

(GI-7, VI-VDI-SI-3)

DATE: 01.04.2022

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) A company manufactures 5,000 units of a product per month. The cost of placing an order is Rs. 100. The purchase price of the raw material is Rs. 10 per kg. The re-order period is 4 to 8 weeks. The consumption of raw materials varies from 100 kg to 450 kg per week, the average consumption being 275 kg. The carrying cost of inventory is 20% per annum.

You are required to calculate

- (i) Re-order quantity
- (ii) Re-order level
- (iii) Maximum level
- (iv) Minimum level
- (v) Average stock level

(5 Marks)

- (b) Accountant of your company had computed labour turnover rates for the quarter ended 30th September, 2013 as 14%, 8% and 6% under Flux method. Replacement method and Separation method respectively. If the number of workers replaced during 2nd quarter of the financial year 2013-14 is 36, find the following:

- (i) The number of workers recruited and joined; and
- (ii) The number of workers left and discharged.

(5 Marks)

- (c) JOURNALISE the following transactions in cost books under Non-Integrated system of Accounting.

- (i) Credit Purchase of Material Rs. 27,000
- (ii) Manufacturing overhead charged to Production Rs. 6,000
- (iii) Selling and Distribution overheads recovered from Sales Rs. 4,000
- (iv) Indirect wages incurred for Manufacturing department Rs. 8,000
- (v) Material returned from production to stores Rs. 9,000

(5 Marks)

- (d) A factory can produce 1,80,000 units per annum at its 60% capacity. The estimated costs of production are as under:

Direct material	Rs. 50 per unit
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Direct employee cost	Rs. 16 per unit
Indirect expenses:	
- Fixed	Rs. 32,50,000 per annum
- Variable	Rs. 10 per unit
- Semi-variable	Rs. 40,000 per month up to 50% capacity and Rs. 15,000 for every 20% increase in the capacity or part thereof.

If production program of the factory is as indicated below and the management desires to ensure a profit of Rs.10,00,000 for the year, DETERMINE the average selling price at which each unit should be quoted:

First three months of the year- 50% of capacity;

Remaining nine months of the year- 75% of capacity.

(5 Marks)

Question 2:

(a) E-books is an online book retailer. The Company has four departments. The two sales departments are Corporate Sales and Consumer Sales. The two support – departments are Administrative (Human Resources Accounting) and Information Systems each of the sales departments conducts merchandising and marketing operations independently.

The following data are available for October, 2013:

Departments	Revenues	Number of Employees	Processing time used (in minutes)
Corporate Sales	Rs. 16,67,750	42	2,400
Consumer Sales	Rs. 8,33,875	28	2,000
Administrative	--	14	400
Information system	--	21	1,400

Cost incurred in each of four departments for October, 2013 are as follow:

Corporate Sales	Rs. 12,97,751
Consumer Sales	Rs. 6,36,818
Administrative	Rs. 94,510
Information systems	Rs. 3,04,720

The company uses number of employees as a basis to allocate Administrative costs and processing time as a basis to allocate Information systems costs.

Required:

- (i) Allocate the support department costs to the sales departments using the direct method.
- (ii) Rank the support departments based on percentage of their services rendered to other support departments. Use this ranking to allocate support costs based on the step-down allocation method.
- (iii) How could you have ranked the support departments differently?
- (iv) Allocate the support department costs to two sales departments using the reciprocal allocation method.

(10 Marks)

(b) Sky & Co., an unregistered supplier under GST, purchased material from Vye Ltd. which is registered under GST. The following information is available for one lot of 5,000 units of material purchased:

Listed price of one lot	Rs. 2,50,000
Trade discount	@ 10% on listed price
CGST and SGST (Credit Not available)	12% (6% CGST + 6% SGST)
Cash discount	@ 10%
(Will be given only if payment is made within 30 days.)	
Toll Tax paid	Rs. 5,000
Freight and Insurance	Rs. 17,000
Demurrage paid to transporter	Rs. 5,000
Commission and brokerage on purchases	Rs. 10,000
Amount deposited for returnable containers	Rs. 30,000
Amount of refund on returning the container	Rs. 20,000
Other Expenses	@ 2% of total cost
20% of material shortage is due to normal reasons.	
The payment to the supplier was made within 21 days of the purchases.	
You are required to CALCULATE cost per unit of material purchased by Sky & Co.	

(10 Marks)

Question 3:

(a) The following incomplete accounts are furnished to you for the month ended 31st October, 2021.

	Stores Ledger Control Account		
1.10.2021	To Balance		Rs. 54,000
	Work in Process Control Account		
1.10. 2021	To Balance		Rs. 6,000
	Finished Goods Control Account		
1.10. 2021	To Balance		Rs. 75,000
	Factory Overheads Control Account		
Total debits for October, 2021	Rs. 45,000		
	Factory Overheads Applied Account		
	Cost of Goods Sold Account		
	Creditors for Purchases Account		
	1.10. 2021	By Balance	Rs. 30,000

Additional information:

- (i) The factory overheads are applied by using a budgeted rate based on direct labour hours. The budget for overheads for 2021 is Rs. 6,75,000 and the budget of direct labour hours is 4,50,000.
- (ii) The balance in the account of creditors for purchases on 31.10.2021 is Rs. 15,000 and the payments made to creditors in October, 2021 amount to Rs. 1,05,000.
- (iii) The finished goods inventory as on 31st October, 2021 is Rs. 66,000.
- (iv) The cost of goods sold during the month was Rs. 1,95,000.
- (v) On 31st October, 2021 there was only one unfinished job in the factory. The cost records show that Rs. 3,000 (1,200 direct labour hours) of direct labour cost and Rs. 6,000 of direct material cost had been charged.
- (vi) A total of 28,200 direct labour hours were worked in October, 2021. All factory workers earn same rate of pay.
- (vii) All actual factory overheads incurred in October, 2021 have been posted.

You are required to find:

- (a) Materials purchased during October, 2021.
- (b) Cost of goods completed in October, 2021.
- (c) Overheads applied to production in October, 2021.
- (d) Balance of Work-in-process Control A/c on 31st October, 2021.
- (e) Direct materials consumed during October, 2021.
- (f) Balance of Stores Ledger Control Account on 31st October, 2021.
- (g) Over absorbed or under absorbed overheads for October, 2021.

(10 Marks)

- (b)** GZ Ld. pays the following to a skilled worker engaged in production works. The following are the employee benefits paid to the employee:

(a)	Basic salary per day	Rs. 1,000
(b)	Dearness allowance (DA)	20% of basic salary
(c)	House rent allowance	16% of basic salary
(d)	Transport allowance	Rs. 50 per day of actual work
(e)	Overtime	Twice the hourly rate (considers basic and DA), only if works more than 9 hours a day otherwise no overtime allowance. If works for more than 9 hours a day then overtime is considered after 8th hours.
(f)	Work of holiday and Sunday	Double of per day basic rate provided works atleast 4 hours. The holiday and Sunday basic is eligible for all allowances and statutory deductions.
(h)	Earned leave & Casual leave	These are paid leave.
(h)	Employer's contribution to Provident fund	12% of basic and DA
(i)	Employer's contribution to Pension fund	7% of basic and DA

The company normally works 8-hour a day and 26-day in a month. The company provides 30 minutes lunch break in between.

During the month of August 2020, Mr.Z works for 23 days including 15 th August and a Sunday and applied for 3 days of casual leave. On 15th August and Sunday he worked for 5 and 6 hours respectively without lunch break.

On 5th and 13th August he worked for 10 and 9 hours respectively. During the month Mr. Z worked for 100 hours on Job no.HT200. You are required to CALCULATE:

- (i) Earnings per day
- (ii) Effective wages rate per hour of Mr. Z.
- (iii) Wages to be charged to Job no. HT200

(10 Marks)

Question 4:

- (a)** Paras Synthetics uses Standard costing system in manufacturing of its product 'Star 95 Mask'. The details are as follows;

Direct Material 0.50 Meter @ Rs. 60 per meter	Rs. 30
Direct Labour 1 hour @ Rs. 20 per hour	Rs. 20

Variable overhead 1 hour @ Rs. 10 per hour	Rs. <u>10</u>
Total	Rs. <u>60</u>

During the month of August, 2020 10,000 units of 'Star 95 Mask' were manufactured.

Details are as follows:

Direct material consumed 5700 meters @ Rs. 58 per meter

Direct labour Hours ? @ ? Rs. 2,24,400

Variable overhead incurred Rs. 1,12,200

Variable overhead efficiency variance is Rs. 2,000 A. Variable overheads are based on Direct Labour Hours.

You are required to calculate the missing data and all the relevant Variances.

(10 Marks)

(b) JK Ltd. has furnished the following standard cost data per unit of production:

Material 10 kg @ Rs. 200 per kg.

Labour 6 hours @ Rs. 110 per hour

Variable overhead 6 hours @ Rs. 200 per hour.

Fixed overhead Rs. 90,00,000 per month (Based on a normal volume of 30,000 labour hours.)

The actual cost data for the month of September 2021 are as follows:

Material used 50,000 kg at a cost of Rs. 1,05,00,000.

Labour paid Rs. 31,00,000 for 31,000 hours

Variable overheads Rs. 58,60,000

Fixed overheads Rs. 94,00,000

Actual production 4,800 units.

CALCULATE:

- (i) Material Cost Variance.
- (ii) Labour Cost Variance.
- (iii) Fixed Overhead Cost Variance.
- (iv) Variable Overhead Cost Variance.

(10 Marks)

Question 5:

(a) The annual demand for an item of raw material is 48,000 units and the purchase price is Rs. 80 per unit. The cost of processing an order is Rs. 1,350 and the annual cost of storage is Rs. 15 per unit.

- (i) DETERMINE is the optimal order quantity and total relevant cost for the order?
- (ii) If the cost of processing an order is Rs. 800 and all other data remain same, then DETERMINE the differential cost?
- (iii) If the supplier offers bulk purchase of 48,000 units at a price of Rs. 72 and cost of placing the is Nil, SHOULD the order be accepted?

(10 Marks)

(b) The following figures are related to LM Limited for the year ending 31st March, 2014 : Sales - 24,000 units @ Rs. 200 per unit;

P/V Ratio 25% and Break-even Point 50% of sales.

You are required to calculate:

- (i) Fixed cost for the year
- (ii) Profit earned for the year
- (iii) Units to be sold to earn a target net profit of Rs. 11,00,000 for a year.

- (iv) Number of units to be sold to earn a net income of 25% on cost.
- (v) Selling price per unit if Break-even Point is to be brought down by 4,000 units.

(10 Marks)

Question 6:

- (a)** DIFFERENTIATE between Cost Control and Cost Reduction.

(5 Marks)

- (b)** 'Like other branches of accounting, cost accounting also has certain limitations'. EXPLAIN the limitations.

(5 Marks)

- (c)** STATE the advantages of Zero-based budgeting.

(5 Marks)

- (d)** DESCRIBE Operation costing with two examples of industries where operation costing is applied.

(5 Marks)

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