

**D.K.M.COLLEGE FOR WOMEN (AUTONOMOUS), VELLORE-1.**

**COST ACCOUNTING III B.COM**

**UNIT – I SECTION-A**

1. Define cost Accounting.
2. What are the objectives of cost Accounting?
3. Write any two limitation of cost Accounting?
4. What is cost sheet?
5. Define cost centre.
6. What is profit centre?
7. What are the elements of cost?
8. What is Tender?
9. Calculate Work Cost:-

Factory Expenses	700
Office expenses	300
Selling expenses	900
Material consumed	3,400

10. Ascertain the profit for 2010:-are t  
Cost of sales Rs.3, 00,000  
Profit at 20% of sales.
11. What is material control?
12. What are the objects of material control?
13. What is Inventory control?
14. What are the methods adopted to control inventory?
15. What is EOQ?
16. Expansion of ABC analysis and VED analysis.
17. Write a note on perpetual inventory system.
18. What is purchase control?
19. What is purchase procedure?
20. What are the types of coding?
21. What is danger level?

22. What is a material loss?
23. Write a formula for EOQ.
24. What is meant by waste in material losses?
25. What is scrap and spoilage?
26. What is pricing of material issues?
27. What are the essential for material cost?
28. What are the methods of pricing material issues?
29. What is cost price method?
30. What is an average price method?
31. What is FIFO CIFO?
32. What is simple average?
33. What do you meant by material losses?
34. Write a note on defective.
35. Write any three types of scraps.
36. What is a labour cost?
37. What are the types of labour cost?
38. What do you meant by labour Turnover?
39. What are the methods of measurement of labour Turnover?
40. Write the formula for i) separation ii) Replacement iii) Flux method.
41. What is replacement cost?
42. What is idle time?
43. What are the types of idle time?
44. What is overtime?
45. What is Overtime?
46. What is remuneration?
47. What are types of piece wage?
48. What is premium and bonus plan?
49. Write a formula for Halsey and rowan plan?
50. What is Emerson's efficiency Plan?
60. Define overheads.
61. What are the classifications of overhead costs?
62. What are the function wise classifications?

63. What is a fixed and variable overhead cost?
64. What is departmentalisation of overheads?
65. What are types of departments?
66. Define allocation of overhead costs?
67. What do you mean by Apportionment of overhead costs?
68. What is primary distribution?
69. What are the types of secondary distribution overhead?
70. Define Absorption of overheads.
71. Write a Short note on machine hour rate method.

**SECTION-B**

**5 Marks**

1. What are the advantages of cost Accounting?
2. Difference between cost centre and profit centre?
3. What are the types of costing?
4. What are the purposes of cost sheet?
5. Write short notes on
  - a) Chargeable expense
  - b) Prime cost
  - c) Works cost
  - d) Work-in-Progress
  - e) Cost of production
  - f) Cost of sales
6. Show the treatment of the following items in cost statement:

Raw material consumed	80,000
Direct wages	60,000
Direct expenses	23,000
Factory overhead	45,000
Opening work –in-progress	8,000
Closing work – in - progress	6,000

7. From the following information prepare a cost sheet for the month of January.

Stock of raw materials on 1 <sup>st</sup> January	25,000
Stock of raw materials on 31 <sup>st</sup> January	26,200
Purchase of raw material	21,900
Carriage on purchases	1,100
Sale of finished goods	72,300
Direct wages	17,200
Non-Productive wages	800
Direct expenses	1,200
Factory overhead	8,300
Administrative overhead	3,200
Selling overhead	4,200

8. Prepare a statement of cost from the following particulars for the year 2006 showing the percentage that each individual item of cost bears to the total cost.

Opening stock of Raw material	30,000
Purchase of Raw material	40,000
Closing stock of Raw material	20,000
Direct wages	20,000
Factory overheads	10,000
Office and administration overhead	8,000
Selling and Distribution overheads	2,000
Sale Value	1,00,000

9. Calculate 1) prime cost 2) Factory cost 3) Cost of production  
4) Cost of sales 5) Profit.

Direct material	1,00,000
Direct wages	25,000
Direct expenses	5,000
Wages of Foremen	2,500

Electric power	500
Lighting:-	
Factory	1500
Office	500
Rent:-	
Factory	5000
Office	2500
Salaries to salesmen	1250
Advertising	1250
Income tax	10,000
sales	1,89,500

10. From the following particulars you are required to prepare a statement showing

a) Cost of materials consumed

b) The prime cost

c) The work cost

d) The total cost

e) The percentage of general overhead to works cost.

Stock of finished goods on 1-1-99	72,800
Stock of raw materials on 1-1-99	33,280
Purchase of raw materials	7,59,200
Productive wages	5,16,880
Sales of finished goods	15,39,200
Stock of finished goods(31-12-99)	78,000
Stock of raw materials (31-12-99)	35,360

Works overhead charges	1,29,220
Office and general expenses	70,161

The

Company is about to send a tender for a large plant. The costing department has estimated that the materials required would cost Rs.52, 000 and the wages to workmen be made at a net profit of 20% on the selling price. Show what the amount of tender would be, if it is based on the above percentage.

11. The accounts of ABC, Co Ltd show the Following:

Material used	7, 00,000
Direct Labour	5, 40,000
Works overhead	1, 62,000
Establishment	
Overhead	1, 12,000

12. What price should the company quote to manufacture a machine which will require an expenditure of Rs.1, 000 in materials and Rs.800 in wages so that it will yield a profit of 20% on selling price? Make necessary assumptions regarding percentages. What are the advantages of material control?

13. List out the objectives of purchase department?

14. Discuss the procedure to be followed by purchasing department while purchase materials.

15. What the advantages of ABC analysis?

16. What do you understand by Inventory?

17. What do you understand by Inventory control and its objectives?

18. Write a note 1) codification and ii) classification.

19. Find out the EOQ:-

Annual usage -6000 units, cost of material per unit: Rs.20  
 Cost of placing and receiving one order: RS60  
 Annual carrying cost one unit 10% of inventory value.

20. Find out the Reorder level from the following:

Maximum consumption of Material 300 units  
 reorder weeks Recode =2-4



37. Calculate Row plan when standard time 10hrs. No.of units to be completed 5 hourly rate is 0.25 Time taken 8 hours. Calculate a worker's total earning and effective rate of earnings per hour.

38. M Company gives the following information:-

No.of employee's on 1-4-99 – 200

No.of employee's on 31-3-2000 – 240

No.of employee resigned : 20

No.of employee discharged : 5

No.of employee replaced =18.

Calculate Labour turnover.

39. Calculate Normal and overtime wages payable to a workman from the following data.

Days	Hours worked
Monday	8
Tuesday	10
Wednesday	9
Thurs Day	11
Friday	9
Saturday	4

Normal working hours – 8 hours per day.

Normal rate: Rs 2per hour

Overtime rate: double the usual rate.

40. From the following particulars calculate the earnings of A and B under Halsey and Rowan plan:

Standard Time: 10 Hrs.

Time rate : Re 1 per Hr.

Time taken : 9Hrs – A

8 Hrs.– B.

41. Write a note on i) Taylor's differential piece rate ii) Multiple (or) Metrics differential Recreate system iii) Gantt Task Plan.

42. What is the importance's of overhead cost?

43. Distinction between Allocation and Apportionment.

44. What are the bases of apportionment in primary distribution of overheads?

45. How to computation of machine hour rate?

46. Calculate the overhead allocable to production department A and B from the Following:-

There are two service departments x and y, x renders service to A and B in the ratio of 3:2 and y renders services to A& B in the ratio of 9:1

Overhead as per primary overhead distribution is

A: Rs49800 B: 29600

X: Rs15600 Y: RS.10800

47. Calculate the direct material percentage rate for overhead absorption from the following.

Factory overhead budgeted =Rs.300000

Cost of direct material estimated to be consumed= Rs500000.

48. The production overhead of department A-12 in a factory is budgeted at Rs80000. It is anticipated that the labour hours worked during the same period will be 10000 hours. Calculated labour hour rate.

49. During 2007 work overhead incurred in factory was Rs40000. The machine hours worked during the month were 8000 hours.

Determine the machine hour rate to be charged to the output to recover the works overhead.

50. What are the reasons for under and over absorption of overheads?

51. Write any 5 expenses on the bases of apportionment.

**10 MARKS:-**

1. Explain the classification of cost.
2. Discuss briefly about the method of costing.
3. Give a proforma of cost sheet.
4. Difference between financial a/c and cost a/c.
5. The Following details have been obtained from the cost records of Rajasekhar Ltd.

Stock of raw materials(1-12-2010)	75,000
Stock of raw materials (31-12-2010)	91,500
Direct wages	52,500
Indirect wages	2,750
Sales	2,11,000
Work -in-Progress(1-12-10)	28,000
Work- in- Progress (31-12-10)	35,000
Purchase of raw materials	66,000
Factory rent, rates power	15,000
Depreciation of plant and machinery	3,500
Expenses on purchases	1500
Carriage outwards	2500
Advertising	3500
Office rent and tanes	2500
Traveller 's wages and commission	6500
Stock of finished goods (1-12-2010)	54000
Stock of finished goods (31-12-2010)	31000

Prepare a cost sheet giving the maximum possible breakup of costs and profit.

6. From the details given below, prepare a comparative cost sheet for the first and second half of the year 2010. Showing per unit in each case, at all stages.

	Half year ended	
	30.06.2010	31.12.2010
Direct Materials consumed	50,000	70,000
Wages	60,000	80,000
Chargeable of factory machines	10,000	12,000
Indirect wages in factory	16,000	20,000
Rent:-	20,000	30,000
Factory	5000	4,000
Office	8000	8,000
Repairs:-		
Factory	6000	4,000
Office	9000	2,000
Sundry office Expenses	16000	20,000
Output during the periods in units	20000(U)	25,000(U)

7. The following in the manufacturing and Profit and Loss account of Raj manufacturing Co. for the year ended 31-3-93, output 850 units:-

For the year ending 31-3-94, it is estimated that

- i) Output and sales will be 1000 units
- ii) Material price will increase by 25%
- iii) Wage cost will increase by 12.5%
- iv) Works expense will increase in proportion to the combined cost of materials and wages.
- v) Selling expenses per unit will remain constant.
- vi) Other expense remain constant
- vii) Profit of 12.5% on sales is to be made.

Prepare a statement of cost and Profit for the year and estimated costs and Profit for the next year.

Particulars	Rs.	Particulars	Rs.
To Materials	64,000	By sales	3,20,000
To wages	96,000		
To works Expenses	40,000		
To salaries	48,000		
To Office expenses	8,000		
To General Expenses	24,000		
To Selling expenses	16,000		
To Net Profit	24,000		

8. The accounts of a machine manufacturing company disclose the following information for six months ending 31<sup>st</sup> December 1982.

Material used	1, 50,000
Direct wages	1, 20,000
Factory others	30,000
Administrative Expenses	15,000

Prepare cost sheet for the half year and calculate the price

Which the company should quote for the manufacturing of a machine requiring materials valued at Rs.1250 and expenditure in productive wages Rs.750 so, that the price might yield a profit of 20% on selling price.

9. The accounts of a machine manufacturing company disclose the following information for the six months ending 31-Dec-1993.

Materials used	1, 50,000
Productive wages	1, 20,000
Factory overhead Exp	24,000
Establishment and	

General Expenses

17,640

Prepare a cost sheet of the machines and calculate the price which the company should quote for the manufacture of a machine requiring materials valued at Rs.1250 and expenditure in productive wages of Rs.750, so that the price may yield a profit of 20% on the selling price.

10. Briefly explain various inventory control techniques.
11. Explain the merits and demerits of perpetual inventory system.
12. Explain the importance and procedure of classification of materials.
13. Find out the EOQ and the number of orders per year from the following information:

Monthly consumption 3000 units

Cost per unit 54 Rs

Ordering cost RS.150 per order

Inventory carrying cost 20% of the average inventory.

14. In a company weekly minimum and maximum consumption of material A is 25 and 75 unit respectively. The reorders quantity as fixed by the company is 300 units. The material is received within 4 to 6 weeks from issue of supply order calculate minimum and maximum level.

15. Material A is used as follows:

Maximum usage - 600 units

Minimum usage - 400 units

Average usage - 450 units

Lead time: Maximum -6 Months

Reorder quantity Minimum - 2 months

Maximum reorder period for emergency Purchases -1 Month

Calculate:-

a) Reorder Level b)Maximum Level c) Minimum Level

d) Average stock Level e) Danger Level.

16. Calculate EOQ consumption of material= 10000Kg Cost of material per kg Rs2, order placing cost per order Rs.50. Storage costs 8% on Average inventory.

17. Two components A and B are used as follows:

Reordering quantity A= 1200 units B=1000 units

Reordering period A 2- 4 weeks B 3 - 6 weeks

Normal usage -300 units per week

Minimum usage – 150 units per week

Minimum usage – 450 units per week

Calculate various stock levels.

18. From the following information calculate i) EOQ ii) Reorder level iii) Maximum level iv) minimum level Normal usage 150 units per day. Maximum usage 200 per days. Reorder period 50-60 days. The annual usage is 5000 units. The cost of purchase is Rs 100 per order. Cost per unit is Re 1.00 carrying cost 10% P.a.

19. Calculate various stock level:-

Normal usage - 600 units per week

Maximum usage - 900 units per week

Minimum usage - 300 units per week

Reorder quantity x - 4800 unit's y-7200 units

Reorder period x = 4to 6 weeks y= 2to 4 weeks.

20. Discuss the important systems of pricing of material issues. Pricing of material issues.

21. Write a short note on.

i) Scrap ii) Defective iii) waste

22. Write the need for pricing of material issue.

23. What are the accounting treatments of scrap?

24. What are the merits and demerits of FIFO?

25. What are the merits and demerits of LIFO?

26. What is weighted average Rice method and its advantages and disadvantages.

27. From the following particulars prepare the store ledger under FIFO method.

2003 March

1 Purchased 300 units at Rs.2 per unit

2 Purchased 600 units at Rs.3per unit

3 Issued 400 units

8 Issued 200 units

10 Purchased 600 units at Rs 5 per unit

12 Issued 400 units.

28. X ltd has purchased and issued the materials in the following order:

Jan 1995

1 Purchased 300 units at Rs 5 per unit

4 Purchased 600 units at Rs 4 per unit

6 Issued 500 units

10 Purchased 700 units at Rs 5 per unit

Ascertain the closing stock as on 31-1-95 under LIFO method.

29. Prepare the store ledger under last in first method:

Dec 1 stock in hand 500 units at Rs.20

Dec 2 Issued 200 units

Dec 3 Purchased 150 units at RS.22

Dec 4 Issued 100 units

Dec 5 Purchased 200 units at RS.25

30. The Following transaction took place in respect of an item of material under simple.

Particulars	Receipt	Rate	issue
	200	2	---
10.03.02	300	2.40	---
15.03.02	---	----	250
18.03.02	250	2.60	---
20.03.02	----	----	200

31. The following transactions took place in respect of a material item under weighted average method.

Date	Receipt	Rate	Issue
1.03.85	300	3	--
5.03.85	500	4	---
10.03.85	--	---	500
12.03.85	700	4.50	---
15.03.85	---	----	700
20.03.85	300	5	--
30.03.85	---	---	150

32. From the following prepare weighted average method for material A

Nov 1 Opening Stock 2000 units as Rs.5

Nov 3 Issue 1500 units

Nov 10 Received 4500 units at Rs.6

Nov 12 Returned to stores 100 units (issue of Nov3)

33. Calculate store ledger a/c under standard price method.

May 2005

	Units	Rates
1 Balance in hand	400	
4 Purchased	500	
5 Issued	600	
8 Issued	200	
10 Issued	700	
12 Purchased	150	
14 Issued	200	
16 Issued	100	
19 Purchased	800	
20 Issued	400	
25 Issued	300	

34. What do you mean by Normal and Abnormal waste of medical?

How will you treat them in cost accounts?

35. From the following transactions prepare separately the store ledger a/c under i) FIFO and ii) LIFO method.

Date	Particulars	Units	Rs.
Jan 1	Opening balance	100	5
5	Received	500	6
20	Issued	300	
Feb 5	Issued	200	
6	Received back issued on 5 feb	10	
7	Received	600	5

20	Issued	300	
25	Returned to supplied	50(Units	
		Purchased on feb	
		7	7
26	Issued	200	
Mar 10	Received	500 Unit Rs 7	7
Mar 15	Issued	300	

Stock verification on 15 March revealed storage of 10 units.

36. From the particulars given below write Up the stores Ledger a/c. adopt. The FIFO and LIFO method of issue and ascertain the value of closing stock.

2007

Jan 1	Opening stock	1000 Unit Rs 26
5	Purchased	500 Unit at Rs.24.50
7	Issued	750 Units
10	Purchased	1500 Units at Rs 24
12	Issued	1100 Units
15	Purchased	1000 Units at Rs.25
17	Issued	500 Units
18	Issued	300 Units
25	Purchased	1500 Units Rs.26
29	Issued	1500 Units.

37. Prepare store ledger a/c under weighted average method of pricing issue of materials.

2010

March

1 Balance 1000 Units Rs.70 P. u

3 Purchased 2000 units Rs.80

5 Issued 500 units

10 Issued 1000 units

15 Purchased 2000 units at Rs.80 P. u

18 Issued 1000 units

20 Received back 25 units out of the issue made on 5<sup>th</sup> March

22 Issued 1500 Units

24 Returned to supplier 30 units out of the purchase made of the purchase made on 15<sup>th</sup> March

25 Purchased 1000 units Rs.75 P. u

30 Issued 1000 Units.

Physical verification on 21 March revealed a shortage of 15 units and 20 unit's shortage on 30 March.

38. Explain the methods of pricing material issues.

39. Show store ledger entries under the simple average and weighted average method of pricing issues.

Date	Particulars	Units	Price
1993 May 1	Balance b/d	300	2

2	Purchase	200	2.20
4	Issued	150	---
6	Purchase	200	2.30
11	Issued	150	---
19	Issued	200	----
22	Purchased	200	2.40
27	Issued	150	---

40. What is labour Turnover? What are steps to do suggest reducing labour turnover?
41. Explain the labour remuneration.
42. Distinguish between differential piece rate systems of Taylor and Merrick.
43. Describe various piece rate system and their pros and cons.
44. From the following data prepare a statement showing the cost per day of 8 HRs of engaging a particular type of labour.
- Monthly salary (Basic + D.A) Rs.400.
  - Leave salary payable to work man 15% of basic and D.A.
  - Employer's contribution to P.F.8% of salary (itemsaxb).
  - Employer's contribution to E.S.I .5% of salary (Items a and b).
  - Pro rata expenditure on amenities to labour Rs25 per head per month.
  - No. of working hours in a month 200.
45. Calculate the earnings of workers x and y under
- Straight Piece rate system and
  - Taylor's differential piece rate system.

Standard time per Unit = 12 minutes

Standard rate per Hour =Rs60

Differentials to be used 80% & 120%

In a particular day of 8 HRs, worker 'x' produced 30 units and worker "y" produced 50 units.

46. Calculate the earnings of 3 worker's A,B,& C Under Merrick's

## Multiple piece rate system

Given the following:-

Standard production per day = 150 Units

Normal piece rate : Rs0.50 per Unit.

Production of workers on a particular day: A -120 Units c- 160 Units.

47. From the following information, calculate the bonus and earnings under & Merson's efficiency Bonus plan:

Standard output in 12 Hours – 192 Units

Actual output in 12 Hours - 168 Units

Time rate Rs.0.75 per hour.

If the actual output is 240 units, what will be the amount of bonus and earning?

48. From the following particulars calculate earnings of a workers under:

- i) Time rate system, ii) Piece wage rate iii) Halsey plan and IV) Rowan plan.

Wage rate – Rs 2 per hour.

Production on per hour – 4 Units

Dearness allowance – Re 1 per hour

Standard time fixed - 80 Hrs.

Actual time taken - 50 Hrs.

Production – 250 Units.

49. From the following calculate cost man day of eight hours.

- a) Basic salary and D.A. Rs3000 P.M
- b) Leave salary 6% the basic and D.A
- c) Employee's contribution of the p .F 6% of (a) plus (b)
- d) Employer's contribution of the p. F 6% of a) Plus (b) e) No.of working hours in a month 200.

50.K ltd has their production department A, B and c and two service departments D and E. The following figures are extracted from the records of the company.

	Rs.
Rent and rates	5000
Indirect wages	1,500
Depreciation of machinery	10,000
General lighting	600
Power	1,500
Sundries	10,000

Following further details are available.

	A	B	C	D	E
Floor space insquance feet	2000	2500	3000	2000	500
Light points	10	15	20	10	5
Direct wages	3000	2000	3000	1500	500
H.P of machines	60	30	50	10	-
Value of machinery	60000	80000	10000	5000	5000

On the basis by preparing a primary departmental distribution summary.

51.A Factory has 3 dept. L,M,N and 2 production dept. x and y. The following expenses allocated and apportioned to the department as per primary distribution summary.

L	M	N	X	Y
10000	8000	12000	30000	40000

The Following additional information on the basis of a detailed analysis on the basis of a detailed analysis.

	2	M	N	X	Y
L's Service used	---	20%	30%	30%	20%
M's Service used	---	--	40%	30%	30%
N' s Service used	----	---	--	60%	40%

Prepare a statement showing apportionment of service department overheads under the step method.

52.Explain the different methods of classifying overheads.

53.Explain the bases for apportionment of overhead expenses.

54.A company has three department production and two service department respectively.

Production	service
A- Rs.800	x-Rs.234
B- Rs.700	y-Rs.300
C- Rs.500	

Service departments give service in the following manner.

	A	B	C	X	Y
X	20%	40%	30%	---	10%
Y	40%	20%	20%	20%	---

You are required to show the distribution of service department OIH'S under simultaneous equation method.

55.A company has 3 department and 2 service department.

Production

A - 16000

B - 13000

C - 14000

Service

x - 4000

y - 6000

The service department expenses are changed out on % basis.

	A	B	C	X	Y
Expenses of E		20%	35%	--	20%
Expenses of F		25%	40%	10%	--

56.P ltd is a manufacturing company having 3 production departments A, B and C. and 2 service departments x and y. The total overheads as per primary distribution.

	Rs
A	4100
B	2700
C	6200
X	4200
Y	5300

A technical assessment of apportionment of service departments under trial and error method.

	A%	B%	C%	X%	Y%
X	45	15	30	--	10
Y	60	35	---	5	---

57.S Ltd has three department for produced A,B and C. Two department for X X Y . The following particular are available for the month of March 2010 concerning the organisation.

Rent	15000	Power	6000
Municipal Taxes	5000	Depreciation	
Electricity	2400	On machinery	40000
Indirect wages	6000	Canteen Expe	30000
		Other tab our related cost	10000

The Following further details are also available:-

	A	B	C	X	Y
Floor space	1000	1250	1500	1000	250
Light points	40	60	80	40	20
Direct wages	12000	8000	12000	6000	2000
Horse power Of machines	60	30	50	10	----
Cost of machines	48000	64000	80000	4000	4000

58.From the following particulars compute the machine hour rate.

Cost of the machine	Rs.1100
Scrap value	Rs. 680
Repairs for the effective Working life	Rs. 1500
Standing charges for 4 weekly Period	Rs. 40

Effective working life 10000 hours power used: 6 units per hour 5 paisa per Units.

Hours worked in 4 weekly

Period: 120 hours.

59. Work out the machine hour rate for the following machine whose scrap value is nil.

Cost of Machine Rs.360000

Freight and installation Rs.40000

Working life 20years.

Working hours:8000 per years

Repair charges: 50% of depreciation

Power: 10 units per hour @ 10 paisa per unit

Lubricating oil @ Rs.2 per day of 8 hours.

Consumable stores @Rs10 per day of 8 hours.

Wages of operator @ Rs 4 per day.

60. Calculate machine Hour rate from the following:-

Cost of Machine

Estimated scrap value

Repair charges per month

Standing charges allocation to

Machine per month Rs.50

Effective working life of machine

Running time per month 166 hours

Power used by machine 5 units per

Hour at 19 paisa per unit.