



PRESIDENCY UNIVERSITY

BENGALURU

Roll No.

End - Term Examinations – December 2025

Date: 17 – 12- 2025

Time: 01:00pm – 04:00pm

School: SOC	Program: B.COM	
Course Code: COM3057	Course Name: Costing Techniques for Managerial decisions	
Semester: V	Max Marks: 100	Weightage: 50%

CO - Levels	C01	C02	C03	C04	C05
Marks	20	20	20	20	20

Instructions:

- (i) Read all questions carefully and answer accordingly.
- (ii) Do not write anything on the question paper other than roll number.

Part A

Answer ALL the Questions. Each question carries 2marks.

10Q x 2M=20M

1.	What is contract costing? Give one example.	2 Marks	L1	C01
2.	Explain the term 'cost-plus contract'.	2 Marks	L2	C01
3.	Define service costing.	2 Marks	L1	C02
4.	List any two features of transport costing.	2 Marks	L1	C02
5.	How does ABC help in pricing and product-mix decisions?	2 Marks	L2	C03
6.	Differentiate between department costing and activity-based costing.	2 Marks	L2	C03
7.	Explain the term 'internal business-process perspective'.	2 Marks	L2	C04
8.	State the meaning of time-based measures in performance evaluation.	2 Marks	L2	C04
9.	Define cost audit.	2 Marks	L1	C05
10.	Explain the purpose of a management audit.	2 Marks	L1	C05

Part B

Answer ALL the Questions. Each question carries 7 marks.

5Q x 7M = 35M

11.	<p>Bharat Builders is constructing a sports complex under a contract of ₹2.5 crore. By the end of the year, the following data is available:</p> <p style="margin-left: 20px;">Work Certified: ₹1,40,00,000</p> <p style="margin-left: 20px;">Work Uncertified: ₹10,00,000</p> <p style="margin-left: 20px;">Cost of Work to Date: ₹1,25,00,000</p> <p style="margin-left: 20px;">Materials at Site: ₹5,00,000</p> <p style="margin-left: 20px;">Cash Received: 75% of Work Certified</p> <p>The company follows the standard rules for calculating notional profit and determining the portion to transfer to the P&L Account for incomplete contracts.</p> <p>Evaluate the amount of profit that should be transferred to the Profit & Loss Account, with justification based on principles of contract costing.</p>	07 Marks	L3	CO1
Or				
12.	<p>A contractor signs a 3-year contract to build a government drainage system for ₹10 crore. Due to a sharp rise in steel and cement prices (25% increase), the contractor applies the escalation clause for price adjustment.</p> <p>The government wants a report on how the escalation clause affects project costing and profitability.</p> <p>Analyze the reasons for incorporating an escalation clause in long-term contracts and discuss its impact on cost recovery, risk reduction, and overall contract profitability in this scenario.</p>	07 Marks	L3	CO1
13.	<p>HealWell Hospital has 80 beds with an average occupancy of 70% for a 30-day month. The monthly operating costs are:</p> <p style="margin-left: 20px;">Salaries: ₹12,00,000</p> <p style="margin-left: 20px;">Medicines & supplies: ₹3,20,000</p> <p style="margin-left: 20px;">Utilities: ₹1,80,000</p> <p style="margin-left: 20px;">General overheads: ₹2,00,000</p> <p>The hospital wants to compute its per-patient cost to revise its pricing policy.</p> <p>Using service costing, compute the cost per patient-day and evaluate the cost of providing medical services.</p>	07 Marks	L3	CO2
Or				
14.	<p>MetroLine Transport Company operates a fleet of six buses that travel daily between two major cities located 55 kilometres apart. Each bus is designed to comfortably seat 45 passengers. For the month of July, the company incurred a total operating expenditure of ₹1,92,000, covering all costs such as staff salaries, fuel, repairs, maintenance, insurance, depreciation and interest. On average, the buses operated at 80% occupancy throughout the month, and each bus completed one round trip per day. Since July consists of 31 days, the management wants to evaluate the efficiency of its operations.</p> <p>You are required to calculate the cost per passenger-kilometre for the month of July.</p>	07 Marks	L3	CO2

15.	<p>Beta Home Essentials Ltd manufactures two household products: the Air-Pure Purifier and the FreshBreeze Humidifier. The company has been using a traditional absorption costing system, allocating factory overheads solely on the basis of machine hours. Recently, management has raised concerns because the Air-Pure Purifier—despite being the more complex product—shows lower costs and higher profits, while the FreshBreeze Humidifier appears less profitable, even though it is simpler to produce.</p> <p>The cost controller believes the traditional system is inaccurately spreading overheads, failing to capture activities such as product designing, order processing, machine changeovers, material movement, customer support, and quality testing, all of which are consumed disproportionately by the two products.</p> <p>Based on this situation, examine how implementing Activity-Based Costing (ABC) can help the company correct the cost misrepresentation. Identify the relevant activities, propose suitable cost drivers, and explain why ABC would provide a more reliable basis for product costing and profitability analysis than the existing traditional system.</p>	07 Marks	L3	CO3
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Or

16.	<p>The budgeted overheads and cost driver volumes of Roman Labs Ltd. are as follows:</p> <table border="1" data-bbox="220 864 1157 1498"> <thead> <tr> <th>Cost Pools</th> <th>Budget Overheads (₹)</th> <th>Cost Driver</th> <th>Budgeted Volumes</th> </tr> </thead> <tbody> <tr> <td>Engineering</td> <td>8,00,000</td> <td>No. of Engineering Changes</td> <td>400</td> </tr> <tr> <td>Material Management</td> <td>6,00,000</td> <td>No. of Material Requisitions</td> <td>1,500</td> </tr> <tr> <td>Machinery Operation</td> <td>12,00,000</td> <td>No. of Machine Hours</td> <td>30,000</td> </tr> <tr> <td>Quality Testing</td> <td>4,00,000</td> <td>No. of Tests</td> <td>2,000</td> </tr> </tbody> </table> <p>The company has produced a batch of 5,000 components of product P-10. Its material cost is ₹2,00,000 and direct labour cost ₹4,50,000. The usage activities of this batch are as follows:</p> <table border="1" data-bbox="220 1630 1136 1850"> <thead> <tr> <th>Activity</th> <th>Usage</th> <th>Activity</th> <th>Usage</th> </tr> </thead> <tbody> <tr> <td>Machine Hours</td> <td>4,000</td> <td>No. of Material Requisitions</td> <td>100</td> </tr> <tr> <td>No. of Engineering Changes</td> <td>25</td> <td>No. of Tests</td> <td>80</td> </tr> </tbody> </table> <p>(a) Calculate the cost driver rates.</p> <p>(b) Ascertain the total cost of the batch of P-10 components using Activity Based Costing.</p>	Cost Pools	Budget Overheads (₹)	Cost Driver	Budgeted Volumes	Engineering	8,00,000	No. of Engineering Changes	400	Material Management	6,00,000	No. of Material Requisitions	1,500	Machinery Operation	12,00,000	No. of Machine Hours	30,000	Quality Testing	4,00,000	No. of Tests	2,000	Activity	Usage	Activity	Usage	Machine Hours	4,000	No. of Material Requisitions	100	No. of Engineering Changes	25	No. of Tests	80	07 Marks	L3	CO3
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17.	<p>RapidTech Electronics manufactures chargers for mobile companies. Recent internal audits show long production cycle times, frequent machine breakdowns, and delays in the testing process. Management wants to improve the internal business-process perspective measures.</p> <p>Identify the key internal process problems faced by RapidTech and suggest how improvements in process quality, workflow, and machine reliability can help the company achieve better performance.</p>	07 Marks	L3	CO4
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Or

18.	<p>PureDrop Water Filters is considering shifting to a higher-grade filter membrane that will reduce customer complaints by 50%. However, the new membrane increases production cost by 12%. Some managers think the change is unnecessary, while others believe long-term benefits outweigh short-term costs.</p> <p>Evaluate the costs and benefits of implementing the improved membrane. Explain how PureDrop should decide whether the improved quality justifies the additional cost.</p>	07 Marks	L3	CO4
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19.	<p>TechFab Appliances recently completed a cost audit, and the management has received several detailed internal reports and recommendations from the cost auditor. Senior managers want to understand how these reports can be used to improve operational efficiency, decision-making, and cost control.</p> <p>Explain the purpose and significance of management reporting under cost audit and discuss how TechFab's management can benefit from such reports.</p>	07 Marks	L3	CO5
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Or

20.	<p>SunRise Pharmaceuticals noticed rising production costs and declining profit margins. To analyse the issue, the company conducts a cost audit. The cost auditor prepares a management report containing various analyses, including cost statements, capacity utilisation, variances, and inefficiency findings.</p> <p>Describe the key elements that are typically included in a management report under cost audit, and explain how these elements help a company like SunRise Pharmaceuticals improve performance.</p>	07 Marks	L3	CO5
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Part C

Answer any three Questions. Each question carries 15marks

3Q x 15M=45M

21.	<p>A product passes through three processes. The output of each process becomes the input of the next process, and the output of Process-III is transferred to finished goods.</p> <p>The expenses incurred are:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 30%;">Particulars</th> <th style="width: 15%;">Process-I (₹)</th> <th style="width: 15%;">Process-II (₹)</th> <th style="width: 15%;">Process-III (₹)</th> </tr> </thead> <tbody> <tr> <td>Materials issued</td> <td style="text-align: center;">50,000</td> <td style="text-align: center;">25,000</td> <td style="text-align: center;">15,000</td> </tr> <tr> <td>Labour</td> <td style="text-align: center;">8,000</td> <td style="text-align: center;">5,000</td> <td style="text-align: center;">2,000</td> </tr> </tbody> </table>	Particulars	Process-I (₹)	Process-II (₹)	Process-III (₹)	Materials issued	50,000	25,000	15,000	Labour	8,000	5,000	2,000	15 Marks	L4	CO1
Particulars	Process-I (₹)	Process-II (₹)	Process-III (₹)													
Materials issued	50,000	25,000	15,000													
Labour	8,000	5,000	2,000													

Manufacturing overhead	12,000	15,000	18,000
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12,000 units were introduced in Process-I. After processing, the following output and normal loss details were observed:

Process	Output	Normal Loss
Process-I	11,600 units	3%
Process-II	11,000 units	4%
Process-III	9,500 units	8%

There is no opening or closing WIP or stock.
Calculate the cost of finished goods.

22.

PQR Ltd. manufactures three products X, Y, and Z. The budgeted costs and production for the year are:

Particulars	X	Y	Z
Production Quantity (Units)	5,000	2,500	1,500
Resources per Unit:			
- Direct Materials (Kg.)	3	5	2
- Direct Labour (Minutes)	40	50	30

The budgeted direct labour rate is ₹12 per hour, and the budgeted material cost is ₹4 per kg. Total Production overheads are budgeted at **₹2,80,000** and are absorbed using the Direct Labour Hour Rate (Absorption Costing).

Activity Based Costing Information:

The total overheads of ₹2,80,000 are analysed as follows:

Cost Pool	Budget Overheads (₹)	Cost Driver
Machinery Setup	90,000	Number of Setups
Inspection & Testing	60,000	Number of Inspection Hours
Machinery Running	1,30,000	Number of Machine Hours

Data on Cost Drivers for Complete Production:

15 Marks

L4

CO3

Activity	X	Y	Z
Number of Setups	15	10	5
Number of Inspection Hours	150	75	25
Number of Machine Hours (per unit)	2	3	1

You are requested to:

1. Calculate the Total Unit Cost of each product using the Absorption Costing method.
2. Calculate the Total Unit Cost of each product using the ABC approach.

<p>23.</p>	<p>SpeedX Logistics tracks its delivery performance as part of the internal business-process perspective of the Balanced Scorecard. For the previous month, the company recorded:</p> <p>Average processing time per parcel: 30 minutes</p> <p>Average waiting time in sorting queue: 20 minutes</p> <p>Transportation time: 70 minutes</p> <p>Total parcels delivered: 12,000</p> <p>Revenue lost due to late delivery: ₹6 per delayed parcel</p> <p>15% of parcels were delivered late.</p> <p>After reviewing the delays, management plans to reduce waiting time by 10 minutes, which is expected to cut late deliveries to 8%.</p> <p>a) Compute the current total delivery-cycle time.</p> <p>b) Calculate the revenue lost due to late deliveries for the month.</p> <p>c) Estimate the revised revenue loss after improvement.</p> <p>d) Explain how time-based performance measures help SpeedX improve quality and customer satisfaction.</p>	<p>15 Marks</p>	<p>L4</p>	<p>C04</p>
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<p>24.</p>	<p>Nova Beverages Pvt. Ltd., a manufacturer of natural fruit drinks, prepares a monthly labour budget to maintain control over production costs. For the month of September, the production department estimated the requirement of 3,600 labour hours at a standard wage rate of ₹180 per hour, giving a budgeted labour cost of ₹6,48,000.</p> <p>During the month, the company faced unexpected delays due to power fluctuations and shortage of skilled workers. As a result, the actual labour hours worked increased to 3,950 hours, and the average actual wage rate paid was ₹190 per hour. The management is now reviewing the labour cost overrun and assessing weaknesses in its current budgetary control practices.</p> <p>1. Compute the actual labour cost for September.</p>	<p>15 Marks</p>	<p>L4</p>	<p>C05</p>
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	<p>2. Calculate the excess of actual labour cost over budgeted labour cost.</p> <p>3. Explain how a strong budgetary control system could have helped Nova Beverages monitor labour utilisation, detect variances promptly, and strengthen overall cost control.</p>			
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25.	<p>Shyamoli Parivahan is running 20 buses between two towns, which are 80 kms apart. Seating capacity of each bus is 60 passengers. Following details are available from their books, for the month of April:</p> <table border="1" data-bbox="220 427 1043 1043"> <thead> <tr> <th data-bbox="220 427 852 506">Particulars</th> <th data-bbox="852 427 1043 506">Amount (₹)</th> </tr> </thead> <tbody> <tr> <td data-bbox="220 506 852 584">Salary of Drivers and conductors</td> <td data-bbox="852 506 1043 584">25,000</td> </tr> <tr> <td data-bbox="220 584 852 663">Salary to Supervisor</td> <td data-bbox="852 584 1043 663">12,000</td> </tr> <tr> <td data-bbox="220 663 852 741">Fuel Cost</td> <td data-bbox="852 663 1043 741">35,000</td> </tr> <tr> <td data-bbox="220 741 852 819">Repairs</td> <td data-bbox="852 741 1043 819">12,000</td> </tr> <tr> <td data-bbox="220 819 852 898">Tax and Insurance</td> <td data-bbox="852 819 1043 898">18,000</td> </tr> <tr> <td data-bbox="220 898 852 976">Depreciation</td> <td data-bbox="852 898 1043 976">26,000</td> </tr> <tr> <td data-bbox="220 976 852 1043">Interest</td> <td data-bbox="852 976 1043 1043">18,000</td> </tr> </tbody> </table> <p data-bbox="220 1043 1193 1164">Actual passengers carried were 72% of the seating capacity. All the five buses run on all days for the month. Each bus made one round trip per day. Calculate cost per passenger – Kilometer.</p>	Particulars	Amount (₹)	Salary of Drivers and conductors	25,000	Salary to Supervisor	12,000	Fuel Cost	35,000	Repairs	12,000	Tax and Insurance	18,000	Depreciation	26,000	Interest	18,000	15 Marks	L4	CO2
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