Time Allowed: 3 Hours **Full Marks: 100**

The figures in the margin on the right side indicate full marks.

Answer Question No. 1 and any five from Question No. 2, 3, 4, 5, 6, 7 and 8.

1.(A) Choose the correct answer from the given alternatives (you may write only the Roman numeral and the alphabet chosen for your answer): **[1×12=12]**

(i) Ticket counter in a Metro Station is an example of:
- a. Profit centre
- b. Investment centre
- c. Cost centre
- d. Revenue centre

(ii) Which of the following is applicable for Cost Control?
- a. It is related with the future
- b. It is a corrective function
- c. It ends when the targets are achieved
- d. It challenges the standards set

(iii) Absorption costing is also referred as:
- a. Historical costing
- b. Traditional costing
- c. Full costing
- d. All of the above terms

(iv) Prime cost is:
- a. all costs incurred in manufacturing a product
- b. the total of direct costs
- c. the material cost of a product
- d. the cost of operating a department

(v) Direct Material is a:
- a. Administration Cost
- b. Selling and Distribution Cost
- c. All of these
- d. None of these

(vi) Which of the following methods smoothes out the effect of fluctuations when material prices fluctuate widely?
- a. FIFO
- b. Simple Average
- c. LIFO
- d. Weighted average

(vii) Labour turnover is measured by:

a. Number of workers replaced / average number of workers
b. Number of workers left / number in the beginning plus number at the end
c. Number of workers joining / number in the beginning of the period
d. All of these

(viii) Under Taylor's differential piece rate scheme, if a worker fails to complete the task within the standard time, then he is paid:
a. 83% of the piece work rate
b. 175% of the piece work rate
c. 67% of the piece work rate
d. 125% of the piece work rate

(ix) Normal capacity of a plant refers to the difference between:
a. Maximum capacity and practical capacity
b. Maximum capacity and actual capacity
c. Practical capacity and estimated idle capacity as revealed by long term sales trend
d. Practical capacity and normal capacity

(x) Selling and Distribution overhead are absorbed on the basis of:
a. Rate per unit
b. Percentage on works cost
c. Percentage on selling price of each unit
d. Any of these

(xi) A company employs three drivers to deliver goods to its customers. The salaries paid to these drivers are:
a. a part of prime cost
b. a direct production expense
c. a production overhead
d. a selling and distribution overhead

(xii) Which of the following is considered an accounting record?
a. Bin Card
b. Bill of Material
c. Store Ledger
d. None of these

1.(B) State whether the following statements are "True or "False": [1×7=7]

(i) Material returned note is prepared to keep a record of return of surplus materials to stores.
(ii) As per the Payment of Bonus Act, 1965 the maximum limit of bonus is 20% of gross earning
(iii) Departments that assist producing department indirectly are called service departments.
(iv) Primary packaging cost is included in distribution cost.
(v) Cost ledger control account makes the cost ledger self-balancing.
(vi) Notional interest on owner's capital appears only in financial profit and loss account.
(vii) Operating costing is applied to ascertain the cost of products.

1.(C) Fill in the blanks: **[1×6=6]**

(i) The ____________ product generally has a greater sale value than by product.
(ii) Three types of standards are_________ , _________, ________.
(iii) Responsibility Accounting is a system of accounting that recognizes various________ throughout the organisation.
(iv) Only difference between variable costing and absorption costing is the classification of_________.
(v) Variable costs change ________ in direct proportion to changes in output.
(vi) A variable cost is ________per unit.

2.(a) PR Ltd manufactures and sells a typical brand of Tiffin Boxes under its own brand name. The installed capacity of the plant is 1,20,000 units per year distributable evenly over each month of calendar year. The Cost Accountant of the company has informed the following cost structure of the product, which is as follows:

Raw Material	₹ 20 per unit.
Direct Labour	₹ 12 per unit.
Direct Expenses	₹ 2 per unit
Variable Overheads	₹ 16 per unit
Fixed Overheads	₹ 3,00,000.

Semi-variable Overheads are as follows:
₹ 7,500 per month up to 50% capacity and additional ₹ 2,500 per month for every additional 25% capacity utilization or part thereof. The plant was operating at 50% capacity during the first seven months of the calendar year 2022, at 100% capacity in the remaining months of the year.
The selling price for the period from 1st January, 2022 to 31st July, 2022 was fixed at ₹ 69 per unit. The firm has been monitoring the profitability and revising the selling price to meet its annual profit target of ₹ 8,00,000.
You are required to suggest the selling price per unit for the period from 1st August, 2022 to 31st December, 2022.
Prepare Cost Sheet clearly showing the total and per unit cost and also profit for the period.
1. From 1st January to 31st July, 2022.
2. From 1st August to 31st December, 2022. **8 marks**

2.(b) Distinguish between relevant (avoidable) and irrelevant (unavoidable) costs and provide examples of each type of cost. **7 marks**

3.(a) M/s. Tubes Ltd are the manufacturers of picture tubes for TV. The following are the details of their operation during the year 2022:

Average monthly market demand	2,000 Tubes
Ordering cost	₹ 100 per order
Inventory carrying cost	20% per annum
Cost of tubes	₹ 500 per tube
Normal usage	100 tubes per week
Minimum usage	50 tubes per week

Maximum usage	200 tubes per week
Lead time to supply	6 – 8 weeks

Compute from the above:

i. Economic order quantity. If the supplier is willing to supply quarterly 1,500 units at a discount of 5%, is it worth accepting?
ii. Re-order Level
iii. Minimum level of stock
iv. Maximum level of stock **7 marks**

3.(b) Amar, Akbar and Anthony are three workers in a manufacturing company and their output during a particular 40 hours' week was 96, 111 and 126 units respectively. The guaranteed rate per hour is ₹ 10 per hour, low piece rate is ₹ 4 per unit, and high piece rate is ₹ 6 per unit. High task is 100 units per week. Normal Piece Rate to be taken at ₹ 6 per unit. Compute the total earnings and labour cost per unit under Taylor, Merrick and Gantt Task Bonus Plan.

8 marks

4.(a) What are the disclosure requirements as per CAS – 10? **5 marks**

(b) The following is the Trading and Profit & Loss Account of M/s. Time and Trading Limited for the year ended 31.12.2022.

Dr. Trading and Profit & Loss Account Cr.

Particulars	Amount (₹)	Particulars	Amount (₹)
To Material (consumed) A/c	7,08,000	By Sales A/c (30,000 units)	15,00,000
To Direct Wages A/c	3,71,000	By Finished Stock A/c (1,000 units)	40,000
To Works Overhead A/c	2,13,000	By Work in Progress A/c	
To Administration Overheads A/c	95,500	– Materials	17,000
To Selling and Distribution Overheads A/c	1,13,500	– Wages	8,000
To Net Profit	69,000	– Works Overheads	5,000
	15,70,000		15,70,000

Manufacturing a standard unit, the company's cost records show that:

i. Works overheads have been charged to work in progress at 20% on prime cost.
ii. Administration overheads have been recovered at ₹ 3 per finished unit.
iii. Selling and distribution overheads have been recovered at ₹ 4 per unit sold.
iv. The unabsorbed or over absorbed overheads have not been adjusted into Costing Profit and Loss Account.

Prepare:

a) A Costing Profit and Loss Account indicating Net profit.

b) A Statement Reconciling the Profit as disclosed by Cost Accounts and that shown in Financial Accounts. **10 marks**

5.(a) A company is at present working at 90% of its capacity and producing 13,500 units per annum. It operates a flexible budgetary control system. The following figures are obtained from its budget:

	90% Amount (₹)	100% Amount (₹)
Sales	15,00,000	16,00,000
Fixed expenses	3,00,500	3,00,600
Semi-fixed expenses	97,500	1,00,500
Variable expenses	1,45,000	1,49,500
Units made	13,500	15,000

Labour and material costs per unit are constant under present conditions. Profit margin is 10%.

(A) You are required to determine the differential cost of producing 1,500 units by increasing capacity to 100%.

(B) What would you recommend for an export price for these 1,500 units taking into account that overseas prices are much lower than indigenous prices? **7 marks**

5.(b) An umbrella manufacturer marks an average net profit of ₹ 2.50 per piece on a selling price of ₹14.30 by producing and selling 6,000 pieces or 60% of the capacity.

His cost of sales is:	Amount (₹)
Direct material	3.50
Direct wages	1.25
Works overhead (50% fixed)	6.25
Sales overhead (25% variable)	0.80

During the current year, he intends to produce the same number but anticipates that fixed charges will go up by 10% which direct labour rate and material will increase by 8% and 6% respectively but he has no option of increasing the selling price. Under this situation, he obtains an offer for further 20% of the capacity. What minimum price you will recommend for acceptance to ensure the manufacturer an overall profit of ₹ 16,730. **8 marks**

6.(a) Mr. Young has ₹ 1,50,000 investment in a business. He wants a 15% profit on his money. From an analysis of recent cost figures, he finds that his variable cost of operating is 60% of sales; his fixed costs are ₹ 75,000 per year. Show supporting computations for each Solution:

(A) What sales volume must be obtained to break even?

(B) What sales volume must be obtained to his 15% return of investment?

(C) Mr. Young estimates that even if he closed the doors of his business, he would incur ₹25,000 expenses per year. At what sales would be better off by locking his sales up?

6 marks

6.(b) The standard cost of a certain chemical mixture is as under:

40% of Material A at ₹ 20 per kg. 60% of Material B at ₹ 30 per kg. A standard loss of 10% is expected in production. The following actual cost data is given for the period:

180 kg material A at a cost of ₹ 18 per kg 220 kg material B at a cost of ₹ 34 per kg The weight produced is 360 kg.

Calculate and present:

i. Material Cost Variance
ii. Material Price Variance
iii. Material Usage Variance
iv. Material Mix Variance
v. Material Yield Variance **9 marks**

7.(a) Explain the situations where full cost pricing may be appropriate**.** **5 marks**

7.(b) The net profits of a manufacturing company appeared at ₹ 64,500 as per financial records for the year ended 31st December, 2021. The cost books however, showed a net profit of ₹ 86,460 for the same period. A careful scrutiny of the figures from both the sets of accounts revealed the following facts.

Particulars		(₹)
i.	Income tax provided in financial books	20,000
ii.	Bank Interest (Cr.) in financial books	250
iii.	Work overhead under recovered	1,550
iv.	Depreciation charged in financial records	5,600
v.	Depreciation recovered in cost	6,000
vi.	Administrative overheads over-recovered	850
vii.	Loss due to obsolescence charged in financial accounts	2,800
viii.	Interest on investments not included in cost accounts	4,000
ix.	Stores adjustments (Credit in financial books)	240
x.	Loss due to depreciation in stock value	3,350

Prepare reconciliation statement. **10 marks**

8.(a)(i) Explain the objective of Cost Accounting Standard Board.

(ii) Name 3 factors that should be disclosed in the cost statements as per CAS-3.

(3+4=7 marks)

(b) Yamuna Printing Co. has three operating departments:

1. Printing and Binding
2. Lithographing and
3. Engraving

The company has a job order cost system using a single predetermined expense rate. The management has been made aware of the deficiencies of using such a rate and is now interested in departmentalizing factory overhead. A study reveals that: Department 1 has 3 similar machines representing a large investment and calling for high repairs and depreciation charges. Department 2 has the workers perform similar tasks and are therefore paid the same hourly wage. Department 3 however has several classes of workers; each group being paid the same hourly wage. The estimated factory overhead and production data costs are as follows:

	Printing and Binding	Lithographing	Engraving
Factory Overhead (₹)	40,000	68,750	1,20,000
Direct Labour Hours	10,000	20,000	40,000
Direct Labour Cost (₹)	25,000	55,000	80,000
Machine Hours	20,000	Nil	Nil

Required:

1. An analysis to advice the management regarding the types of rates to be used in these departments.
2. A computation of the rates recommended. **8 marks**