk and profit. Higher the risk, higher is the possibility of profits. Stockholders expect greater returns from investments of higher risk and vice-versa.
Financial distress is a position when accounting profits of a firm are sufficient to meet its long-term obligations.	**False**	Financial distress is a position where Cash inflows of a firm are inadequate to meet all its current obligations.
Angel investor is one who provides funds for start-up in exchange for an ownership/equity.	**True**	Angel Financing is a form of an equity-financing where an angel investor provides capital for start-up or expansion, in exchange for an ownership/equity in the company.

(b) Some of the forms of bank credit are:

(i) Cash Credit: This facility will be given by the banker to the customers by giving certain amount of credit facility on continuous basis. The borrower will not be allowed to exceed the limits sanctioned by the bank.

(ii) Bank Overdraft: It is a short-term borrowing facility made available to the companies in case of urgent need of funds. The banks will impose limits on the amount they can lend. When the borrowed funds are no longer required they can quickly and easily be repaid. The banks issue overdrafts with a right to call them in at short notice.

(iii) Bills Discounting: The Company which sells goods on credit will normally draw a bill on the buyer who will accept it and sends it to the seller of goods. The seller, in turn discounts the bill with his banker. The banker will generally earmark the discounting bill limit.

(iv) Bills Acceptance: To obtain finance under this type of arrangement a company draws a bill of exchange on bank. The bank accepts the bill thereby promising to pay out the amount of the bill at some specified future date.

(v) Line of Credit: Line of Credit is a commitment by a bank to lend a certain amount of funds on demand specifying the maximum amount.

(vi) Letter of Credit: It is an arrangement by which the issuing bank on the instructions of a customer or on its own behalf undertakes to pay or accept or negotiate or authorizes another bank to do so against stipulated documents subject to compliance with specified terms and conditions.

(vii) Bank Guarantees: Bank guarantee is one of the facilities that the commercial banks extend on behalf of their clients in favour of third parties who will be the beneficiaries of the guarantees.

(viii) Short Term Loans: In a loan account, the entire advance is disbursed at one time either in cash or by transfer to the current account of the borrower. It is a single advance and given against securities like shares, government securities, life insurance policies and fixed deposit receipts, etc.

(ix) Clean Overdrafts: Request for clean advances are entertained only from parties which are financially sound and reputed for their integrity. The bank has to rely upon the personal security of the borrowers.

(x) Advances against goods: Goods are charged to the bank either by way of pledge or by way of hypothecation. Goods include all forms of movables which are offered to the bank as security.

(xi) Usance bills maturing at a future date or sight are discounted by the banks for approved parties. The borrower is paid the present worth and the bank collects the full amount on maturity.

(xii) Advance against documents of title to goods: A document becomes a document of title to goods when its possession is recognised by law or business custom as possession of the goods like bill of lading, dock warehouse keeper's certificate, railway receipt, etc. An advance against the pledge of such documents is an advance against the pledge of goods themselves.

(xiii) Advance against supply of bills: Advances against bills for supply of goods to government or semi-government departments against firm orders after acceptance of tender fall under this category. It is this debt that is assigned to the bank by endorsement of supply bills and executing irrevocable power of attorney in favour of the banks for receiving the amount of supply bills from the Government departments.

(c) Reciprocal of the payback would be a close approximation of the Internal Rate of Return if the life of the project is at least twice the payback period and the project generates equal amount of the annual cash inflows.

The payback reciprocal is a helpful tool for quick estimation of rate of return of a project provided its life is at least twice the payback period.

It may be calculated as follows:

Payback Reciprocal = Average annual cash flows/initial Investment

Or

Payback Reciprocal = 1 / payback period

OR

(c) Crowd funding: crowdfunding means raising money for an individual or organisation from a group of people to fund a project, typically via internet (social media and crowdfunding websites). It generally involves collecting funds from family, friends, strangers, corporates and many more in exchange of equity (known as Equity funding), loans (known as P2P lending) or nothing at all (i.e. donation). This source of funding also helps start-up to substantiate demand for their product before entering into production.

In the crowdfunding process, three parties are involved i.e. fund raiser, mediator and fund investor. The platforms (mediator) may also charge certain fees in the form of processing fee, transaction fee, etc. either as a fixed amount or a percentage or in combination of both.

SECTION – B: STRATEGIC MANAGEMENT

*Question paper comprises of **4** questions, Answer Question No. **5** which is compulsory and any **2** out of the remaining **3** questions.*

Question 5

(a) *BOYA Ltd. is a venture in the market present for a decade. Till, 2023, it was working on the values and vision of its founder while operating in limited area of operations.*

Growth opportunities exist for BOYA Ltd. Considering the changing environment, company is interested to leverage new skills in marketing, technology, product development and financial management. As a known fact, modifying one aspect might have a ripple effect on other elements. The company wants to understand various hard and soft elements interrelated with each other in the company and having a bearing on effective operational results.

As a strategist, you intend to prepare a questionnaire based on both types of elements by analyzing the organizational design. The response to the same will help in finding an answer to ensure effectiveness through the interaction of such elements.

Briefly discuss the strategic model you will use in the given situation. State the limitations of the model as well. ***(2 +3 = 5 Marks)***

(b) *Elvis Global is a famous OTT platform facing fierce competition from its competitors amid changing consumer preferences. This has made it difficult to retain customers as the existing television channels are also launching their own platforms. The company has appointed Raghav to lead the company forward as the sales & marketing manager. Raghav needs to design creative and innovative advertising campaigns to gain a competitive edge, engage the public and capture the market.*

Identify the strategic level that represents Raghav's role at Elvis Global. As a strategic advisor, highlight the various benefits of strategic management in overcoming different challenges to Raghav. ***(1 +4 = 5 Marks)***

(c) *Yash is planning to launch his new tech start-up. He is exploring different locations across the country to establish his company in the right business environment. One option is the city of Bengaluru, the silicon valley of India,* *with an engaging network of entrepreneurs, investors, advisors and mentors. Coupled with various subsidies for new ventures and tax benefits, Bengaluru might be an ideal choice for Yash to establish his company and increase the chances of success.*

Define the term Business Environment with respect to the above scenario. Explain the different ways in which the interaction of a business with its environment can be helpful in developing a successful strategy.

(1 +4 = 5 Marks)

Answer

(a) In addressing the strategic needs of BOYA Ltd., the **McKinsey 7S Model** is an effective tool to consider. This model focuses on the interaction of hard and soft elements within an organization, suggesting that modifying one aspect might have a ripple effect on the other elements to maintain an effective balance. The McKinsey 7S Model helps analyze the company's organizational design to achieve effectiveness through these interactions. The model categorizes the elements into 'hard' and 'soft' components:

The **Hard elements** are directly **controlled by the management.** The following elements are the hard elements in an organization.

- **Strategy:** the direction of the organization, a blueprint to build on a core competency and achieve competitive advantage to drive margins and lead the industry.
- **Structure:** depending on the availability of resources and the degree of centralisation or decentralization that the management desires, it choses from the available alternatives of organizational structures.
- **Systems:** the development of daily tasks, operations and teams to execute the goals and objectives in the most efficient and effective manner.

The **Soft elements** are difficult to define as they are more **governed by culture.** But these soft elements are equally important in determining an organization’s success as well as growth in the industry. The following are the soft elements in this model.

- **Shared Values:** The core values which get reflected within the organizational culture or influence the code of ethics of the management.
- **Style:** This depicts the leadership style and how it influences the strategic decisions of the organisation. It also revolves around people motivation and organizational delivery of goals.
- **Staff:** The talent pool of the organisation.
- **Skills:** The core competencies or the key skills of the employees play a vital role in defining the organizational success.

While the McKinsey 7S Model provides a structured approach to analysing organizational effectiveness, it has certain limitations:

- It ignores the importance of the external environment and depicts only the most crucial elements within the organization.
- The model does not clearly explain the concept of organizational effectiveness or performance.
- The model is considered to be more static and less flexible for decision making.
- It is generally criticized for missing out the real gaps in conceptualization and execution of strategy.

By applying the McKinsey 7S Model, BOYA Ltd. can gain a comprehensive understanding of how different elements within the organization interact and influence overall performance. The insights gathered from the questionnaire can guide strategic decisions to enhance growth and operational effectiveness.

(b) Raghav's role at Elvis Global represents the **Functional level** of strategy. As the sales and marketing manager, his responsibilities are focused on specific areas within the company, particularly on crafting and executing marketing and sales strategies that drive customer engagement and competitive positioning.

Benefits of Strategic Management for Raghav at Elvis Global

Strategic management can provide several benefits to Raghav in addressing the competitive and consumer challenges faced by Elvis Global:

- Strategic management helps Elvis Global define its goals and mission, providing clear **direction for future initiatives**. This ensures that all marketing efforts are aligned with the company's overall vision. It allows Raghav to **set realistic** and achievable **objectives** that support the company's **long-term goals**, ensuring that marketing strategies are both ambitious and attainable.

- Through strategic management, Raghav can **proactively shape the future** of Elvis Global rather than merely reacting to market changes. This allows the company to **anticipate trends and act accordingly**. A proactive approach enables Elvis Global to better manage environmental uncertainties and stay ahead of competitors, ensuring a more controlled and predictable business environment.

- Strategic management provides a robust **framework for making critical decisions** regarding marketing strategies, target markets, and resource allocation. This ensures that all major decisions are well-informed and strategically sound. It ensures **coherence and consistency in decision-making** across the organization, aligning marketing strategies with overall business objectives.

- Strategic management helps **identify and exploit new business opportunities**, allowing Raghav to craft **campaigns** that resonate **with** emerging **consumer preferences and market trends**. By recognizing and capitalizing on these opportunities, Elvis Global can differentiate itself from competitors and capture a larger market share.

- Strategic management **acts as a defence mechanism** against potential mistakes and pitfalls, helping Raghav avoid costly errors in marketing decisions and campaign execution. It provides a structured approach to identifying and mitigating risks, ensuring **more informed and safer decision-making.**

- Strategic management **enhances the longevity and sustainability** of Elvis Global by ensuring that marketing strategies are adaptable and resilient in a dynamic market. It helps the company **establish a clear and deliberate position** within the industry, ensuring sustained relevance and competitiveness.

- Strategic management enables the **development of core competencies** and competitive advantages that are crucial for the company's success. This includes building strong brand identity, innovative content offerings, and superior customer service. By focusing on these strengths, Raghav can ensure that **Elvis Global achieves sustainable growth** and **maintains its competitive edge** in the OTT market.

  Through strategic management, Raghav can effectively navigate the competitive challenges faced by Elvis Global. By providing clear direction, encouragement a proactive approach, guiding critical decisions, identifying new opportunities, defending against pitfalls, ensuring longevity, and developing core competencies, strategic management enables the company to achieve and sustain a competitive edge. This comprehensive approach will allow Raghav to design innovative advertising campaigns that engage the public, capture the market, and drive the company forward.

(c) Business Environment refers to all **external factors**, influences, or situations **that affect business decisions**, plans, and operations. In Yash's case, these factors include the dynamic and evolving conditions in Bengaluru, which impact the strategic decisions for his tech start-up.

Benefits of Interaction with the Business Environment

- **Determine Opportunities and Threats:** Interaction with the environment helps Yash **identify new consumer needs, emerging trends, and potential market opportunities.** This insight can guide the development of innovative products and services that meet market demands. Understanding changes in laws, social behaviors, and competitor actions enables Yash to anticipate and mitigate potential threats, ensuring the start-up remains resilient and adaptive.
- **Give Direction for Growth:** By analyzing the external environment, Yash can pinpoint areas for expansion and growth. Recognizing market trends and technological advancements allows him to **strategize effectively, ensuring the start-up scales successfully.**

Awareness of the changes around the business environment facilitates better planning and strategic decisions, aligning the start-up's goals with the market dynamics.

- **Continuous Learning:** Continuous interaction with the environment motivates Yash and his team to update their knowledge, understanding, and skills. Staying **informed about industry trends and advancements ensures the start-up remains competitive.** This ongoing learning process enhances the start-up's ability to adapt to changes, promoting innovation and responsiveness to market shifts.
- **Image Building:** Understanding and responding to environmental needs help the start-up build a positive image. For instance, adopting sustainable practices or **contributing to local initiatives can enhance the company's reputation.** Demonstrating sensitivity to the business environment shows that the start-up is responsible and community-focused, attracting customers and partners who value corporate social responsibility.
- **Meeting Competition:** Interaction with the environment allows Yash to analyze competitors' strategies and adapt accordingly. **Understanding competitors' strengths and weaknesses helps in crafting strategies that provide a competitive edge**. By leveraging insights from the environment, the start-up can position itself uniquely in the market, differentiating its offerings from those of competitors.

Question 6

(a) *'Innovation leads to unnecessary expenses that do not give as many returns.' Do you agree with the statement? Give reasons in support of your answer.* ***(1 + 4 = 5 Marks)***

(b) *Explain how organizations can effectively manage strategic uncertainties in a rapidly changing business environment.* ***(5 Marks)***

Answer

(a) The statement "Innovation leads to unnecessary expenses that do not give as many returns" is often debated, but evidence strongly suggests that innovation is crucial for long-term business growth and success. I **disagree** with the statement for several reasons:

Innovation offers the following for a business to grow long term:

Helps to solve complex problems: A business strives to find opportunities in existing problems of the society, and it does so through planned innovation in areas of expertise. This guided innovation helps solve complex problems by developing customer centric sustainable solutions.

Increases productivity: Innovation leads to simplification and in most cases automation of existing tasks. Companies are willing to spend millions on increasing their productivity. Innovation, by automating repetitive tasks and simplifying the long chain of processes, adds to productivity of teams and thereby the organization as a whole.

Gives competitive advantage: Being ahead of competition is a need and businesses spend majority of their strategic time building solutions to achieve this advantage. The faster a business innovates, the farther it goes from its competitors reach. Innovative products need less marketing as they aim to provide added satisfaction to consumers, thus, creating a competitive advantage. Innovation not only helps retain its existing customers but helps acquire new ones with ease too.

(b) In managing strategic uncertainties in a rapidly changing business environment, organizations need to adopt proactive strategies to navigate unpredictability effectively. Here are several key approaches:

Flexibility: Organizations should build flexibility into their strategies to enable quick adaptation to change in the environment.

Diversification: Diversifying the organization's product portfolio, markets, and customer base can help reduce the impact of strategic uncertainty.

Monitoring and Scenario Planning: Regularly monitoring key indicators of change and conducting scenario planning exercises can help organizations anticipate and prepare for different future scenarios.

Building Resilience: Investing in building internal resilience is essential for weathering uncertainty. This includes strengthening operational processes, increasing financial flexibility, and improving risk management capabilities.

Collaboration and Partnerships: Collaborating with other organizations, suppliers, customers, and partners can provide access to additional resources, expertise, and market opportunities. Strategic partnerships enable organizations to pool resources, share risk, and leverage each other's strengths to navigate uncertainty more effectively.

Question 7

(a) What are the key characteristics of business products that contribute to the overall competitiveness and dynamics of the market? ***(5 Marks)***

(b) 'A company's mission statement is typically focused on its present business scope.' Explain the significance of a mission statement. ***(5 Marks)***

Answer

(a) Businesses sell products. A product can be either a good or a service. It might be physical good or a service, an experience.

Following are the key characteristics of business products:

1. **Products are either tangible or intangible.** A tangible product can be handled, seen, and physically felt, such as a car, book, pen, table, mobile handset and so on. Alternatively, an intangible product is not a physical good, such as telecom services, banking, insurance, or repair services.

2. **Product has a price**. Businesses determine the cost of their products and charge a price for them. The dynamics of supply and demand influence the market price of an item or service. The market price is the price at which quantity provided equals quantity desired. The price that may be paid is determined by the market, the quality, the marketing, and the targeted group. In the present competitive world price is often given by the market and businesses have to work on costs to maintain profitability.

3. **Products have certain features that deliver satisfaction**. A product feature is a component of a product that satisfies a consumer need. Features determine product pricing, and businesses alter features

during the development process to optimize the user experience. Products should be able to provide value satisfaction to the customers for whom they are meant. Features of the product will distinguish it in terms of its function, design, quality and experience A customer's cumulative experience with a product from its purchase to the end of its useful life is an important component of a product feature.

4. **Product is pivotal for business**. The product is at the centre of business around which all strategic activities revolve. The product enables production, quality, sales, marketing, logistics and other business processes. Product is the driving force behind business activities.

5. **A product has a useful life**. Every product has a usable life after which it must be replaced, as well as a life cycle after which it is to be reinvented or may cease to exist. We have observed that fixed line telephone instruments have largely been replaced by mobile phones.

(b) A company's mission statement is typically focused on its present business scope **who we are and what we do**. Mission statements broadly describe an organization's present capability, customer focus, activities, and business make up. Mission for an organization is significant for the following reasons:

- It ensures **unanimity of purpose** within the organization.
- It develops a basis, or standard, for **allocating organizational resources.**
- It provides a basis for **innovating the use of the organisation's resources**
- It **establishes** a general tone or **organizational climate**, to suggest a business like operation.
- It serves as a **focal point** for those who can identify with the **organisation's purpose and direction**.
- It facilitates the **translation of objectives and goals into a work structure** involving the assignment of tasks to responsible elements within the organization.

- It specifies organizational purposes and the **translation of these purposes into goals** in such a way that cost, time, and performance parameters can be assessed and controlled.

Question 8

(a) *What are channels? Why is channel analysis important? Explain the different types of channels?* ***(1 + 1 + 3 = 5 Marks)***

(b) *Explain the concept of vertically integrated diversification. How is forward integration different from backward integration?* ***(5 Marks)***

OR

(b) *Recommend a tool to analyze the competitive position of various rival companies in the market and outline the step by step procedure for using the identified tool.* ***(5 Marks)***

Answer

(a) Channels represent the **distribution system** through which organizations distribute their products or provide services to customers. They play a pivotal role in reaching target markets, maximizing sales, and establishing competitive advantages.

Channel analysis is important when the business strategy is to scale up and expand beyond the current geographies and markets. When a business plans to grow to newer markets, they need to develop or leverage existing channels to get to new customers. Thus, analysis of channels that suit one's products and customers is of utmost importance.

There are typically three channels that should be considered: sales channel, product channel and service channel.

- **The sales channel** - These are the intermediaries involved in selling the product through each channel and ultimately to the end user. The key question is: Who needs to sell to whom for your product to be sold to your end user? **For example**, many fashion designers use agencies to sell their products to retail organizations, so that consumers can access them.
- **The product channel** - The product channel focuses on the series of intermediaries who physically handle the product on its path from its

producer to the end user. This is true of Australia Post, who delivers and distributes many online purchases between the seller and purchaser when using eBay and other online stores.

- **The service channel** - The service channel refers to the entities that provide necessary services to support the product, as it moves through the sales channel and after purchase by the end user. The service channel is an important consideration for products that are complex in terms of installation or customer assistance. **For example**, a Bosch dishwasher may be sold in a Bosch showroom, and then once sold it is installed by a Bosch contracted plumber.

(b) Vertically integrated diversification is a strategic approach in which a company expands its business operations into different stages of the production or distribution process within the same industry. This involves either forward integration or backward integration.

The key difference between forward and backward integration lies in the direction of expansion within the supply chain. **Forward integration moves towards the end consumer,** while **backward integration moves towards the source of raw materials or components.**

Forward integration allows companies to have **more control over distribution channels,** improve customer relationships, and capture a larger share of the value chain. In contrast, **backward integration helps** companies **secure a stable supply of inputs,** reduce dependency on suppliers, and potentially lower production costs.

Forward integration is often associated with activities such as retailing, marketing, and after-sales services, while backward integration is associated with activities such as manufacturing, sourcing, and procurement.

Both types of integration offer strategic advantages such as increased market power, cost efficiencies, and greater control over critical business processes. However, the decision to pursue forward or backward integration depends on factors such as industry dynamics, competitive landscape, and the company's core competencies and resources.

Or

A tool to identify the market positions of rival companies by grouping them into like positions is **Strategic Group Mapping.** A strategic group consists of those rival firms which have similar competitive approaches and positions in the market.

The procedure for constructing a strategic group map and deciding which firms belong in which strategic group are as follows:

1. Identify the competitive characteristics that differentiate firms in the industry typical variables that are price/quality range (high, medium, low); geographic coverage (local, regional, national, global); degree of vertical integration (none, partial, full); product-line breadth (wide, narrow); use of distribution channels (one, some, all); and degree of service offered (no-frills, limited, full).
2. Plot the firms on a two-variable map using pairs of these differentiating characteristics.
3. Assign firms that fall in about the same strategy space to the same strategic group.
4. Draw circles around each strategic group making the circles proportional to the size of the group's respective share of total industry sales revenues.