

**M.Com. DEGREE EXAMINATION NOVEMBER 2014**  
**COMMERCE**  
**FIRST SEMESTER**

**COURSE : MAJOR CORE**  
**PAPER : COST DETERMINATION AND COST CONTROL**  
**TIME : 3 HOURS** **MAX. MARKS: 100**

**SECTION – A**

**I. ANSWER ALL QUESTIONS: (10 x 2 = 20 Marks)**

1. What is Opportunity Cost?
2. Write a note on inter process profits.
3. What is meant by Decentralised Purchasing?
4. What do you understand by Under-Absorption of overhead?
5. What is Operating costing?
6. Ascertain the Cost and selling price from the following:  
Materials consumed Rs.6, 000;                      Wages Paid Rs.9, 000;  
Works on cost 50% on wages,                      Office on cost 20% on works cost,  
Selling on cost 10% on works cost,                      Profit 20% on cost.
7. A factory requires 1,500 units of an item per month, each costing Rs.27. The cost per order is Rs.150 and the inventory carrying charges work out to 20 percent of the average inventory. Find out the Economic Order Quantity.
8. Calculate machine hour rate from the following:  
Cost of machine Rs.19, 200;                      Estimated scrap value Rs.1, 200  
Effective working life of machine 10,000 hours  
Power used by machine 5 units per hour @ Re.0.19 per unit.
9. M/s Joint products Limited processing material 'X' produces four Joint products A,B,C and D. Cost per tonne of 'X' processed is as under:  
Material                      Rs.1, 350  
Labour & overhead cost    Rs. 900  
Total                                      2, 250  
The joint products yielded were 540,180,118 and 62 Kilo grams of A, B, C and D respectively the rest being normal wastage. Apportion the total costs of 'X' to each one of the joint products.
10. From the following information, calculate total passenger-kms.  
Number of buses – 5                      Days operated in the month – 25  
Trips made by each bus – 4                      Distance of route – 20 kms. long (one side)  
Capacity of bus – 50 passengers                      Normal passenger travelling – 90% of capacity.

**II. ANSWER ANY FIVE QUESTIONS:**

**(5 x 8 = 40 Marks)**

11. The following data collected related to the manufacture of a standard product during the month of April 2014:

Raw materials consumed	Rs. 20, 000
Direct wages	Rs. 12, 000
Machine hours worked	9,500 hours
Machine hour rate	Rs.2
Office overheads	20% of works cost
Selling overheads	50 paise per unit
Units produced	20,000 units
Units sold	18,000 @ Rs.5 per unit.

Prepare a cost sheet in respect of the afore mentioned data showing

(a) Cost per unit and (b) Profit for the month of April 2014.

12. The average consumption of iron in a factory is 7 ton per day, the maximum consumption per day is 11 ton, Minimum level is 75 ton and Economic order quantity is 230 ton. It is estimated that the supply would take 10-12 days. The emergent supply time is 3 days. Find out different levels of inventory.

13. Calculate the normal and overtime wages payable to a workman from the following data:

<u>Days</u>	<u>Hours worked</u>
Monday	8
Tuesday	10
Wednesday	9
Thursday	11
Friday	9
Saturday	4

Normal working hours: - 8 hours per day

Normal rate: - Rs.0.50 per hour

Overtime rate: Up to 9 hours in a day at single rate and over 9 hours in a day at

Double rate or up to 48 hours in a week at single rate and over 48 hours at double Rate, whichever is more beneficial to the workman.

14. Prepare statement of equivalent production, statement of cost and process account from the following information:

Units put into process I	5,000
Units completed and transferred to process II	3,000
Estimated normal loss 20% of Input	
Work-in-progress at the end 1,000 units	
Stage of completion: Material 100%	
Labour and overheads 20%	

Process costs: Material Rs.50, 000; Labour Rs.48, 000; Overheads Rs.48, 000

15. Compute the machine hour rate from the information given below:

(i)	Cost of machine	Rs.1,00,000
(ii)	Installation charges	Rs.10,000
(iii)	Estimated Scrap value after the expiry of its life (15 years)	Rs.5,000
(iv)	Rent and rates for the shop per month	Rs.200
(v)	General lighting for the shop per month	Rs.300
(vi)	Insurance premium for the machine per annum	Rs.960
(vii)	Repairs and maintenance expenses per month	Rs.1,000
(viii)	Power consumption – 10 units per hour	
(ix)	Rate of power per 100 units	Rs.20
(x)	Estimated working hours per annum – 2,200. This includes setting up time of 200 hours	
(xi)	Shop supervisor's salary per month	Rs.600

The machine occupies 1/4<sup>th</sup> of the total area of the shop. The supervisor is expected to devote 1/5<sup>th</sup> of his time for supervising the machine.

16. From the following information of 'X' construction company prepare the Contract account for 2009. Also show what part of the profit on the contract should be taken credit in 2009. The Contract was for Rs.8, 00,000.

	<b>Rs.</b>
Materials issued from stores	1, 50,000
Wages paid	2, 20,000
General charges	8,000
Plant installed at site on 1 <sup>st</sup> July 2009	40,000
Materials on hand at close	8,000
Wages accrued due	8,000
Work certified	4, 00,000
Work completed but not certified	12,000
Cash received	3, 00,000
Materials transferred to other contracts	8,000
Depreciation on plant is to be provided at 10% per annum.	2,000

17. From the data given below, obtained from the books of M/s. Anitha & Co., for the year ended 31.12.2010, prepare (1) Consolidated completed Jobs accounts showing the profit or loss; and (2) Consolidated working progress account.

	Completed jobs (Rs.)	Work-in-progress (Rs.)
Raw materials supplied from stores	9,000	3,000
Chargeable expenses	1,000	400
Wages	10,000	4,000
Materials transferred to work-in-progress	200	200
Material returned to stores	100	-

Factory overhead is 80% of wages and office overhead 25% of factory cost. The value of executed jobs during 2010 was Rs.41, 000.

18. Lakshmi Travels, a transport co. is running a fleet of 6 buses between two towns 75 kms. apart. The seating capacity of each bus is 40 passengers. The following particulars are available for the month of April 2007.
- |  | <b>Rs.</b> |
|--|------------|
| Wages of drivers, conductors etc.        | 3,600      |
| Salaries of office and supervisory staff | 1,500      |
| Diesel oil, etc.                         | 10,320     |
| Repairs and maintenance                  | 1,200      |
| Taxes and Insurance                      | 2,400      |
| Depreciation                             | 3,900      |
| Interest and other charges               | 3,000      |
- The actual passengers carried were 80% of the capacity. All the buses run all the days in the month. Each bus made one round trip per day. Find out the cost per passenger kms.

### SECTION – C

#### III. ANSWER ANY TWO QUESTIONS:

(2 x 20 = 40 Marks)

19. Usha company submits the following information for the year 2004

	<b>Rs.</b>	<b>Rs.</b>
Sales for the year		2, 75,000
Inventories at the beginning of 2004:		
Finished goods	7,000	
Work in progress	4,000	
Purchase of Materials		1, 10,000
Materials inventory:		
Opening	3,000	
Closing	4,000	
Direct labour		65,000
Factory overhead 60% of direct labour cost		
Inventories at the close of the year:		
Finished goods	7,000	
Work in progress	6,000	
Other expenses for the year were as follows:		
Selling expenses 10% of sales		
Administration expenses 5% of sales		

Prepare a statement of cost.

20. From the following particulars, prepare stores ledger by adopting Simple average method and Weighted average method of pricing of material issues.

	<b>Date</b>	<b>Receipts</b>	<b>Issues</b>
1990	Jan 1	300 units at Rs.10 per unit	
	10	200 units at Rs.12 per unit	
	12	400 units at Rs.11 per unit	
	15		250 units
	16		150 units
	18	200 units at Rs.14 per unit	
	20		300 units
	22	300 units at Rs.15 per unit	
	25	100 units at Rs.16 per unit	
	27		200 units
	31		100 units.

21. A product passes through 3 processes. The following relate to the 3 processes during September 1998:

	Total	Process I	Process II	Process III
Materials (Rs.)	5,625	2,600	2,000	1,025
Labour (Rs.)	7,330	2,250	3,680	1,400
Overheads (Rs.)	7,330	-	-	-
Output (units)	-	450	340	270
Normal loss (% of input)	-	10	20	25
Scrap value (Rs. Per unit)	-	2	4	5

500 units @ Rs.4 per unit were introduced in process I. Production overhead is absorbed in the ratio of labour. Prepare the process accounts and abnormal loss and abnormal gain accounts.

22. The following data were obtained from the books of Light engineering company for the half year ended 30<sup>th</sup> September. Calculate the departmental overhead rate for each of the production departments, assuming that overheads are recovered as a percentage of direct wages.

Production department      Service department

Particulars	A	B	C	X	Y
Direct wages [Rs.]	7,000	6,000	5,000	1,000	1,000
Direct materials [Rs.]	3,000	2,500	2,500	1,500	1,000
Employees [Nos.]	200	150	150	50	50
Electricity [Kwh]	8,000	6,000	6,000	3,000	3,000
Light points [Nos.]	10	15	15	5	5
Assets value [Rs.]	50	30	20	10	10
Area occupied [Sq.meters]	800	600	600	200	100

The expenses for six months were:

Stores overheads	Rs.400	Depreciation	Rs.6, 000
Motive Power	Rs.1, 500	Repairs & Maintenance	Rs.1, 200
Electric Lighting	Rs.200	General overheads	Rs.10, 000
Labour welfare	Rs.3, 000	Rent & taxes	Rs.600

Apportion the expenses of department X in the ratio of 4:4:3 and that of department Y in proportion to direct wages, to department A, B and C respectively.

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