



SRR & CVR GOVERNMENT DEGREE
COLLEGE (A), VIJAYAWADA.

COST AND MANAGEMENT ACCOUNTING

II YEAR BCOM- SEMESTER IV

SYLLABUS

UNIT I: INTRODUCTION

Cost Accounting: Definition- Features- Objectives- Functions- Scope- Advantages and Limitations. Management Accounting: Features- Objectives- Functions- Difference between Cost Accounting & Management Accounting. Elements of Cost- Preparation of Cost Sheet (Including Problems)

UNIT II: TECHNIQUES OF INVENTORY CONTROL AND LABOUR

Valuation of Material Issues: FIFO- LIFO- Simple Average and Weighted Average methods. Labour: Direct and Indirect Labour cost- Methods of Payment of Wages- Incentive Schemes- Time Rate Method, Piece Rate Method, Halsey, Rowan Methods and Taylor Methods only (Including Problems) Labour Turnover and its causes.

UNIT III: CONTRACT COSTING AND PROCESS COSTING

Definition and Features of Contract Costing- Process Costing features- Treatment of Normal and Abnormal Loss- (Including Problems on Contract Costing and Process Costing)

UNIT IV: FINANCIAL STATEMENT ANALYSIS AND INTERPRETATION

Financial Statements- Features, Limitations- Need, Meaning, Objectives and Process of Financial Statement Analysis- Comparative Analysis- Common Size Analysis- Trend Analysis (Including Problems)

UNIT V: MARGINAL COSTING

Meaning and Features of Marginal Costing- Contribution- Profit Volume Ratio- Break Even Point- Margin of Safety- Estimation of Profit and Estimation of Sales (Including Problems)

QUESTION PAPER FORMAT

II B.Com- Semester- IV

COST AND MANAGEMENT ACCOUNTING

Time: 3 Hours

Max. Marks: 60

Section-A [5 X 4=20]

*Answer any **FIVE** of the following questions.*

1. Contents of Unit-I
2. Contents of Unit-I
3. Contents of Unit-II
4. Contents of Unit-II
5. Contents of Unit-III
6. Contents of Unit-III
7. Contents of Unit-IV
8. Contents of Unit-IV
9. Contents of Unit-V
10. Contents of Unit-V

Section-B [5 x 8=40]

*Answer **FIVE** questions*

11. (a) Theory Question- Contents of Unit-I
(OR)
(b) Product Cost Sheet- Problem- Unit-I
12. (a) Material Issues- Problem- Unit-II
(OR)
(b) Labour Remuneration- Problem-Unit-II
13. (a) Contract Costing- Problem-Unit-III
(OR)
(b) Process Costing- Problem- Unit-III
14. (a) Comparative Analysis/Trend percentages- Problem-Unit-IV
(OR)
(b) Common Size Analysis- Problem-Unit-IV
15. (a) Marginal Costing- Problem- Unit-V
(OR)
(b) Marginal Costing- Problem- Unit-V

MODEL PAPER

II B.Com- Semester- IV

COST AND MANAGEMENT ACCOUNTING

Time: 3 Hours

Max. Marks: 60

Section-A [5 X 4=20]

Answer any FIVE of the following questions.

1. Objectives of Cost Accounting
2. Functions of Management Accounting
3. FIFO Method
4. Rowan Premium Bonus Plan
5. Features of Contract Costing
6. Abnormal Loss
7. Types of Financial Statement Analysis
8. Common Size Balance Sheet
9. Contribution
10. Break Even Point

Section-B [5 x 8=40]

Answer FIVE questions.

11.(a) Explain the differences between Cost Accounting and Management Accounting.

(OR)

(b) Prepare cost sheet of Sri Vinayaka Enterprises for the year ended 31st March 2020.

Particulars	Amount (₹)
Raw Materials Purchases	55,000
Direct Labour	30,000
Direct Expenses	10,000
Factory Overhead	25,000
Office & Administration Overhead	15,000
Selling & Distribution Overhead	20,000
Profit	10,000

Inventory	Opening Stock (₹)	Closing Stock (₹)
Raw Materials	10,000	5,000
Work- in - Progress	15,000	25,000
Finished Goods	20,000	15,000

12.(a) With the help of the following information, prepare Stores Ledger Card based on the Weighted Average method of pricing issues:

September

- 1 Opening balance 24,000 kg
@ ₹ 7,500 per tonne
- 1 Purchase 44,000 kg @ ₹ 7,600 per tonne
- 1 Issue 10,000 kg
- 5 Issue 16,000 kg
- 12 Issue 24,000 kg
- 13 Purchase 10,000 kg @ ₹ 7,800 per tonne
- 18 Issue 20,000 kg
- 22 Purchase 50,000 kg @ ₹ 8,000 per tonne
- 28 Issue 30,000 kg
- 30 Issue 22,000 kg

(OR)

(b) From the following information relating to a worker calculate which of the following method of wage payment is beneficial to the worker:

- i. Time rate
- ii. Piece rate
- iii. Halsey Plan
- iv. Rowan Plan

Standard time in a week: 45 hours

Standard Weekly Production: 450 units

Actual time taken by worker: 40 hours

Piece rate: ₹ 2.00 per unit

Hourly rate: ₹ 25 per hour.

13.(a) A firm of building contractor undertook a contract. On 31.12.2021, the position relating to Contract No. 51 was as follows, which commenced ten months ago:

	₹
Materials supplied	3,75,000
Materials on hand	15,000
Wages paid	4,37,500
Wages outstanding	6,250
Proportionate share in indirect expenses	18,750
Cost of Plant	62,500

The value of work certified was ₹ 9,00,000 of which ₹ 6,75,000 had been received in cash. Work completed but uncertified amounted to ₹ 25,000. The contract price was ₹ 15,00,000. The plant at site was valued at ₹ 50,000 on 31.12.2021.

You are required to prepare Contract Account No. 51 after taking credit for profit which you think reasonable.

(OR)

(b) Prepare Process A and B accounts from the following:

Particulars	Process A	Process B
	₹	₹
Material	40,000	4,000
Labour	20,000	15,000
Overheads	10,000	8,500
Input (Units)	20,000	15,000
Normal Loss	10%	5%
Scrap value per unit	2	3
Final Output from Process B were 18,500 units.		

14. (a) From the following information prepare a Comparative Income Statement.

Particulars	2009	2010
	₹	₹
Sales	10,00,000	8,00,000
Cost of Goods Sold	6,00,000	4,00,000
Selling & Dist. exp	2,00,000	1,40,000
Other Incomes	40,000	20,000
Income Tax	1,20,000	1,40,000

(OR)

(b) From the following information prepare Common Size Balance sheet.

Particulars	31/3/2009	31/3/201
	(₹)	(₹)
Equity Share Capital	4,00,000	6,00,000
Debentures	2,00,000	3,25,000
Sundry Creditors	2,55,000	1,17,000
Overdraft	7,000	10,000
Total Liabilities	<u>8,62,000</u>	<u>10,52,000</u>
Plant & Machinery	1,00,000	2,00,000
Land & Buildings	3,60,000	5,40,000
Investments	2,70,000	1,70,000
Sundry Debtors	1,00,000	88,000
Cash in hand	32,000	54,000
Total Assets	<u>8,62,000</u>	<u>10,52,000</u>

15. (a) From the following particulars calculate

- P/V Ratio
- BEP
- Profit when sales are 15,00,000
- Sales to earn a profit of 70,000

Sales = ₹ 10,00,000

Variable Cost = ₹ 6,00,000

Fixed Cost = ₹ 3,00,000

(OR)

(b) Year	Sales	Profit
	₹	₹
2018	2,00,000	20,000
2019	3,00,000	40,000

From the above calculate:

- P/V Ratio
- Fixed Cost
- Profit when Sales are ₹ 1,80,000
- Sales at a profit of ₹ 50,000.

THEORY QUESTION BANK

UNIT I: INTRODUCTION

SHORT ANSWERS:

- Write any five features of Cost Accounting
- Objectives of Cost Accounting
- Functions of Cost Accounting
- Objectives of Management Accounting
- Functions of Management Accounting
- Elements of Cost

ESSAYS:

- Define Cost Accounting. Explain its advantages and Limitations.
- Define Management Accounting. Explain the features of Management Accounting.
- Explain the differences between Cost Accounting and Management Accounting.

UNIT II: TECHNIQUES OF INVENTORY

CONTROL AND LABOUR

SHORT ANSWERS:

- Write a short note on Stores ledger
- FIFO Method
- Direct and Indirect Labour Cost
- Halsey Premium Bonus Plan
- Rowan Premium Bonus Plan
- Labour Turnover

UNIT III: CONTRACT COSTING AND PROCESS

COSTING

SHORT ANSWERS:

- Features of Contract Costing
- Notional Profit
- Features of Process Costing
- Normal Loss
- Abnormal Loss
- Abnormal Gain

UNIT IV: FINANCIAL STATEMENT ANALYSIS AND

INTERPRETATION

SHORT ANSWERS:

- Write about Financial Statements
- What are the Objectives of Financial Statement Analysis?
- What are the types of Financial Statement Analysis?
- Comparative Income Statement
- Common Size Balance Sheet
- Trend Analysis

UNIT V: MARGINAL COSTING

SHORT ANSWERS:

- Meaning and Features of Marginal Costing.
- Contribution
- Profit Volume Ratio
- Break Even Point
- Margin of Safety
- Angle of Incidence
- Break Even Chart

PROBLEMS - QUESTION BANK**UNIT I: INTRODUCTION-PRODUCT COST SHEET**

1. Calculate Raw Materials Consumed for the year 2021.

PARTICULARS	AMOUNT (₹)
Raw Materials Purchases	1,00,000
Opening Stock of Raw Materials as on 01-01-2021	50,000
Closing Stock of Raw Materials as on 31-12-2021	30,000
Freight	2,000
Carriage In-wards	500
Purchase Returns	500

2. Calculate Raw Materials Consumed.

PARTICULARS	AMOUNT (₹)
Opening Stock of Raw Materials	25,000
Closing Stock of Raw Materials	10,000
Raw Materials Purchases	85,000
Carriage	1,000
Purchase Returns	2,000

3. Prepare cost sheet of Sri Vinayaka Enterprises for the year ended 31st March 2020.

Particulars	Amount (₹)
Raw Materials Purchases	55,000
Direct Labour	30,000
Direct Expenses	10,000
Factory Overhead	25,000
Office & Administration Overhead	15,000
Selling & Distribution Overhead	20,000
Profit	10,000

Inventory	Opening Stock (₹)	Closing Stock (₹)
Raw Materials	10,000	5,000
Work- in - Progress	15,000	25,000
Finished Goods	20,000	15,000

4. Details of Inventory:

Particulars	01-01-2019 (₹)	31-12-2019 (₹)
Raw Materials	10,000	5,000
Work- in-Progress	8,000	3,000
Finished Goods	23,000	36,000

Details of expenses incurred during the year 2019:

Particulars	Amount (₹)
Direct Wages	25,000
Selling & Distribution Overhead	15,000
Raw Material Purchases	65,000
Office & Administration Overhead	20,000
Chargeable Expenses	5,000
Factory Overhead	10,000
Sales	2,50,000

Prepare Cost Sheet for the year ending 31-12-2019.

5. Prepare Cost Sheet from the following:

Particulars	Amount (₹)
Raw Materials Consumed	25,000
Production Wages	10,000
Chargeable Expenses	5,000
Factory Overhead @ 80% of Production Wages	
Office & Administration Overhead @ 25% of Factory Cost.	
Selling & Distribution Overhead @ 10% of Cost of Goods Sold	
Profit @ 20% of Cost of Sales.	

6. Prepare Cost Sheet from the following:

Particulars	Amount (₹)
Materials Consumed	20,000
Direct Labour	20,000
Works Overhead @ 60% of Direct Labour	
Office Overhead @ 30% of Works Cost.	
Selling & Distribution Overhead @ 20% of Cost of Goods Sold	
Profit @ 25% of Cost of Sales.	

- 7.** Prepare Cost Sheet of XYZ Ltd for the month of August 2020.

Particulars	Amount (₹)
Materials Consumed	45,000
Direct Labour	25,000
Factory Overhead @ 20% of Factory Cost	
Office & Administration Overhead @ 25% of Cost of Production	
Selling & Distribution Overhead @10% of Cost of Sales	
Profit @ 20% of Sales	

- 8.** Prepare Cost Sheet of ABC Ltd for the month of April 2020.

Particulars	Amount (₹)
Raw Material	20,000
Wages	10,000
Works on Cost @ 10% of Works Cost	
Office on Cost @ 12% of Cost of Production	
Selling on Cost @ 8% of Cost of Sales	
Profit @ 12% of Sales	

- 9.** The following information has been obtained from the cost records of Modern Works Ltd., for three months ending 31st March, 2007 during which 100 units are produced and all the units are sold @ ₹3,000 per unit.

Particulars	Amount (₹)
Stock of raw materials on 1st January, 2007	18,000
Stock of raw materials on 31st March, 2007	21,000
Materials purchased	1,62,000
Carriage paid on purchase	3,000
Depreciation on plant	6,000
Repairs to plant	2,000
Factory rent, taxes and insurance	7,000
Indirect materials	11,000
Indirect labour	9,000
Direct labour	28,000
Depreciation on furniture	3,000
Printing and stationery	1,500
Office salaries and allowances	14,500
Warehouse rent	2,400
Advertising	2,000
Salesmen's salary and commission	2,600

Prepare statement showing the following information:

- (a) Prime cost (b) Works cost (c) Cost of production (d) Cost of sales (e) Total cost (f) Profit.

- 10.** The Accounts of Gama manufacturing company for the year ended 31st December, 2002 show the following:

Particulars	Amount (₹)
Drawing office salaries	6,500
Counting house salaries	12,600
Carriage and cartage outwards	4,300
Carriage and cartage on purchases	7,150
Bad debts	6,500
Repairs of plant, machinery and tools	4,450
Rent, rates, taxes and insurance - factory	8,500
- Office	2,000
Sales	4,61,100
Stock of materials 31st Dec., 2001	62,800
31 st Dec., 2002	48,000
Materials purchased	1,85,000
Loss on sale of investment	1,200
Travelling expenses	2,100
Goodwill written off	4,100
Travellers' salaries and commission	7,700
Preliminary expenses	450
Productive wages	1,26,000
Depreciation - Plant, machinery & tools	6,500
- Furniture	300
Director's fees	6,000
Gas & Water - Factory	1,200
- Office	400
Manager's salary (factory 3/4, Office 1/4)	10,000
General expenses	3,400
Income tax	500
Dividend	1,000

Prepare Cost Sheet.

- 11.** The following data have been extracted from the Books of M/s Moon Shine Industries Ltd. for the calendar year 2007.

Particulars	Amount (₹)
Opening stock of raw materials	25,000
Purchase of raw materials	85,000
Closing stock of raw materials	40,000
Carriage inward	5,000
Wages: Direct	75,000
Indirect	10,000
Other direct charges	15,000
Rent & rates: Factory	5,000
Office	500
Indirect consumption of materials	500
Depreciation: Plant	1,500
Office furniture	400
Salary: Office	2,500
Salesman	2,000
Other factory expenses	5,700
Managing director's remuneration	12,000
Other office expenses	900
Other selling expenses	1,000
Travelling expenses of salesman	1,100
Carriage and freight outward	1,400
Sales	2,50,000
Advance income tax paid	15,000
Advertisement	2,000
Bad debts recovered	500
Interest and dividend received	1,800
Refund of double taxation	700

Managing director's remuneration is to be allocated in the ratio of 2:1:3 for Factory, Office and Sales Departments respectively.

From the above information prepare the different phases of Cost & Net Profit.

UNIT II: (A): MATERIALS

- Q1.** The following receipts and issues were made of a new item of stores:

July 1 Purchases 300 units @ ₹ 10
 4 Issued 120 units to production
 7 Purchased 220 units @ ₹ 11
 18 Issued 200 units to production
 29 Purchased 100 units @ ₹ 12

Prepare Stores Ledger Account of the material for the month of July under FIFO Method of pricing issues.

- Q2.** From the following particulars write up the Stores Ledger under Last-in- first- out.

December 1 Stock in hand 500 units at ₹ 20
 3 Issued 200 units
 3 Purchased 15 units at ₹ 22
 4 Issued 100 units
 5 Purchased 200 units at ₹ 25
 6 Issued 300 units
 6 Returned to store 10 units (Issued on 4th December)
 7 Issued 100 units
 8 Issued 50 units

On 10th it was noticed that there is a shortage of 10 units.

- Q3.** From the following prepare the Stores Ledger under FIFO and LIFO methods of pricing.

Date	Particulars	Quantity	Rate per kg (₹)
June 1	Received	500 kg	10
10	Received	300 kg	12
15	Issued	700 kg	--
20	Received	400 kg	14
25	Issued	300 kg	--
27	Received	500 kg	11
30	Issued	200 kg	--

- Q4.** The following transactions took place in respect of a material during March, 2022.

Date	Particulars	Units	Rate per unit (₹)
March 1	Balance in store	600	4
6	Received	400	5
8	Issued	300	--
25	Received	200	6
30	Issued	250	--

Prepare Stores Ledger under Simple Average Price method and Weighted Average Price method.

Q5. The following transactions took place in respect of a material during the month of June, 2022.

Date	Particulars	Qty/kg	Rate per unit (₹)
June 1	Received	500	10
10	Received	300	12
15	Issued	700	--
20	Received	400	14
25	Issued	300	--
27	Received	500	11

You are required to prepare Stores Ledger under Simple Average Price method and Weighted Average Price method.

Q6. With the help of the following information, prepare Stores Ledger Card based on the Weighted Average method of pricing issues:

September

- 2 Opening balance 24,000 kg @ ₹ 7,500 per tonne
- 2 Purchase 44,000 kg @ ₹ 7,600 per tonne
- 2 Issue 10,000 kg
- 6 Issue 16,000 kg
- 14 Issue 24,000 kg
- 15 Purchase 10,000 kg @ ₹ 7,800 per tonne
- 19 Issue 20,000 kg
- 23 Purchase 50,000 kg @ ₹ 8,000 per tonne
- 29 Issue 30,000 kg
- 31 Issue 22,000 kg

Q7. Prepare a Stores Ledger account from the following transactions assuming that the issue of stores has been priced on the principle of First- in- First- out.

- Jan. 1 Opening stock 2000 units at ₹ 26 each
- 2 Issued 1,000 units
- 3 Issued 800 units
- 4 Purchased 1,500 units at ₹ 27.50 each
- 4 Issued 400 units
- 5 Issued 320 units
- 6 Purchased 1,000 units at ₹ 29 each
- 7 Issued 1,400 units
- 8 Returns to Vendor, purchased on 6thJan. 30 units.
- 9 Received back from the work order, issued on 5th Jan. 40 units.
- 10 Issued 500 units.

On 10th Jan. when the stock is verified, it is found that the actual stock is more by 20 units.

UNIT II:(B): LABOUR

Q1. Rana works in a factory, following particulars are given.

Normal Rate per hour: ₹ 1.50

Normal Piece Rate: 20% more than time rate

Expected output: 20 units per hour.

Rana produces 150 units in an 8-hour day.

Calculate his wages for the day on

- (a) Time Basis
- (b) Piece Basis

Q2. From the following particulars find out the earnings of workers A, B and C under:

- (a) Normal Piece Rate
- (b) Taylor's Differential Piece Rate System

Normal Rate per hour: ₹ 18.00

Standard time: 1 minute per unit

In a day production is as follows:

Worker A: 384 units

Worker B: 450 units

Worker C: 552 units

Working hours in a day is 8 hours.

Q3. From the following particulars calculate Earnings of workers A and B under:

- (a) Normal Piece Rate
- (b) Taylor's Differential Piece Rate System

Normal Rate per hour: ₹ 1.80

Standard time: 20 seconds per unit

Differential Piece Rate:

Low Piece Rate = 80% of Piece Rate

High Piece Rate = 120% of Piece Rate

Worker A produces 1,300 units in a day

Worker B produces 1,500 units in a day

Q4. The following particulars apply to a particular job:

Standard Production per hour: 6 units

Normal Rate per hour: ₹ 1.20

In an 8-hour day:

Mohan produces 32 units

Sohan produces 42 units

Lakhan produces 50 units

Calculate the wages of these workers under Taylor's Differential Piece Rate System.

Q5. From the following information relating to a worker calculate which of the following method of wage payment is beneficial to the worker:

- (a) Time rate
- (b) Piece rate
- (c) Halsey Plan
- (d) Rowan Plan

Standard time in a week: 45hours

Standard Weekly Production: 450 units

Actual time taken by worker: 40 hours

Piece rate: ₹ 2.00 per unit

Hourly rate: ₹ 25 per hour.

UNIT III:(A): CONTRACT COSTING

Q6. A worker takes 9 hours to complete a job on daily wages and 6 hours on scheme of Payment by Results, his day rate is ₹ 50 per hour. The material cost of the product is ₹ 200 and the overheads are recovered at 150% of direct wages. Calculate factory cost of the product under:

- (a) Piece Rate
- (b) Halsey Plan
- (c) Rowan Plan

Q7. A worker takes 9 hours to complete a job On daily wage and 6 hours on a scheme of Payment by Result. His day rate is ₹ 100 per hour. Material Cost of the product is ₹ 5,000 and the Overheads are recovered at 150% of the total wages. Calculate the factory cost of the production under:

- (a) Piece Rate
- (b) Halsey Plan
- (c) Rowan Plan

Q8. A worker takes 9 hours to complete a job On daily wage and 6 hours on a scheme of Payment by Result. His day rate is ₹ 0.75 per hour. Material Cost of the product is ₹ 4 and the Overheads are recovered at 150% of the total wages. Calculate the factory cost of the production under:

- (a) Piece Rate
- (b) Halsey Plan
- (c) Rowan Plan

Q9. A worker completes a job in a certain number of hours. The standard time allowed for the job is 10 hours and the hourly rate of wages is ₹ 1. The worker earns at the 50% rate bonus of ₹ 2 under Halsey Plan. Ascertain his total wages under the Rowan Premium Plan.

Q10. The standard time allowed for the job is 30 hours. The hourly rate of guaranteed wages is ₹ 1.50. Because of saving in time, a worker X gets an hourly wage of ₹ 1.80 under Rowan Premium Bonus System for the same saving in time, calculate the hourly rate of wages a worker will get under Halsey Premium Bonus System.

Q1. The following particulars are extracted from the books of Fast Constructions, in respect of Contract No. 1369 for the year ending 31.12.2021.

	₹
Contract Price	8,00,000
Materials bought for the contract	3,20,000
Wages paid	2,30,000
Direct charges	20,000
Establishment charges	15,000
Materials transferred from other contracts	20,000
Plant bought	80,000
Materials transferred to other contracts	18,000
Stock of materials on 31.12.2021	12,000
Value of plant at site on 31.12.2021	40,000

The contract is completed during the year and the full amount is received from the contractee. Prepare the contract account and contractee's account for the period.

Q2. A firm of building contractor undertook a contract. On 31.12.2021, the position relating to Contract No. 51 was as follows, which commenced ten months ago:

	₹
Materials supplied	3,75,000
Materials on hand	15,000
Wages paid	4,37,500
Wages outstanding	6,250
Proportionate share in indirect expenses	18,750
Cost of Plant	62,500

The value of work certified was ₹ 9,00,000 of which ₹ 6,75,000 had been received in cash. Work completed but uncertified amounted to ₹ 25,000. The contract price was ₹ 15,00,000. The plant at site was valued at ₹ 50,000 on 31.12.2021. You are required to prepare Contract Account No. 51 after taking credit for profit which you think reasonable.

Q3. Prepare Contract account from the following:

	₹
Contract price	9,00,000
Materials Purchased	2,25,000
Wages paid	1,37,500
General Expenses	21,000
Plant purchased	2,50,000
Wages payable	45,000
Closing material at site	30,000
Material lost in theft	6,000

	₹
Depreciation on plant	12,500
Value of work certified	6,00,000
Value of work uncertified	1,00,000
Cheque received from Contractee	5,00,000

Q4. The contractor accepted a contract for the construction of a building for ₹ 10,00,000. The contractee agreeing to pay 90% of the work certified as certified by the architect. During the year the amounts spent were,

	₹
Materials	1,20,000
Labour	1,50,000
Machinery	30,000
Other expenses	90,000

At the end of the year the machinery was considered to be of ₹ 20,000 and materials at site of the value ₹ 5,000. Work certified totalled ₹ 4,00,000 and work uncertified ₹ 15,000. Prepare Contract Account.

Q5. The following is the information relating to Contract No. 123:

	₹
Contract Price	6,00,000
Wages	1,64,000
General expenses	8,600
Raw material	1,20,000
Plant	20,000

As on date, cash received was ₹ 2,40,000 being 80% of work certified. The value of materials remaining at site was ₹ 10,000. Depreciate plant by 10%. Prepare the Contract Account.

Q6. A contractor obtained a contract for ₹ 12,00,000 on 1st January 2021. The expenses incurred during the year ended 31st December 2021 were as under:

	₹
Materials	3,60,000
Wages	3,20,000
Wages accrued	20,000
Other expenses	50,000

The plant specially installed for the contract worth of ₹ 90,000 was returned to stores subject to a depreciation of 20%. Materials on 31st December 2021 was valued at ₹ 48,000.

The contractor received ₹ 7,20,000 in cash representing 80% of the work certified. The work uncertified was estimated at ₹ 8,000. Prepare Contract Account.

Q7. Anand undertook a contract for constructing a building from Bharat on 1.1.2021. The contract price is ₹ 12,00,000

	₹
Materials Purchased	80,000
Materials supplied from stores	10,000
Materials return to stores	5,000
Labour	30,000
Direct Expenses	20,000
Plant installed	40,000
Establishment charges	5,000
Cash received from Contractee (80% of Work Certified)	2,00,000
Uncertified work	50,000
Materials on 31.12.2021	2,000
Plant on 31.12.2021	30,000

Prepare Contract and Contractee accounts.

Q8. Sriram commenced his contract on 1st January 2021. Prepare the contract from the following information:

Materials issued	₹ 60,000
Wages 50% of materials cost	
Indirect expenses 25% of wages	
Plant	₹ 21,000
Materials worth ₹ 2,000 were lost and worth ₹ 1,000 were stolen.	
Plant at site on 31.12.2021	₹ 18,000
Cash received is ₹ 1,20,000 which is 80% of work certified.	
Work uncertified	₹ 4,500
Contract price	₹ 2,00,000

Q9. Mr Sudhir undertook a contract for the construction of a building on 1st January 2021. The Contract price being ₹ 7,50,000. The following details are available for the year 2021.

	₹
Materials Purchased	1,20,000
Materials issued from stores	1,50,000
Labour employed on site	45,000
Plant installed on site	60,000
Direct expenses	30,000
Proportionate Establishment charges	7,500
Cash received (80% of work certified)	3,00,000
Work Uncertified	75,000
Materials returned to stores	7,500
Materials in hand at the end	45,000
Wages outstanding	9,000
Direct expenses accrued	12,000

Prepare Contract account and Contractee account.

Q10. Mr. Bharath undertook a Contract No. 501 on 1st July 2021. On 31st March 2022. When the accounts were closed, the following information was available:

	₹
Material issued to site	55,000
Direct expenses paid	6,000
Site office costs	10,000
Plant	2,00,000
Direct expenses prepaid	1,000
Cost of work uncertified	20,000
Wages paid	18,000
General Overheads	25% of Wages
Costs of Sub- Contracts	15,000
Wages accrued at the end	2,000
Materials at site at the end	5,000
Cash received ₹ 2,00,000 being 80% of Work Certified.	

The Plant was installed on the respective date of the contract and depreciation is to be provided at 10% per annum.

Required: Prepare Contract Account, Contractee's Account .

UNIT III:(B): PROCESS COSTING

Q1. The manufacture of a product 'X' requires two distinct processes, Process I and Process II. On completion, the product is transferred from Process II to finished stock. The following relate to the product for a particular period.

Element of Cost	Process I	Process II
	₹	₹
Direct Material	8,000	2,000
Direct Labour	6,000	7,000
Direct Expenses	4,000	3,000
Production OH	2,000	1,000

Production during the period was 1,000 units. There was no stock of raw materials or work-in-progress either at the beginning or at the end of the period. Show the process accounts until the final process is completed.

Q2. A product passes through different processes to completion. 1,000 units are introduced to Process I at a cost of ₹ 20 per unit. Direct Labour and Direct Expenses for the process were ₹ 7,000 and ₹ 3,000 respectively. Overhead expenses amounted ₹ 2,000.

Past experience shows that 10% of the material introduced to the process would lose normally. Actual production was 900 units. Units lost realised a scrap value of 6 per unit.

Show the preparation of the Process Account as well as the Normal Loss Account.

Q3. 1,000 units of raw materials were introduced to Process 'X' at ₹ 10 per unit. Direct labour and other expenses were ₹ 3,000 and ₹ 2,000 respectively.

Past experience shows that 10% of the units introduced to the process are normally lost which possesses a scrap value of ₹ 6 per unit. The actual production from the process were only 850 units to be transferred to Process Y.

Prepare the Process X Account and also the Abnormal Loss and Normal Loss Account.

Q4. 900 units were introduced from Process X to Y at a cost of ₹ 60 per unit. The expenses of the process were- Labour ₹ 12,000, Materials ₹ 3,240 and Overheads at 50% of labour. Normal loss expected in the process was 10% of the units introduced to the process with a scrap value of ₹ 8 per unit. The actual output of the Process Y was 820 units to be transferred to Process Z.

Prepare Process Y Account, Normal Loss Account and Abnormal Gain Account.

Q5. Prepare the necessary process accounts from the following information:

Particulars	Process A	Process B
	₹	₹
Materials	30,000	3,000
Labour	10,000	12,000
Overheads	7,000	17,000
Input (units)	20,000	17,500
Normal Loss	10%	4%
Sale value of Wastes per unit	1	2

There is no opening or closing stock or work-in- progress. The final output from Process B is 17,000 units.

Q6. Prepare Process Accounts from the following:

Particulars	Process I	Process II
	₹	₹
Indirect Materials	10,000	13,000
Direct Labour	10,000	13,100
Production OH	20,000	10,000
Normal Loss		
(% of Input)	5%	5%
Scrap value per unit	5	5
Output (Units)	19,000	18,800

2,000 units costing ₹ 60,000 are introduced in Process I.

Q.7. Prepare Process A and B accounts from the following:

Particulars	Process A	Process B
	₹	₹
Material	40,000	4,000
Labour	20,000	15,000
Overheads	10,000	8,500
Input (Units)	20,000	15,000
Normal Loss	10%	5%
Scrap value per unit	2	3

Final Output from Process B were 18,500 units.

Q.8. A product passes through three processes A,B,C. From the following prepare Process Account.

Particulars	A ₹	B ₹	C ₹
Materials	17,000	20,000	25,000
Wages	13,000	8,000	9,000
Overheads	8,000	7,150	8,210
Production (Units)	4,750	4,200	3,750
Normal Loss	5%	10%	15%
Scrap Value (₹ Per Unit)	5	20	25
No. of units Introduced	5,000	-	-
Value of units introduced	₹5,000	-	-

Q.9. A product pass through three processes A, B, and C. The normal loss of each process is as follows:

Process A-3%, Process B-5% & Process C-8%
Loss of process A was sold at 25 paise per unit, B at 50 paise per unit and that of C at 1 rupee per unit.

10,000 units were introduced to Process A at One rupee per unit. The Other expenses were as follows:

Particulars	A ₹	B ₹	C ₹
Materials	2,050	2,688	2,509
Labour	5,000	8,000	6,500
Actual Output (in units)	9,500	9,100	8,100

Prepare Process Accounts, assuming that there were no Opening or Closing Stocks.

Q.10. A product passes through three processes namely A, B & C. From the following information, you are required to prepare Process Accounts.

Particulars	A ₹	B ₹	C ₹
Direct Material	20,000	30,200	34,620
Direct Labour	30,000	40,000	50,000
Direct Expenses	5,000	2,260	-
Normal Loss	10%	5%	10%
Sale of scrap (₹ per unit)	30	50	60
Production (Units)	920	870	800

Production Overhead ₹ 60,000

(To be apportioned on the basis of wages)

UNIT IV: FINANCIAL STATEMENT ANALYSIS AND INTERPRETATION

A. COMPARATIVE INCOME STATEMENT

Q.1. From the following information prepare a Comparative Income Statement.

Particulars	2009 ₹	2010 ₹
Sales	10,00,000	8,00,000
Cost of Goods Sold	6,00,000	4,00,000
Selling & Dist. exp	2,00,000	1,40,000
Other Incomes	40,000	20,000
Income Tax	1,20,000	1,40,000

Q.2. From the following prepare Comparative Income Statement.

Particulars	2009 (₹'000)	2010 (₹'000)
Sales	1,000	1,400
Other Income	40	30
	<u>1,040</u>	<u>1,430</u>
Expenses:		
Cost of Goods Sold	650	1,020
Office Expenses	40	50
Selling Expenses	60	90
Interest	50	60
	<u>800</u>	<u>1,220</u>
Net Profit	240	210

Q.3. Costs & Incomes of XYZ Company are given below:

Particulars	2002 ₹	2001 ₹
Sales	8,16,000	6,56,500
Sales Returns	16,000	6,500
Cost of Goods Sold	4,00,000	3,12,000
Selling & Dist. Exp	2,00,000	1,30,000
General Expenses	1,20,000	78,000
Other Incomes	6,400	6,500
Income Tax	32,000	67,000

Prepare Comparative Income Statement of XYZ Company and Comment.

B. COMPARATIVE BALANCE SHEET

Q.4. From the following Balance Sheet prepare a Comparative Balance Sheet.

	31 st March 2012 (₹)	31 st March 2013 (₹)
Equity Share Capital	5,00,000	10,00,000
Preference Share Cap	1,00,000	2,00,000
General Reserve	1,00,000	2,50,000
Creditors	1,00,000	2,00,000
Outstanding Exp	50,000	50,000
Profit & Loss A/c	2,00,000	3,00,000
	<u>10,50,000</u>	<u>20,00,000</u>

Fixed Assets	4,00,000	10,00,000
Investments	3,00,000	1,00,000
Bills Receivable	2,00,000	4,00,000
Inventories	1,00,000	4,00,000
Cash	50,000	1,00,000
	<u>10,50,000</u>	<u>20,00,000</u>

Q.5. From the following Balance Sheet prepare a Comparative Balance Sheet of a company.

Liabilities	2011 (₹)	2012 (₹)
Equity Share Capital	2,00,000	3,30,000
Preference Share Cap	1,00,000	1,50,000
Reserve	20,000	30,000
Profit & Loss A/c	15,000	20,000
Bank Overdraft	50,000	50,000
Creditors	40,000	50,000
Provision for Tax	20,000	25,000
Proposed Dividend	15,000	25,000
	<u>4,60,000</u>	<u>6,80,000</u>

Assets	2011 (₹)	2012 (₹)
Fixed Assets	2,40,000	3,50,000
Stock	40,000	50,000
Debtors	1,00,000	1,25,000
Bills Receivable	20,000	60,000
Pre- Paid Expenses	10,000	12,000
Cash in hand	40,000	53,000
Cash at bank	53,000	30,000
	<u>4,60,000</u>	<u>6,80,000</u>

Q.6. Suresh Ltd furnishes its balance sheet for the year 1999 and 2000. Prepare Comparative Balance Sheet.

Liabilities	1999 (₹)	2000 (₹)
Equity Share Capital	80,000	80,000
Debentures	80,000	90,000
Retained Earnings	40,000	49,000
Sundry Creditors	50,000	70,000
Bills Payable	10,000	15,000
	<u>2,60,000</u>	<u>3,04,000</u>

Assets	1999 (₹)	2000 (₹)
Land & Buildings	80,000	74,000
Machinery	60,000	54,000
Furniture	20,000	28,000
Inventory	40,000	60,000
Debtors	40,000	80,000
Cash	20,000	8,000
	<u>2,60,000</u>	<u>3,04,000</u>

C. COMMON- SIZE INCOME STATEMENT

Q.7. From the following prepare Common size income statement.

Particulars	(₹)
Sales	7,50,000
Purchases	3,75,000
Opening Stock	70,000
Closing Stock	80,000

Administrative Expenses:

Salaries	37,000
Rent	12,000
Postage	5,000
Provision for Taxation	50,000

Selling & Distribution Expenses:

Salaries	18,000
Advertising	6,000
Commission on sales	7,500
Discount	2,000

Non- Operating Expenses:

Interest	5,000
Loss on sale of assets	11,500

Non- Operating Income:

Profit on Investments	9,500
	<u>14,38,500</u>

Q.8. Following is the information relating to A Company and B Company. Prepare Common Size Income Statement.

Particulars	A Company (₹ in Lakhs)	B Company (₹ in Lakhs)
Net Sales	7.85	9.1
Cost of Goods Sold	4.52	5.03
Administrative Expenses	0.73	0.75
Selling Expenses	0.90	0.82
Interest Paid	0.24	0.30
Other Income	0.08	0.06
Rate of Income Tax	30%	

Q.9. Prepare Common size Income Statement from the following information.

	2014 (₹)	2015 (₹)
Cost of Goods Sold	1,00,000	2,00,000
Net Sales	1,80,000	2,60,000
Office Expenses	20,000	25,000
Selling Expenses	10,000	15,000
Financial Expenses	10,000	8,000
Profit	40,000	12,000

Q.10. Prepare Common Size Income Statement from the following information.

	XY Ltd (₹)	AB Ltd (₹)
Sales	1,50,000	8,00,000
Cost of Goods Sold	1,20,000	6,00,000
Office Expenses	7,000	50,000
Selling Expenses	8,000	70,000
Interest Paid	2,000	20,000

D. COMMON- SIZE BALANCE SHEET

Q.11. From the following information, prepare Common Size Balance Sheet.

Liabilities	A Ltd. (₹ in Lakhs)	B Ltd. (₹ in Lakhs)
Creditors	42	154
Other Current Liabilities	78	62
Long term Loan	225	318
Capital	658	493
	<u>1,003</u>	<u>1,027</u>
Assets	A Ltd. (₹ in Lakhs)	B Ltd. (₹ in Lakhs)
Cash	27	72
Debtors	220	226
Inventory Balance	100	174
Prepaid Expenses	11	21
Other Current assets	10	21
Fixed Assets (Net)	635	513
	<u>1,003</u>	<u>1,027</u>

Q.12. From the following information prepare Common Size Balance sheet.

Particulars	31/3/2009 (₹)	31/3/2010 (₹)
Equity Share Capital	4,00,000	6,00,000
Debentures	2,00,000	3,25,000
Sundry Creditors	2,55,000	1,17,000
Overdraft	7,000	10,000
Total Liabilities	<u>8,62,000</u>	<u>10,52,000</u>
Plant & Machinery	1,00,000	2,00,000
Land & Buildings	3,60,000	5,40,000
Investments	2,70,000	1,70,000
Sundry Debtors	1,00,000	88,000
Cash in hand	32,000	54,000
Total Assets	<u>8,62,000</u>	<u>10,52,000</u>

Q.13. From the following information, prepare Common Size Balance Sheet.

Liabilities	31/3/2011 (₹)	31/3/2012 (₹)
Capital	1,000	1,200
Capital Reserve	90	185
General Reserve	500	450
Contingency Reserve	90	100
Debenture	450	650
Creditors	200	150
Other Liabilities	15	20
	<u>2,345</u>	<u>2,755</u>
Assets	31/3/2011 (₹)	31/3/2012 (₹)
Debtors	450	390
Cash	200	15
Inventory	320	250
Investments	300	250
Buildings	800	1,400
Land	198	345
Furniture	77	105
	<u>2,345</u>	<u>2,755</u>

E. TREND ANALYSIS

Q.14. The following figures relate to FLtd. Calculate Trend values and comment.

Year	Revenue from Operations (₹)	Gross Profit (₹)
2010	75,000	16,125
2011	1,10,000	20,200
2012	1,00,000	21,000
2013	1,20,000	24,000
2014	68,000	14,000
2015	1,87,500	45,000

Q.15. The following figures relates to company. Calculate Trend Percentages and comment.

Year	Sales (₹)	Inventory (₹)	Profit (₹)
2000	1,881	709	321
2001	2,340	781	435
2002	2,655	816	458
2003	3,021	944	527
2004	3,768	1,154	672

Q.16. The following information relates to Venkat Profit & Loss A/c, Analyse the data using Trend Percentages.

Year	Sales (₹)	Wages (₹)	Bad-debts (₹)	Profit (₹)
2010	3,50,000	50,000	14,000	16,000
2011	4,15,000	60,000	26,000	24,500
2012	4,25,000	75,200	29,000	45,000
2013	4,60,000	85,000	33,000	60,000

UNIT V: MARGINAL COSTING

Q.1. Selling Price per unit = ₹ 25
Variable Cost per unit = ₹ 12
Production = 10,000 units.
Calculate contribution per unit and total contribution.

Q.2. Fixed Cost = ₹ 1,00,000 at a production of 5,000 units. Profit at this level is ₹ 25,000.
Calculate total contribution.

Q.3. Contribution per unit = ₹ 8
Production units = 50,000
Fixed Cost = ₹ 2,50,000
Calculate Profit.

Q.4. Selling Price per unit = ₹ 20
Variable Cost per unit = ₹ 14
Production = 75,000 units
Profit at this level = ₹ 1,00,000
Calculate Fixed Cost.

Q.5. Variable Cost per unit = ₹ 9
Fixed Cost = ₹ 1,15,000
Profit = ₹ 50,000
Production = 15,000 units.
Calculate Selling Price per unit.

Q.6. Calculate Profit- Volume Ratio from the following particulars:
Selling Price per unit = ₹ 120
Variable Cost per unit = ₹ 60

Q.7. Selling Price per unit = ₹ 90
Variable Cost per unit = ₹ 50
Fixed Cost = ₹ 4,00,000
Calculate Break Even Point.

Q.8. Fixed Cost = 4,00,000
Variable Cost per unit = 50
Calculate Selling Price per unit when Break Even Point in units is 9,000.

Q.9. Sales = ₹ 25,00,000
Fixed Cost = ₹ 2,50,000
Variable Cost = ₹ 20,00,000
Calculate Break Even Point value in Rupees.

Q.10. Sales = ₹ 1,00,000
Fixed Cost = ₹ 40,000
Profit = ₹ 20,000
Calculate:
a. P/V Ratio
b. Break Even Point
c. Sales Required to earn a desired profit of ₹ 20,000

Q.11. Sales = ₹ 30,00,000
BEP (₹) = ₹ 20,00,000
Calculate Margin of Safety and MOS Ratio.

Q.12. Sales = ₹ 5,00,000
Fixed Cost = ₹ 1,00,000
Profit = ₹ 1,50,000
Calculate:
a. P/V Ratio
b. BEP
c. MOS

Q.13. Calculate
a) P/V Ratio
b) Break Even Point
c) Margin of Safety
Sales = ₹ 4,00,000
Fixed Cost = ₹ 40,000
Profit = ₹ 35,000

Q.14. From the following particulars calculate:
a) P/V Ratio
b) Break Even Point
c) Margin of Safety
d) Sales required to earn a profit ₹ 1,50,000
e) Profit when sales are of ₹ 1,00,000
Sales = ₹ 5,00,000
Fixed Cost = ₹ 1,50,000
Profit = ₹ 1,00,000

Q.15. From the following particulars calculate
a) P/V Ratio
b) BEP
c) Profit when sales are 15,00,000
d) Sales to earn a profit of 70,000
Sales = ₹ 10,00,000
Variable Cost = ₹ 6,00,000
Fixed Cost = ₹ 3,00,000

Q.16. From the following particulars calculate:

- Contribution
- P/V Ratio
- Break Even in units and in rupees
- What will be the selling price per unit if the break-even is brought down to 25,000 units?

Fixed Expenses = ₹ 1,50,000

Variable Cost per unit = ₹ 10

Selling Price per unit = ₹ 15

Q.17. Calculate BEP and MOS from the following data:

Sales = 4,20,000

Fixed Cost = 90,000

Variable Cost Ratio = 50% of Sales.

Q.18. Sales and profit of two years

Year	Sales ₹	Profit ₹
2015	1,50,000	20,000
2016	1,70,000	25,000

Find out:

- P/V Ratio
- Break Even Point
- Sales to earn a profit of ₹ 40,000
- What is profit when sales are ₹ 2,50,000?

Q.19. The following information relates to production and sale of an article for January and February 2022.

Particulars	January ₹	February ₹
Sales	38,000	65,000
Profit	---	3,000
Loss	2,400	----

Calculate:

- Break Even Sales
- Profit or Loss at ₹ 46,000 sales
- Sales to earn a profit of ₹ 5,000

Q.20. The following figures of sales and profits for two periods are available in respect of a concern:

Particulars	Sales ₹	Profit ₹
Period I	1,00,000	15,000
Period II	1,20,000	23,000

You are required to find out:

- P/V Ratio
- Profit at an estimated sale of ₹ 1,25,000

Q.21. The sales turnover and profit during two years were as follows:

Year	Sales ₹	Profit ₹
2016	1,40,000	15,000
2017	1,60,000	20,000

You are required to calculate:

- P/V Ratio
- Sales required to earn a profit of ₹ 40,000
- Profit when sales are ₹ 1,20,000

Q.22.

Year	Sales ₹	Total Cost ₹
2019	6,00,000	5,00,000
2020	8,00,000	6,50,000

You are required to find out:

- P/V Ratio
- Break Even Point
- Margin of Safety.

Q.23.

Year	Sales ₹	Profit ₹
2018	2,00,000	20,000
2019	3,00,000	40,000

From the above calculate:

- P/V Ratio
- Fixed Cost
- Profit when Sales are ₹ 1,80,000
- Sales at a profit of ₹ 50,000.

Q.24. Given, Selling Price = ₹ 12 per unit.
Variable Cost = ₹ 8 per unit
Fixed Cost = ₹ 40,000

- P/V Ratio
- Breakeven Point (units and ₹)
- Profits when actual sales are 10% more than the breakeven sales
- Sales to earn a profit @ 10% on sales.
- Sales to earn a profit of ₹ 8,000.

Q.25. A company gives you the following data:

	₹
Fixed Cost	3,000
BEP	60,000
Profit	3,000

Calculate the following:

- Sales
- Variable Cost

Q.26. A company gives the following data:
Contribution/Sales Ratio 40%
MOS 20%

Annual Fixed Cost ₹ 30,000. Calculate:

- Breakeven Sales
- Total Sales
- Variable Cost
- Profit



SRR & CVR GOVERNMENT DEGREE COLLEGE (A), VIJAYAWADA.

COST AND MANAGEMENT ACCOUNTING

II YEAR BCOM- SEMESTER IV

UNIT I: INTRODUCTION

SHORT ANSWERS:

Q.1. Write any five features of Cost Accounting.

“Cost accounting is the application of accounting and costing principles, methods and techniques in the ascertainment of costs and the analysis of savings and/or excesses as compared with the previous experience or with standards”. – **Wheldon**

Features of Cost Accounting:

1. Cost accounting is a branch of accounting.
2. Cost accounting is complementary/supplementary to financial accounting.
3. Cost accounting provides cost information.
4. Cost accounting uses accounting principles and procedures relating to recording of income and expenditure.
5. Cost accounting is a science as well as an art. Cost accounting is a science since it contains systematized knowledge which the accountant applies. Cost accounting is an art since the application of techniques and methods require skill and judgement.

Q.2. Objectives of Cost Accounting

“Cost accounting is the application of accounting and costing principles, methods and techniques in the ascertainment of costs and the analysis of savings and/or excesses as compared with the previous experience or with standards”. – **Wheldon**

Objectives of Cost Accounting:

1. To ascertain cost of various products, jobs, service, etc.,
2. To determine selling price.
3. To control Cost.
4. To help in preparation of financial and other statements.
5. To formulate operating policies.

Q.3. Functions of Cost Accounting

“Cost accounting is the application of accounting and costing principles, methods and techniques in the ascertainment of costs and the analysis of savings and/or excesses as compared with the previous experience or with standards”. – **Wheldon**

Functions of Cost Accounting:

1. Analysis and Ascertainment of Costs.
2. Presentation of costs for Cost Reduction and Cost Control.
3. To serve as a tool for planning and decision making.
4. To serve as an index of managerial performance.
5. To protect interests of the investors.
6. To report to the government.

Q.4. Objectives of Management Accounting

“Management Accounting is application of professional knowledge and skill in the preparation of accounting information in such a way as to assist management in the formation of policies and in the planning and control of the operations of the undertaking”.

- **ICMA, LONDON**

Objectives of Management Accounting:

1. Increase the overall operational efficiency of the enterprise.
2. Help management in planning and policy formulation.
3. Helpful in controlling performance.
4. Helpful in Organizing.
5. Helpful in interpreting financial information.
6. Helpful in making decisions.

Q.5. Functions of Management Accounting

“Management Accounting is application of professional knowledge and skill in the preparation of accounting information in such a way as to assist management in the formation of policies and in the planning and control of the operations of the undertaking”.

- **ICMA, LONDON**

Functions of Management Accounting:

1. Planning and Forecasting
2. Modification of Data according to the requirements of management.
3. Financial Analysis and Interpretation.
4. Facilitating Management Control
5. Use of Qualitative information.
6. Supplying information to various levels of management.

Q.6. Elements of Cost There are three elements of cost:

1. **Materials:** The term materials may be defined as the substances from which the products are manufactured. Materials may be direct or indirect.
2. **Labour:** The term labour may be defined as the human effort by which materials are converted into finished products. Labour may be direct or indirect.
3. **Expenses:** Costs other than material cost and labour cost are known as expenses. Expenses may be direct or indirect.

❖ **PRIME COST** is the total of Direct material, Direct Labour and Direct Expenses.

❖ **OVERHEADS** is the total of Indirect material, Indirect Labour and Indirect Expenses.

ESSAYS:**Q.1. Define Cost Accounting. Explain its advantages and Limitations.**

Cost accounting is a recent development born in respect to the needs of managers for detailed information about the cost of a product or service.

The characteristic features of modern industry, especially large-scale production, keen competition and complexity of the structure of production necessitated production of goods and services at the lowest possible cost. Management became tremendously cost conscious.

Definition of Cost Accounting:

1. "Cost accounting is the application of accounting and costing principles, methods and techniques in the ascertainment of costs and the analysis of savings and/or excesses as compared with the previous experience or with standards". – **Wheldon**
2. "Cost accounting is the process of recording, classifying, allocating and reporting various costs incurred in the operations of an enterprise". – **J.M. FREMGEN**

Advantages of Cost Accounting:**I. Advantages to Management:**

- i. Helps in ascertainment of cost of each product, process, job, contract, activity etc.,
- ii. Helps in cost control.
- iii. Helps management in various decision making.
- iv. Helps in fixing selling prices.
- v. Helps in inventory control
- vi. Helps in cost reduction.
- vii. Profitable and unprofitable activities are disclosed.
- viii. It enables a concern to measure the efficiency and then to maintain and improve it.
- ix. Helps in improving productivity.
- x. Helps in increasing profits.

II. Advantages to Employees: An efficient costing system benefits the employees by introducing incentive plans. As a result, the productivity and earnings increase.

III. Advantages to Creditors: Cost accounting reveals not only the present trends of the business but also the future prospects. On the basis of these reports, creditors can have an idea of the financial soundness of the business before extending credit facilities.

IV. Advantages to Society: An efficient costing system benefits the society by providing products and services at lower prices due to lower cost of production.

V. Advantages to National Economy: An efficient costing system benefits the national economy by achieving higher production, higher productivity because progress of enterprises leads to the progress of the industry which lead to progress of the national economy.

VI. Advantages to Government agencies and others: Cost accounting provides ready figures for use by Government, trade unions, wage tribunals etc., for dealing with a variety of problems like price fixation, wage level fixation, settlement of industrial disputes, framing various policies etc.,

Limitations of Cost Accounting:

1. It is **unnecessary** because it involves duplication of work. Many good enterprises are functioning without any costing system.
2. It is **expensive** because the installation of cost accounting system involves additional cost.
3. It is **inapplicable** to many industries.
4. It is a **failure** in some enterprises.
5. The results shown by cost accounts **differ** from those shown by financial accounts.

Q.2. Define Management Accounting. Explain the features of Management Accounting.

The term 'Management Accounting' is of recent origin. This term was first used in 1950 by a team of accountants visiting USA under the auspices of Anglo-American Council on Productivity.

Modern business is complex in nature. They are large in size and their activities are wide spread. Their ownership is different from management. Even the development of cost accounting does not provide adequate data needed by the management. Management accounting meets the needs of management.

Definitions of Management Accounting:

1. "The presentation of accounting information in such a way as to assist management in the creation of policy and in day-to-day operation of an undertaking".
– **Anglo- American Council on Productivity**
2. "Management Accounting is concerned with accounting information which is useful to management". – **Robert Anthony**

Features of Management Accounting:

1. **Providing Accounting Information:** The collection and classification of data is the primary function of accounting department. The information so collected is rearranged and analysed by the management for taking decisions.
2. **Achieving of Objectives:** In management accounting, the accounting information is used to achieve the organisational objectives.
3. **Taking Important Decisions:** Management accounting helps in taking various important decisions. It supplies necessary information to the management which may base its decisions on it.
4. **Use of Special Techniques and Concepts:** Management accounting uses special techniques and concepts such as budgetary control, marginal costing, project appraisal etc. to make accounting data more useful.
5. **Cause and Effect Analysis:** The cause and effect relationship is discussed in management accounting. If there is loss, the reasons for that are to be analysed.
6. **Increase in Efficiency:** The efficiency can be improved by setting up goals for each department. The performance appraisal will enable the management to pin point efficient and inefficient sections and corrective measures are taken, wherever, necessary.
7. **No Fixed Norms Followed:** Unlike in financial accounting, no specific rules are followed in management accounting. The analysis of data depends upon the person using it.
8. **Concerned with Forecasting:** The management accounting is concerned with the future. It helps the management in planning and forecasting.
9. **Supplies Information and not Decision:** The management accountant supplies information to the management. The decisions are to be taken by the top management. Management accountant is only to guide and not to supply decisions.

Q.3 Explain the differences between Cost Accounting and Management Accounting.

POINTS OF DIFFERENTIATION	COST ACCOUNTING	MANAGEMENT ACCOUNTING
1.Principles and Practices followed	It uses the principles and practices of Cost Accounting.	It uses the principles and practices of both Cost and Financial Accounting.
2.Nature of approach	It generally deals with current operations.	It looks ahead through long-term planning apart from current operations.
3.Scope of study	Cost accounts has narrow scope.	It has a wide scope.
4.Primary Objective	The primary objective is ascertainment and control of cost.	The primary object is to provide the relevant information to the management to take an appropriate decision.
5.Statutory Verification	Cost accounts and reports are subject to statutory verification (i.e. cost audit)	Management accounting reports are not subject to any statutory audit.
6.Utility of reports	Cost reports are meant for management and even useful to external parties.	Management accounting reports are useful only to the management.
7.Type of data used	It uses quantitative cost data only	It uses both quantitative and qualitative data.
8. Accounting period	It is done for a specific accounting period.	It does not follow any specific accounting period as such.
9.Term of Planning	It is concerned with short-term planning.	It is equally concerned with short-term and long-term planning.
10.Installation of system	It can be installed without management accounting system.	It cannot be installed without a proper cost accounting system.
11.Status	The status of Cost Accountant comes after Management Accountant.	Management Accountant is senior in position to cost accountant.
12.Evolution	Development of Cost Accounting attributable to Industrial Revolution.	Management Accounting evolved in the 20 th Century. Hence it is of recent origin when compared to cost accounting.

UNIT II: TECHNIQUES OF INVENTORY CONTROL AND LABOUR

SHORT ANSWERS:

Q.1. Write a short note on Stores ledger

- i. Stores ledger is kept in the costing department, outside the control of storekeeper.
- ii. Stores ledger is identical with the bin card except that receipts, issues and balances are shown along with their money values.
- iii. Stores ledger contains an account for every item of stores and makes a record of the receipts, issues and the balances, both in quantity and value.
- iv. Stores ledger provides the information for the pricing of material issued and the money value at any time of each item of the stores.
- v. In stores ledger, transactions are periodically recorded.

Stores Ledger											
Description:						Folio No.:					
Item Code No.:						Maximum Level:					
Bin No.:						Minimum Level:					
						Ordering Level:					
Date	Receipt			Issues			Balance			Stock Verification	
	Qty.	Rate	Amt.	Qty.	Rate	Amt.	Qty.	Rate	Amt.	Date	Initls.

Q.2. FIFO Method

First in First Out (FIFO) Method

In this method, it is assumed that the materials received first in the stores are issued first, accordingly, the materials in stock are the materials purchased in the last.

Advantages:

- i. Materials are issued at the actual cost and hence no unrealised profit /loss accrues to the organisation
- ii. It is based on realistic assumption that materials received first are issued first.
- iii. Valuation of closing inventory is done at the current market price.
- iv. The method is simple and easy to operate.

Disadvantages:

- i. As the material issues are made at old prices, the cost of production does not reflect the current economic value.
- ii. It makes the cost of production fluctuate from period to period when there are frequent changes in market prices
- iii. It makes the cost comparison of two jobs difficult because these similar jobs may be charged with materials at different prices.

In nutshell, it may be mentioned here that, in periods of rising prices, the FIFO method produces higher profits because lower cost is charged to production. The position is reverse during periods of falling prices.

Q.3. Direct and Indirect Labour Cost

LABOUR:

Labour is the second element of cost, dealing with human resource of an organisation. Labour is of two types:

DIRECT LABOUR	INDIRECT LABOUR
1. Direct labour can be identified with a particular product.	1. Indirect labour cannot be identified with a particular product.
2. Direct labour forms part of Prime Cost.	2. Indirect labour forms part of Overhead.

Q.4. Halsey Premium Bonus Plan

Under this plan the worker gets bonus equal to 50% of time saved in addition to time wages.

$$\text{Earnings} = (\text{Hours Worked} \times \text{Rate Per Hour}) + [\frac{1}{2} \times \text{Time Saved} \times \text{Rate Per Hour}]$$

Advantages:

- i. It is easy to understand and simple to operate.
- ii. It guarantees the hourly wages to the workers for the actual time taken.
- iii. It provides incentive for the efficient workers.

Disadvantages:

- i. It is difficult to fix standard time.
- ii. Incentive is not strong as piece rate system.
- iii. The sharing principle is not liked by employees.

Q.5. Rowan Premium Bonus Plan

Under Rowan Plan the workers are guaranteed time wages and bonus is calculated on the basis of ratio of time saved to time allowed of time wages.

$$\text{Earnings} = (\text{Hours Worked} \times \text{Rate Per Hour}) + \left[\frac{\text{Time Saved}}{\text{Time Allowed}} \times \text{Hours Worked} \times \text{Rate Per Hour} \right]$$

Advantages:

- i. Standard time is fixed, the basic rate is not changed.
- ii. It assures minimum time wages to workers.
- iii. The employers also are benefited with the employees.
- iv. It pays higher bonus to workers compared to Halsey plan.

Disadvantages:

- i. It is difficult to understand and calculate.
- ii. Efficiency beyond certain point is not rewarded.
- iii. Complex and expensive

Q.6. Labour Turnover

- i. Labour turnover is rate of change of workers in an organization during a given period of time.
- ii. Causes of labour turnover:
 - a. Personal Causes
 - b. Unavoidable Causes- not within the control of the management
 - c. Avoidable Causes- within the control of the management, requires management attention on continues basis.

- iii. Measurement of Labour Turnover:
 - a. Separation Method
 - b. Flux Method
 - c. Replacement Method
- iv. Effect of Labour Turnover: High Labour turnover increases the cost of production and decreases the profitability.
- v. Costs associated with Labour Turnover:
 - a. Preventive Costs: costs incurred to minimize labour turnover- included in Direct Labour cost.
 - b. Replacement Costs: Costs incurred in order to recruit employees in the vacancies caused due to separations - treated as Overhead

UNIT III: CONTRACT COSTING AND PROCESS COSTING

SHORT ANSWERS:

Q.1.Features of Contract Costing

- i. Contract costing is Order Based Costing
- ii. Customer order is important.
- iii. Contract Costing is effective for constructional work.
- iv. Constructional work is started after the receipt of customers order.
- v. Every contract is identified with a distinctive contract name or contract number.
- vi. Costs are accumulated for each contract separately, i.e., every contract is cost center.
- vii. Contract costing involves constructional work for a long period of time.
- viii. WIP on the valuation date, is a regular feature.
- ix. Contract is performed at customers site.
- x. There is no input- output relationship among contracts.
- xi. Contract does not result in joint and by- products.

Q.2.Notional Profit

- ❖ Profit on incomplete contracts: The long- term nature of contracts has necessitated to determine profit to be attributed to each accounting period.
- ❖ Work Certified is that portion of the work completed which has been certified/approved by the Contractee's architect or surveyor. It is valued in terms of contract price.
- ❖ Notional profit is the difference between the value of work-in-progress certified and the cost of work-in-progress certified.

$$\text{❖ NOTIONAL PROFIT} = \text{VALUE OF WORK CERTIFIED} - \text{COST OF WORK CERTIFIED}$$

- ❖ It is advisable to credit only a part of notional profit to Profit and Loss Account. The balance of notional profit is kept as reserve for the next year in order to cover any loss that may arise due to unforeseen contingencies in the remaining period of execution of the contract.

Q.3.Features of Process Costing

- i. Process costing is a method of Operations Costing.
- ii. Customer order is important for production.
- iii. There is a continuous flow of production
- iv. Output is identical in all respects.
- v. Continuous flow of production is separated into different stages, each stage is called Process.
- vi. Every process is identified with a distinctive Process No. or Name.
- vii. The output of one process is the Input of the subsequent process until finished goods.
- viii. Costs are accumulated for each process separately and cost flow from one process to subsequent process, until finished goods.
- ix. WIP on the valuation date is regular feature.
- x. Production process may result in two or more products. (Joint & by products.)

Q.4.Normal Loss

1. Normal loss is expected loss, expected on the basis of past experience or technical knowledge.
- 2. Normal output units = Input units – Normal loss units**
3. Any amount charged to the process A/c is intended for normal output.
- 4. Normal cost per unit = $\frac{\text{Normal Cost of Normal Output}}{\text{Normal Output units}}$**
5. Abnormal loss, abnormal gain and output of the process are to be valued at Normal Cost Per Unit.

Q.5.Abnormal Loss

1. Abnormal loss is any loss in excess of normal loss.
2. Abnormal loss is valued at normal cost per unit.
- 3. Abnormal loss = $\frac{\text{Normal Cost of Normal Output}}{\text{Normal output units}} \times \text{Abnormal loss units}$**
4. Abnormal loss is charged to Costing Profit and Loss A/C.

Q.6.Abnormal Gain

1. Any output in excess of normal output is abnormal gain.
2. Abnormal Gain reduces the expected normal loss.
3. Abnormal Gain is valued at normal cost per unit.
- 4. Abnormal Gain = $\frac{\text{Normal Cost of Normal Output}}{\text{Normal output units}} \times \text{Abnormal Gain units}$**
5. Abnormal Gain is credited to Costing Profit and Loss A/C.

UNIT IV: FINANCIAL STATEMENT ANALYSIS AND INTERPRETATION

SHORT ANSWERS:

Q.1. Write about Financial Statements

Financial statements are the end products of financial accounting. Financial statements are the summarized statements and reports prepared by business concerns to disclose their accounting information and communicate them to the interested parties.

Financial statements usually include the following:

- i. Profit and Loss Account (Income Statement)
- ii. Balance Sheet (Position Statement)
- iii. Cash Flow Statement
- iv. Funds Flow Statement
- v. Statement of Retained Earnings
- vi. Schedules

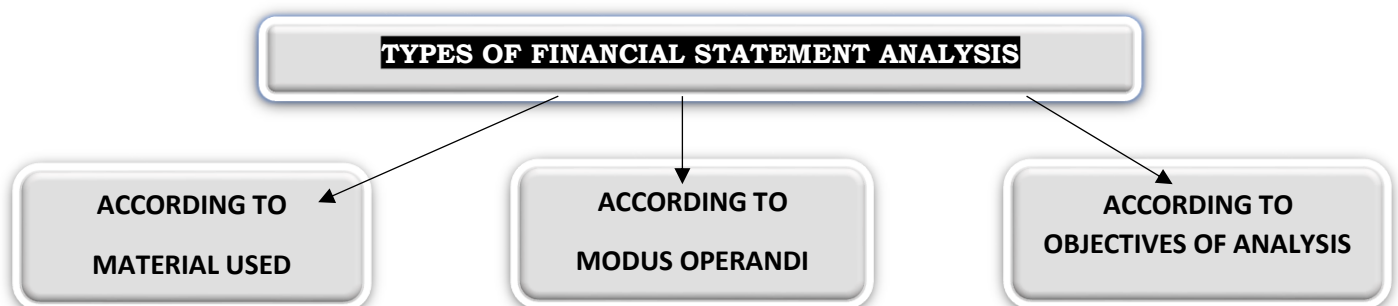
Q.2. What are the Objectives of Financial Statement Analysis?

Analysis of financial statements is the process of determining the significant operating and financial characteristics of a firm from the accounting data. It is the treatment of the information contained in the financial statements to afford a full diagnosis of the profitability and financial position of the firm.

Objectives of Financial Statement Analysis:

- i. Measuring the efficiency of operation of the business.
- ii. Measure the financial position and financial performance of the firm.
- iii. Determining long term liquidity of the funds
- iv. Measuring the solvency of the firm
- v. Future prospects of the firm
- vi. Measuring the progress of the firm.

Q.3. What are the types of Financial Statement Analysis?



I. According to Material used:

1. External Analysis: External analysis of financial statements is made by those who do not have access to the detailed accounting records of the company, i.e., banks, creditors and general public.

2. Internal Analysis: Internal analysis is made by the finance and accounting department to help the top management. These people have direct approach to the relevant financial records.

II. According to Modus Operandi or Method of Operation:

1. Horizontal Analysis or Dynamic Analysis: When financial statements for a number of years are reviewed and analysed, the analysis is called Horizontal Analysis. Ex: Comparative Statements.

2. Vertical Analysis or Static Analysis: Vertical analysis refers to the study of relationship of the various items in the financial statements of one accounting period. Ex: Common-Size Statements.

III. According to Objectives of Analysis:

1. Long term Analysis: In the long-term analysis, the stress is on the stability and earning potentiality of the concern.

2. Short term Analysis: The short-term analysis of financial statement is mainly concerned with the working capital analysis.

Q.4. Comparative Income Statement

Comparative Income Statement is a statement prepared to get an idea of the progress of a business over a period of time. The changes in absolute data in money value and percentages help to analyse the profitability of a business. It is an important device of Horizontal Financial Analysis.

Comparative income statement has four columns. First two columns give figures of various items for two years. Third and fourth columns are used to show increase or decrease in figures, in absolute amounts and percentages respectively.

Comparative Income Statement

Particulars	Previous Year (₹)	Current Year (₹)	Increase (+)/Decrease (-) (₹)	Increase (+)/Decrease (-) %

Q.5. Common Size Balance Sheet

A statement in which Balance Sheet items are expressed as percentage of each asset to total assets and percentage of each liability to total of liabilities is called Common-Size Balance Sheet.

This statement establishes the relationship between each asset to total value of assets and each liability to total of liabilities. It is useful in vertical financial analysis and comparison of two business enterprises at a certain date.

Common-Size Balance Sheet

Particulars	Previous Year (₹)	%	Current Year (₹)	%

Q.6.Trend Analysis

Trend ratios is an important tool of horizontal financial analysis. The information for a number of years is taken up and one year, generally the first year, is taken as a base year. The figures of the base year are taken as 100 and trend ratios for other years are calculated on the basis of base year. The analyst is able to see the trend of figures, whether upward or downward.

The method of trend percentages is a useful analytical device for the management since by substituting percentages for large amounts, the brevity and readability are achieved.

Advantages of Trend Analysis:

1. It helps in easily knowing the direction of movement of the activity of the business i.e., whether upward or downward.
2. Trend analysis is helpful in forecasting and budgeting.
3. It helps in comparing one period with another period.
4. It makes data brief and easily understandable.

UNIT V: MARGINAL COSTING

SHORT ANSWERS:

Q.1. Meaning and Features of Marginal Costing.

MARGINAL COSTING:

Marginal costing is the ascertainment of marginal cost and the effect on profit of changes in volume or type of output by differentiating between fixed costs and variable cost. Marginal costing is a principle whereby variable costs are charged to cost units and the fixed costs attributed to the relevant period is written off in full against the contribution for that period.

Features of Marginal Costing:

- i. Marginal costing is not a method of costing, it is a special technique for managerial decision making.
- ii. Marginal costing necessitates the segregation of costs into fixed and variable costs. Semi-variable costs are segregated into fixed and variable costs.
- iii. In marginal costing only variable costs are taken into account for computing cost of production and value of stocks.
- iv. Fixed costs are charged to Profit and Loss Account of the period for which costs are incurred.
- v. The profitability of a product or department is ascertained in terms of marginal contribution i.e., Sale value – variable costs.

Determination of Net Profit under Marginal Costing:

Net profit is ascertained by deducting fixed costs from marginal contribution. For this purpose, Marginal Cost Sheet is prepared.

Q.2. Contribution

❖ Contribution is excess of sales over variable cost.

❖ $\text{Contribution} = \text{Sales} - \text{Variable cost} \quad (\text{or}) \quad \text{Fixed Cost} + \text{Profit}$

❖ Contribution is looked upon as a fund contributed by each product, service or segment of business operation. Contribution is first used for recovering fixed costs or common costs. The surplus after meeting such fixed costs is profit and deficit, if any is a loss.

❖ $\text{CONTRIBUTION} - \text{FIXED COST} = \text{PROFIT/LOSS}$

Q.3. PROFIT-VOLUME RATIO (P/V RATIO)

❖ P/V RATIO is the ratio of contribution to sales.

$$\text{P/V RATIO} = \frac{\text{CONTRIBUTION}}{\text{SALES}}$$

$$\text{P/V RATIO} = \frac{\text{SALES} - \text{VARIABLE COST}}{\text{SALES}}$$

$$\text{P/V RATIO} = \frac{\text{FIXED COST} + \text{PROFIT}}{\text{SALES}}$$

❖ P/V RATIO is the indicator of profitability of the business. A higher P/V Ratio indicates high profitability and low P/V RATIO indicates low profitability.

❖ **Improvement of P/V RATIO:**

1. Increase selling price
2. Reduce variable cost
3. Increasing the products of higher P/V RATIO

Q.4. Break-Even Point (BEP)

- ❖ The Break-Even Point is level of sales at which there is neither profit nor loss to the firm.

At BEP:

$$\begin{aligned} \text{TOTAL REVENUE} &= \text{TOTAL COST} \\ \text{(OR)} \\ \text{TOTAL CONTRIBUTION} &= \text{TOTAL FIXED COST} \end{aligned}$$

$$\text{BEP (UNITS)} = \frac{\text{FIXED COST}}{\text{CONTRIBUTION PER UNIT}}$$

$$\text{BEP (Rs.)} = \frac{\text{FIXED COST}}{\text{P/V RATIO}}$$

- ❖ Every organisation should try to operate above breakeven point, to earn profits.

Q.5. MARGIN OF SAFETY (MOS)

- ❖ Margin of safety refers to sales in excess of break-even point. It refers to the difference between sales at a given activity level and sales at break-even point.

$$\text{MOS (Rs.)} = \text{TOTAL SALES} - \text{BREAK EVEN SALES}$$

(OR)

$$\text{MOS (Rs.)} = \frac{\text{PROFIT}}{\text{P/V RATIO}}$$

$$\text{MOS (Units)} = \frac{\text{PROFIT}}{\text{CONTRIBUTION PER UNIT}}$$

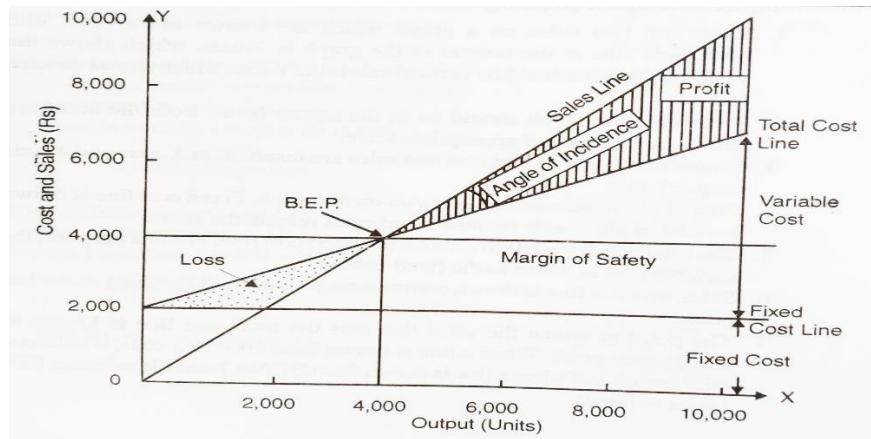
- ❖ Margin of safety provides strength and stability to a concern. A low margin of safety indicates high fixed costs.

❖ Improvement of MOS:

1. Keeping the breakeven point at the lowest level and try to maintain actual sales at highest level
2. Increase in sales volume
3. Increase in selling price
4. Lowering fixed costs
5. Lowering variable costs
6. Change in product mix such that more profitable lines are introduced.

Q.6. ANGLE OF INCIDENCE

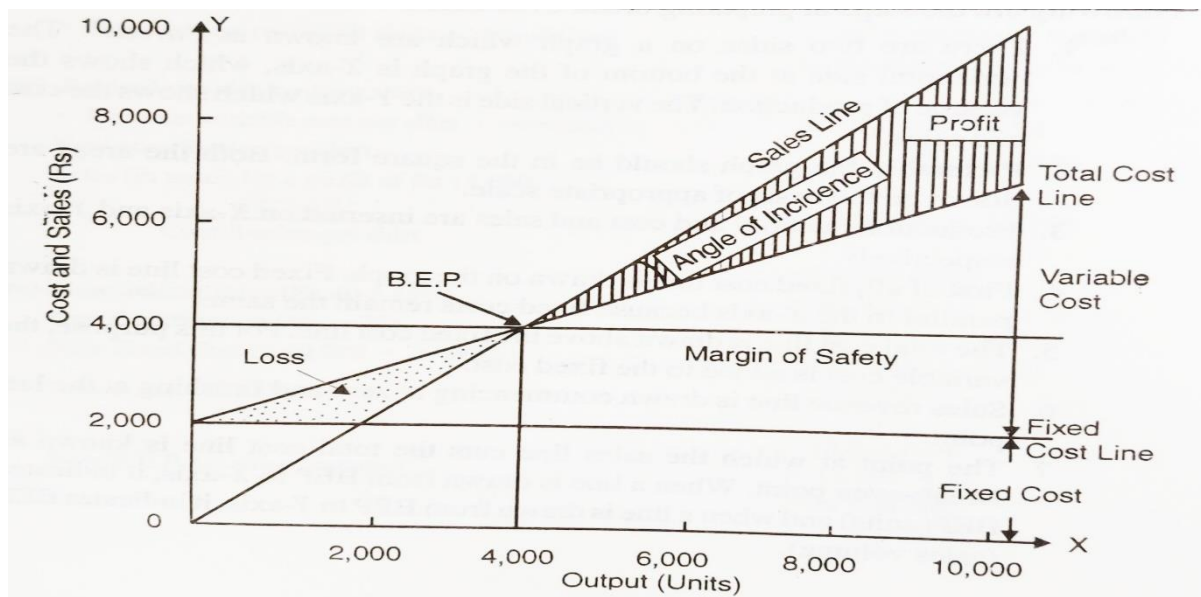
- ❖ In graphic presentation of marginal cost data i.e., a break-even chart, the total cost line and sales line cross each other. The point of their crossing is termed Breakeven point. The angle at which the sales line crosses the total cost line is called the 'Angle of Incidence'.
- ❖ The larger the angle, the more will be the contribution and profit with every additional sale. Firms with higher P/V Ratio and comparatively low in variable costs have a higher angle of incidence. Such firms can magnify their profits in high demand conditions.



- ❖ The angle of incidence at a glance can signify or reveal the ability of a firm to earn higher profits with every increase in sales.

Q.7. Break Even Chart

- ❖ Break-Even analysis is made through graphical charts.
- ❖ "Break-even chart is a graph showing the amount of fixed, variable costs and sales revenue at different volumes of operation. It shows at what volume that firm first covers all costs with revenue of break-even"- **Dr. Vance.**



- ❖ The above graph reveals that the firm reaches break-even point at BEP, at this point the total cost (TC) is equal to total revenue (TR). The zone below BEP is called loss zone and above BEP is called profit zone. The total cost curve is based on the total of fixed cost and variable cost. The margin of safety refers to the excess of production or sales over and above the BEP production or sales.