(GI-11, GI-12+15, GI-13+14, SI-5)

DATE: 12.01.2020 MAXIMUM MARKS: 100 TIMING: 3¼ Hours

PAPER : COSTING

Answer to questions are to be given only in English except in the case of candidates who have opted for Hindi Medium. If a candidate who has not opted for Hindi Medium. His/her answer in Hindi will not be valued.
Question No. 1 is compulsory.
Candidates are also required to answer any Four questions from 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.
Wherever necessary, suitable assumptions may be made and disclosed by way of note.

Question 1:

(a) M/s. Private Limited is manufacturing a special product which requires a component "SKY BLUE". The following particulars are available for the year ended 31st March, 2018:

Annual demand of "SKY BLUE"	12000 Units
Cost of placing an order	Rs. 1,800
Cost per unit of "SKY BLUE	Rs. 640
Carrying cost per annum	18.75%

The company has been offered a quantity discount of 5% on the purchases of "SKY BLUE" provided the order size is 3000 components at a time.
You are required to:
(i) Compute the Economic Order Quantity.
(ii) Advise whether the quantity discount offer can be accepted.

(5 Marks)

(b) The information regarding number of employees on roll in a shopping mall for the month of December 2017 are given below:
Number of employees as on 01-12-2017 900
Number of employees as on 31-12-2017 1100
During December, 2017, 40 employees resigned and 60 employees were discharged. 300 employees were recruited during the month. Out of these 300 employees, 225 employees were recruited for an expansion project of the mall and rest were recruited due to exit of employees.
Assuming 365 days in a year, calculate Employee Turnover Rate and Equivalent Annual' Employee Turnover Rate by applying the following:
(i) Replacement Method
(ii) Separation Method
(iii) Flux Method

(5 Marks)

(c) Following figures have been extracted from the books of M/s. RST Private Limited:

Financial Year	Sales (Rs.)	Profit/Loss (Rs.)
2016-17	4,00,000	15,000(loss)
2017-18	5,00,000	15,000 (Profit)

You are required to calculate:
(i) Profit Volume Ratio
(ii) Fixed Costs
(iii) Break Even Point

(iv) Sales required to earn a profit of Rs. 45,000.
(v) Margin of Safety in Financial Year 2017-18.

(5 Marks)

(d) GK Ltd. showed net loss of Rs. 2,43,300 as per their financial accounts for the year ended 31st March, 2018. However, cost accounts disclosed net loss of Rs. 2,48,300 for the same period. On scrutinizing both the set of books of accounts, the following information were revealed:

		Rs.
(i)	Works overheads over recovered	30,400
(ii)	Selling overheads under recovered	20,300
(iii)	Administrative overheads under recovered	27,700
(iv)	Depreciation over charged in cost accounts	35,100
(v)	Bad debts w/off in financial accounts	15,000
(vi)	Preliminary Exp. w/off in financial accounts	5,000
(vii)	Interest credited during the year in financial accounts	7,500

Prepare a reconciliation statement reconciling losses shown by financial and cost accounts by taking costing net loss as base.

(5 Marks)

Question 2:

(a) G-2020 Ltd. is a manufacturer of a range of goods. The cost structure of its different products is as follows:

Particulars	Product A	Product B	Product C	
Direct Materials	50	40	40	Rs./u
Direct Labour @ Rs. 10/ hour	30	40	50	Rs./u
Production Overheads	30	40	50	Rs./u
Total Cost	110	120	140	Rs./u
Quantity Produced	10,000	20,000	30,000	Units

G-2020 Ltd. was absorbing overheads on the basis of direct labour hours. A newly appointed management accountant has suggested that the company should introduce ABC system and has identified cost drivers and cost pools as follows:

Activity Cost Pool	Cost Driver	Associated Cost (Rs.)
Stores Receiving	Purchase Requisitions	2,96,000
Inspection	Number of Production Runs	8,94,000
Dispatch	Orders Executed	2,10,000
Machine Setup	Number of Setups	12,00,000

The following information is also supplied:

Details	Product A	Product B	Product C
No. of Setups	360	390	450
No. of Orders Executed	180	270	300
No. of Production Runs	750	1,050	1,200
No. of Purchase Requisitions	300	450	500

Required
CALCULATE activity based production cost of all the three products.

(10 Marks)

(b) From the following figures, CALCULATE cost of production and profit for the month of March 2018.

	Amount (Rs.)		Amount (Rs.)
Stock on 1st March, 2018		Purchase of raw materials	28,57,000

- Raw materials	6,06,000	Sale of finished goods	1,34,00,000
- Finished goods	3,59,000	Direct wages	37,50,000
Stock on 31st March, 2018		Factory expenses	21,25,000
- Raw materials	7,50,000	Office and administration expenses (related to management)	10,34,000
- Finished goods	3,09,000	Selling and distribution expenses	7,50,000
Work-in-process:		Sale of scrap	26,000
- On 1st March, 2018	12,56,000		
- On 31st March, 2018	14,22,000		

(10 Marks)

Question 3:

(a) As of 31st March, 2018, the following balances existed in a firm's cost ledger, which is maintained separately on a double entry basis:

	Debit (Rs.)	Credit (Rs.)
Stores Ledger Control A/c	3,20,000	--
Work-in-process Control A/c	1,52,000	--
Finished Goods Control A/c	2,56,000	--
Manufacturing Overhead Control A/c	--	28,000
Cost Ledger Control A/c	--	7,00,000
	7,28,000	7,28,000

During the next quarter, the following items arose:

	(Rs.)
Finished Product (at cost)	2,35,500
Manufacturing overhead incurred	91,000
Raw material purchased	1,36,000
Factory wages	48,000
Indirect labour	20,600
Cost of sales	1,68,000
Materials issued to production	1,26,000
Sales returned (at cost)	8,000
Materials returned to suppliers	11,000
Manufacturing overhead charged to production	86,000

Required:

PREPARE the Cost Ledger Control A/c, Stores Ledger Control A/c, Work-in-process Control A/c, Finished Stock Ledger Control A/c, Manufacturing Overhead Control A/c, Wages Control A/c, Cost of Sales A/c and the Trial Balance at the end of the quarter as per costing records.

(10 Marks)

(b) A Ltd. produces product 'AXE' which passes through two processes before it is completed and transferred to finished stock. The following data relate to October 20X8:

	Process-I (Rs.)	**Process-II (Rs.)**	**Finished Stock (Rs.)**
Opening stock	7,500	9,000	22,500
Direct materials	15,000	15,750	--
Direct wages	11,200	11,250	--
Factory overheads	10,500	4,500	--
Closing stock	3,700	4,500	11,250
Inter-process profit included in opening stock	--	1,500	8,250

Output of Process- I is transferred to Process- II at 25% profit on the transfer price. Output of Process- II is transferred to finished stock at 20% profit on the transfer price. Stock in process is valued at prime cost. Finished stock is valued at the price at which it is received from process II. Sales during the period are Rs. 1,40,000.

PREPARE Process cost accounts and finished goods account showing the profit element at each stage.

(10 Marks)

Question 4:

(a) ABC Transport Company has given a route 40 kilometers long to run bus.

(a) The bus costs the company a sum of Rs. 20,00,000
(b) It has been insured at 1.5% p.a. and
(c) The annual tax will amount to Rs. 20,000
(d) Garage rent is Rs. 20,000 per month.
(e) Annual repairs will be Rs. 2,04,000
(f) The bus is likely to last for 5 years
(g) The driver's salary will be Rs. 30,000 per month and the conductor's salary will be Rs. 25,000 per month in addition to 10% of takings as commission [To be shared by the driver and conductor equally].
(h) Cost of stationery will be Rs. 1,000 per month.
(i) Manager-cum-accountant's salary is Rs. 17,000 per month.
(j) Petrol and oil will be Rs. 500 per 100 kilometers.
(k) The bus will make 3 up and down trips carrying on an average 40 passengers on each trip.
(l) The bus will run on an average 25 days in a month.

Assuming 15% profit on takings, CALCULATE the bus fare to be charged from each passenger.

(10 Marks)

(b) ABC Ltd. had prepared the following estimation for the month of April:

	Quantity	Rate (Rs.)	Amount (Rs.)
Material-A	800 kg.	45.00	36,000
Material-B	600 kg.	30.00	18,000
Skilled labour	1,000 hours	37.50	37,500
Unskilled labour	800 hours	22.00	17,600

Normal loss was expected to be 10% of total input materials and an idle labour time of 5% of expected labour hours was also estimated.

At the end of the month the following information has been collected from the cost accounting department:

The company has produced 1,480 kg. finished product by using the followings:

	Quantity	Rate (Rs.)	Amount (Rs.)
Material-A	900 kg.	43.00	38,700
Material-B	650 kg.	32.50	21,125
Skilled labour	1,200 hours	35.50	42,600
Unskilled labour	860 hours	23.00	19,780

Required:

CALCULATE:

(i) Material Cost Variance;
(ii) Material Price Variance;
(iii) Material Mix Variance;
(iv) Material Yield Variance;
(v) Labour Cost Variance;
(vi) Labour Efficiency Variance and
(vii) Labour Yield Variance.

Note: Quantity and Amount can be Round off.

(10 Marks)

Question 5:

(a) A construction company undertook a contract at an estimated price of Rs. 108 lakhs, which includes a budgeted profit of Rs. 18 lakhs. The relevant data for the year ended 31.03.20X8
are as under:

	(Rs. '000)
Materials issued to site	5,000
Direct wages paid	3,800
Plant hired	700
Site office costs	270
Materials returned from site	100
Direct expenses	500
Work certified	10,000
Work not certified	230
Progress payment received	7,200

A special plant was purchased specifically for this contract at Rs. 8,00,000 and after use on this contract till the end of 31.02.20X8, it was valued at Rs. 5,00,000. This cost of materials at site at the end of the year was estimated at Rs. 18,00,000 Direct wages accrued as on 31 03.20X8 was Rs. 1,10,000.
Required
PREPARE the Contract Account for the year ended 31st March, 20X8.

(10 Marks)

(b) Gaurav Ltd. is drawing a production plan for its two products Minimax (MM) and Heavyhigh (HH) for the year 20X8-X9. The company's policy is to hold closing stock of finished goods at 25% of the anticipated volume of sales of the succeeding month. The following are the estimated data for two products:

	Minimax (MM)	Heavyhigh (HH)
Budgeted Production units	1,80,000	1,20,000
	(Rs.)	(Rs.)
Direct material cost per unit	220	280
Direct labour cost per unit	130	120
Manufacturing overhead	4,00,000	5,00,000

The estimated units to be sold in the first four months of the year 20X8-X9 are as under:

	April	May	June	July
Minimax	8,000	10,000	12,000	16,000
Heavyhigh	6,000	8,000	9,000	14,000

PREPARE production budget for the first quarter in month-wise

(10 Marks)

Question 6:

(a) DISCUSS the essential features of a good cost accounting system.

(5 Marks)

(b) What are the reasons for disagreement of profits as per cost accounts and financial accounts? Discuss.

(5 Marks)

(c) What is cost plus contract? State its advantages.

(5 Marks)

(d) DISTIGUISH between job and batch costing.

(5 Marks)

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