

TOPIC : FULL COURSE PAPER

Division A is compulsory.

In Division B, Question No.1 is compulsory

*Attempt any **Three** questions out of the remaining **Four** questions*

Time allowed – 3 hours

DIVISION – A

MULTIPLE CHOICE QUESTIONS :

CASE SCENARIO : 1

1. M Ltd. is producing a single product and may expand into product diversification in next one to two years. M Ltd. is amongst a labour – intensive company where majority of processes are done manually. Employee cost is a major cost element in the total cost of the company. The company conventionally uses performance parameters Earnings per manshift (EMS) to measure cost paid to an employee for a shift of 8 hours, and Output per manshift (OMS) to measure an employee's output in a shift of 8 hours.

The Chief Manager (Finance) of the company has emailed you few information related to the last month. The email contains the following data related to the last month :

During the last month, the company has produced 2,34,000 tonnes of output. Expenditures for the last months are :

- (i) Raw materials consumed Rs. 50,00,000.
- (ii) Power consumed 13,000 Kwh @ Rs. 8 per Kwh to run the machines for production.
- (iii) Diesels consumed 2,000 litres @ Rs. 93 per litre to run power generator used as alternative or backup for power cuts.
- (iv) Wages & salary paid – Rs. 6,40,00,000
- (v) Gratuity & leave encashment paid – Rs. 64,20,000
- (vi) Hiring charges paid for HEMM – Rs. 30,00,000. HEMM are directly used in production.
- (vii) Hiring charges paid for cars used for official purpose – Rs. 66,000.
- (viii) Reimbursement of diesel cost for the cars – Rs. 22,000.
- (ix) The hiring of cars attracts GST under RCM @ 5% without credit.
- (x) Maintenance cost paid for weighing bridge (used for weighing of final goods at the time of dispatch) – Rs. 12,000
- (xi) AMC cost of CCTV installed at weighing bridge (used for weighing of final goods at the time of dispatch) and factory premises is Rs. 8,000 and Rs. 18,000 per month respectively.
- (xii) TA/DA and hotel bill paid for sales manager – Rs. 36,000.

- (xiii) The company has 1,800 employees works for 26 days in a month. You are asked to calculate the followings :
- (i) What is the amount of prime cost incurred during the last month :
- (a) Rs. 7,54,20,000
 (b) Rs. 7,57,10,000
 (c) Rs. 7,56,06,000
 (d) Rs. 7,87,10,000
- (ii) What is the total and per shift cost of production for last month :
- (a) Rs. 7,87,10,000 and Rs. 336.37 respectively
 (b) Rs. 7,87,10,000 and Rs.1,681.84 respectively
 (c) Rs. 7,87,28,000 and Rs. 1,682.22 respectively
 (d) Rs. 7,87,28,000 and Rs. 336.44 respectively
- (iii) What is the value of administrative cost incurred during the last month :
- (a) Rs. 92,400
 (b) Rs. 88,000
 (c) Rs. 1,48,400
 (d) Rs. 1,44,000
- (iv) What is the value of selling and distribution cost and total cost of sales :
- (a) Rs. 36,000 & Rs. 7,88,76,400 respectively
 (b) Rs. 56,000 & Rs. 7,88,76,400 respectively
 (c) Rs. 36,000 & Rs. 7,88,72,000 respectively
 (d) Rs. 56,000 & Rs. 7,88,72,000 respectively
- (v) What is the value EMS and OMS for the last month :
- (a) Rs. 1,504.70 & 5 tonnes respectively
 (b) Rs. 1,367.52 & 5 tonnes respectively
 (c) Rs. 1,504.70 & 4.37 tonnes respectively
 (d) Rs. 1,367.52 & 4.37 tonnes respectively

(5 * 2 MARKS = 10)

CASE SCENARIO : 2

2. During half year ending inter departmental review meeting of P Ltd., cost variance report was discussed and the performance of the departments were assessed. The following figures were presented.

For a period of first six months of the Financial year, following information were extracted from the books :

Actual production overheads	Rs. 34,08,000
The above amount is inclusive of the following payments made :	
Paid as per court's order	Rs. 4,50,000
Expenses of previous year booked in current year	Rs. 1,00,000
Paid to workers for strike period under an award	Rs. 4,20,000
Obsolete stores written off	Rs. 36,000

Production and sales data for the six months are as under :

Production	
Finished goods	1,10,000 units
Works – in – progress	

(50% complete in every respect)	80,000 units
Sale :	
Finished goods	90,000 units

Machine worked during the period was 3,000 hours.

At time of preparation of revenue budget, it was estimated that a total of Rs. 50,40,000 would be required for budgeted machine hours of 6,000 as production overheads for the entire year.

During the meeting, a data analytic report revealed that 40% of the over /under – absorption was due to defective production policies and the balance was attributable to increase in costs.

You were also present at the meeting; the chairperson of the meeting has asked you to be ready with the followings for the performance appraisal of the departmental heads :

- (i) How much was the budgeted machine hour rate used to recover overhead ?
 - (a) Rs. 760
 - (b) Rs. 820
 - (c) Rs. 780
 - (d) Rs. 840
- (ii) How much amount of production overhead has been recovered (absorbed) upto the end of half year end ?
 - (a) Rs. 25,20,000
 - (b) Rs. 34,08,000
 - (c) Rs. 24,00,000
 - (d) Rs. 24,60,000
- (iii) What is the amount of overhead under / over absorbed ?
 - (a) 1,18,000 over – absorbed
 - (b) 1,18,000 under – absorbed
 - (c) 18,000 over – absorbed
 - (d) 18,000 under – absorbed
- (iv) What is the supplementary rate for apportionment of over/ under absorbed overheads over WIP, Finished goods and Cost of sales ?
 - (a) Rs. 0.315 per unit
 - (b) Rs. 0.472 per unit
 - (c) Rs. 0.787 per unit
 - (d) Rs. 1 per unit
- (v) What is the amount of over /under absorbed overhead apportioned to work in Progress ?
 - (a) Rs. 9,440
 - (b) Rs. 42,480
 - (c) Rs. 18,880
 - (d) Rs. 70,800

3. Which of the following statements relating to Zero Based Budgeting (ZBB) is false :

- (a) It is a method of budgeting whereby all activities are re – evaluated each time a budget is formulated.
 - (b) ZBB attempts to eliminate unnecessary expenditure being retained in budgets
 - (c) It is probably the least time consuming and least costly approach to budgeting
 - (d) It requires that budgets are built up from scratch.
4. The main difference between marginal costing and absorption costing is regarding the treatment of :
- (a) Prime cost
 - (b) Fixed overheads
 - (c) Direct materials
 - (d) Variable overheads
5. Which of the following is Not true about the cost control and cost reduction :
- (a) Cost control seeks to attain lowest possible cost under best conditions.
 - (b) Cost control emphasizes on past and present.
 - (c) Cost reduction is a corrective function. It operates even when an efficient cost control system exists.
 - (d) Cost control ends when targets are achieved.
6. Which of the following statements is true :
- (a) Job cost sheet may be used for estimating profit of jobs.
 - (b) Job costing cannot be used in conjunction with marginal costing
 - (c) In cost plus contracts, the contractor runs a risk of incurring a loss.
 - (d) None of these
7. The production planning department prepares a list of materials and stores required for the completion of a specific job order, this list is known as :
- (a) Bin card
 - (b) Bill of material
 - (c) Material requisition slip
 - (d) None of the above

(15 * 2 MARKS = 30)

DESCRIPTIVE QUESTIONS :

QUESTION : 1

You are given the following data :

	Sales	Profit
Year 2021 – 22	Rs. 1,20,000	8,000
Year 2022 – 23	Rs. 1,40,000	13,000

FIND OUT –

- (i) P/V ratio,
- (ii) B.E. Point,
- (iii) Profit when sales are Rs. 1,80,000
- (iv) Sales required earn a profit of Rs. 12,000.
- (v) Margin of safety in year 2020 – 21.

(5 MARKS)

QUESTION : 1(B)

A factory producing article A also produces a by-product B which is further processed into finished product. The joint cost of manufacture is given below:

Material	Rs. 5,000
Labour	Rs. 3,000
Overhead	<u>Rs. 2,000</u>
	<u>Rs. 10,000</u>

Subsequent cost in Rs. are given below:

	A	B
Material	3,000	1,500
Labour	1,400	1,000
Overhead	600	500
	5,000	3,000

Selling prices are A Rs. 16,000

B Rs. 8,000

Estimated profit on selling prices is 25% for A and 20% for B.

Assume that selling and distribution expenses are in proportion of sales prices. Show how you would apportion joint costs of manufacture and prepare a statement showing cost of production of A and B.

(5 MARKS)

QUESTION : 1(C)

A skilled worker is paid a guaranteed wage rate of Rs. 120 per hour. The standard time allowed for a job is 6 hour. He took 5 hours to complete the job. He is paid wages under Rowan Incentive Plan.

- Calculate his effective hourly rate of earnings under Rowan Incentive Plan.
- If the worker is placed under Halsey Incentive Scheme (50%) and he wants to maintain the same effective hourly rate of earnings, calculate the time in which he should complete the job.

(4 MARKS)

QUESTION : 2(A)

ANI Limited is a trader of a Product Z. It has decided to analyse the profitability of its five new customers. It buys Z article at Rs. 5,400 per unit and sells to retail customers at a listed price of Rs.6,480 per unit. The data pertaining to five customers are:

	Customers				
	A	B	C	D	E
Units sold	4,500	6,000	9,500	7,500	12,750
Listed Selling Price	Rs.6,480	Rs.6,480	Rs.6,480	Rs.6,480	Rs.6,480
Actual Selling Price	Rs.6,480	Rs.6,372	Rs.5,940	Rs.6,264	Rs.5,832
Number of Purchase orders	15	25	30	25	30
Number of Customer visits	2	3	6	2	3

Number of deliveries	10	30	60	40	20
Kilometers travelled per delivery	20	6	5	10	30
Number of expedited deliveries	0	0	0	0	1

Its five activities and their cost drivers are:

Activity	Cost Driver Rate
Order taking	Rs.4,500 per purchase order
Customer visits	Rs.3,600 per customer visit
Deliveries	Rs.7.50 per delivery Km travelled
Product handling	Rs.22.50 per case sold
Expedited deliveries	Rs.13,500 per expedited delivery

Required:

- (i) COMPUTE the customer-level operating income of each of five retail customers (A, B, C, D and E).
- (ii) STATE the factors ANI Limited should consider in deciding whether to drop a customer.

(10 MARKS)

QUESTION : 2(B)

The Accountant of KPMR Ltd. has prepared the following budget for the coming year 2022 for its two products 'AYE' and 'ZYE':

Particulars	Product 'AYE'	Product 'ZYE'
Production and Sales (in Units)	4,000	3,000
	Amount (in Rs.)	Amount (in Rs.)
Selling Price per unit	200	180
Direct Material per unit	80	70
Direct Labour per unit	40	35
Variable Overhead per unit	20	25
Fixed Overhead per unit	10	10

After reviewing the above budget, the management has called the marketing team for suggesting some measures for increasing the sales. The marketing team has suggested that by promoting the products on social media, the sales quantity of both the products can be increased by 5%. Also, the selling price per unit will go up by 10%. But this will result in increase in expenditure on variable overhead and fixed overhead by 20% and 5% respectively for both the products.

You are required to prepare flexible budget for both the products:

- (i) Before promotion on social media,
- (ii) After promotion on social media

(4 MARKS)

QUESTION : 3(A)

The following details are available from the books of R Ltd. for the year ending 31st March 2020 :

Particulars	Amount (Rs.)
Purchase of raw material	84,00,000
Consumable materials	4,80,000
Direct wages	60,00,000
Carriage Inward	1,72,600
Wages to foreman and store keeper	8,40,000
Other indirect wages to factory staffs	1,35,000
Expenditure on research and development on new production technology	9,60,000
Salary to accountants	7,20,000
Employer's contribution to EPF & ESI	7,20,000
Cost of power & Fuel	28,00,000
Production planning office expenses	12,60,000
Salary to delivery staffs	14,30,000
Income tax for the assessment year 2019 – 20	2,80,000
Fees to statutory auditor	1,80,000
Fees to cost auditor	80,000
Fees to independent directors	9,40,000
Donation to PM – national relief fund	1,10,000
Value of sales	2,82,60,000
Position of inventories as on 31.03.2020:	
- Raw material	6,20,000
- W – I – P	7,84,000
- Finished goods	14,40,000
Position of inventories as on 31.3.2020 :	
- Raw Material	4,60,000
- W – I – P	6,64,000
- Finished goods	9,80,000

From the above information PREPARE a cost sheet for the year ended 31st March 2020.

(10 MARKS)

QUESTION : 3(B)

NXE Manufacturing Concern furnishes the following information :

Standard :	Material for 70 kg finished products	100 kg
	Price of material	Rs. 1 per kg
Actual :	Output	2,10,000 kg
	Material used	2,80,000 kg
	Cost of Materials	Rs. 2,52,000

CALCULATE : (a) Material usage variance, (b) Material price variance, (c) Material cost variance.

(4 MARKS)

QUESTION : 4(A)

Mr. PS owns a bus which runs according to the following schedule:

(i)	Delhi to Hisar and back, the same day	
	Distance covered:	160 km. one way
	Number of days run each month:	9
	Seating capacity occupied	90%.
(ii)	Delhi to Aligarh and back, the same day	
	Distance covered:	160 km. one way
	Number of days run each month:	12
	Seating capacity occupied	95%
(iii)	Delhi to Alwar and back, the same day	
	Distance covered:	170 km. one way
	Number of days run each month:	6
	Seating capacity occupied	100%
(iv)	Following are the other details:	
	Cost of the bus	Rs. 15,00,000
	Salary of the Driver	Rs. 30,000 p.m.
	Salary of the Conductor	Rs. 26,000 p.m.
	Salary of the part-time Accountant	Rs. 7,000 p.m.
	Insurance of the bus	Rs. 6,000 p.a.
	Diesel consumption 5 km. per litre at	Rs. 90 per litre
	Road tax	Rs. 21,912 p.a.
	Lubricant oil	Rs. 30 per 100 km.
	Permit fee	Rs. 500 p.m.
	Repairs and maintenance	Rs. 5,000 p.m.
	Depreciation of the bus	@ 30% p.a.
	Seating capacity of the bus	50 persons

Passenger tax is 20% of the total takings.

CALCULATE the bus fare to be charged from each passenger to earn a profit of 30% on total takings.

The fares are to be indicated per passenger for the journeys: (i) Delhi to Hisar (ii) Delhi to Aligarh and (iii) Delhi to Alwar.

(10 MARKS)

QUESTION : 4(B)

The product of a manufacturing concern passes through two processes A and B and then to finished stock. The details of expenses incurred on the two processes during the year were as under :

	Process A (Rs.)	Process B (Rs.)
Materials	40,000	---
Labour	40,000	56,000
Overheads	16,000	40,000

On completion, the output of Process A is transferred to Process B at a price calculated to give a profit of 20% on the transfer price and the output of process B is charged to finished stock at a profit of 25% on the transfer price. The finished stock department realized Rs. 4,00,000 for the finished goods received from Process B.

You are asked to SHOW process accounts and total profit, assuming that there was no opening or closing work – in – Progress.

(4 MARKS)

QUESTION : 5(A)

Journalize the following transactions assuming the cost and financial accounts are integrated:

Particulars	Amount (Rs.)
Direct Materials issued to production	Rs. 5,88,000
Allocation of Wages (Indirect)	Rs. 7,50,000
Factory Overheads (Over absorbed)	Rs. 2,25,000
Administrative Overheads (Under absorbed)	Rs. 1,55,000
Deficiency found in stock of Raw material (Normal)	Rs. 2,00,000

(5 MARKS)

QUESTION : 5(B)

Define Inventory Control and give its objectives. List down the basis to be adopted for Inventory Control.

(5 MARKS)

QUESTION : 5(C)

EXPLAIN the difference between Allocation and Apportionment of expenses.

(4 MARKS)

QUESTION : 6(A)

DISCUSS cost classification based on variability and controllability.

(4 MARKS)

QUESTION : 6(B)

HL Limited produces and sells four varieties of beverage. The past data shows different demand patterns for various quarters during the year. The sales quantity and selling price for the month of September 2023 is as follows:

	Sales Quantity	Selling Price per unit
Hot Coffee	1,40,000 Units	Rs. 20/-
Cold Coffee	3,40,000 Units	Rs. 40/-
Fruit Juice	4,20,000 Units	Rs. 20/-
Carbonated Soft Drink	2,70,000 units	Rs. 20/-

For the quarter October to December 2023, it is estimated that due to climate changes the demand for Hot Coffee would increase every month by 50% of the previous month and the

demand for Cold Coffee would decrease every month by 30% of the previous month. The demand for Fruit Juice would decrease by 20% in the month of October 2023 and thereafter it will remain constant. HL Limited would be able to sell only 60,000 units, 50,000 units and 30,000 units of Carbonated Soft Drink respectively during the months of October, November and December 2023. There would be no change in the selling price of all the products during the next quarter.

Standard Quantity of closing stock for the period September 2023 to December 2023 is as follows:

	Hot Coffee	Cold Coffee	Fruit Juice	Carbonated Soft Drink
September 2023	12,000	13,000	11,000	7,500
October 2023	15,000	14,000	12,000	5,500
November 2023	13,000	15,000	10,000	6,000
December 2023	11,000	16,000	13,000	7,000

You are required to prepare a Production Budget (in units) and Sales Budget (in units and sales value) for the months of October, November and December 2023.

(10 MARKS)