

**M.Com. DEGREE EXAMINATION NOVEMBER 2008**  
COMMERCE  
FIRST SEMESTER

COURSE : MAJOR – CORE  
PAPER : COST AND MANAGEMENT ACCOUNTING  
TIME : 3 HOURS MAX. MARKS : 100

**SECTION – A**

ANSWER ANY FIVE QUESTIONS: ( 5 x 8 = 40)

1. A Company manufactures two products namely A and B, using same plant and process. The following information is available for a particular production period.
- |                              | A     | B     |
|------------------------------|-------|-------|
| Quantity produced (units)    | 6,000 | 8,000 |
| Direct labour hours per unit | 2     | 3     |
| Machine hours per unit       | 4     | 2     |
| Set-ups in the period        | 20    | 60    |
| Orders handled in the period | 25    | 90    |
- Overhead costs
- |                                   |             |
|-----------------------------------|-------------|
| Related to machine activity       | Rs.3,20,000 |
| Related to production run set ups | Rs.30,000   |
| Related to handling of orders     | Rs.46,000   |
- Required:
- to calculate production overheads to be absorbed by one unit of each product using traditional costing approach using direct labour hour rate to absorb overheads.
  - An activity based costing approach using suitable cost drivers to trace overheads to products.
2. A machine is purchased for cash Rs.9,200 its working life is estimated to be 18,000 hours after which its scrap value is estimated at Rs.200. It is assumed from past experience that:
- the machine will work for 1,800 hours annually.
  - the repair charges will be Rs.1,080 during the whole period of life of the machine.
  - the power consumption will be 5 units per hour at 6 paise per unit.
  - other annual standing charges are estimated to be
    - rent of department (machine occupies 1/5 of total space) Rs.780.
    - light (12 points in the department – 2 points for the machine) Rs.288.
    - Foreman's salary (1/4 of his time is occupied in the machine) Rs.6,000.
    - insurance premium for machinery – Rs.36
    - cotton waste – Rs.60.
- Find out the machine hour rate on the basis of the above data for allocation of the works expenses to all jobs for which the machine is used. ..2

3. During first week of April 2007, a worker manufactured 300 articles. He receives wages for a guaranteed 48 hour week at the rate of Rs.4 per hour. The estimated time to produce one article is 10 minutes and under incentive scheme the time allowed is increased by 20%. Calculate his gross wages according to
- piece work with a guaranteed weekly wage
  - Rowan premium bonus
  - Halsey premium bonus 50% to workman.

4. From the following information, you are required to calculate:

- Average stock
- Purchases
- Creditor's turnover ratio
- Average payment period
- Average collection period
- Working capital ratio

Stock turnover ratio	6 times
Gross profit ratio	20% on sales
Closing stock is Rs.10,000 more than the opening stock	
Opening creditors	Rs.20,000
Closing creditors	Rs.30,000
Trade debtors at the end	Rs.60,000
Net working capital	Rs.50,000.

5. The Balance sheet of A Ltd. on 1.4.2006 and 2007 was as follows:

	2006 Rs.	2007 Rs.
<b>Liabilities</b>		
Current liabilities	72,000	82,000
Loan	-	40,000
Bank overdraft	60,000	50,000
Capital	2,96,000	2,98,000
	<u>4,28,000</u>	<u>4,70,000</u>
<b>Assets</b>		
Cash	8,000	7,200
Debtors	70,000	76,800
Stock	50,000	44,000
Land	40,000	60,000
Building	1,00,000	1,10,000
Machinery	2,14,000	2,44,000
Prov. For depreciation	(54,000)	(72,000)
	<u>4,28,000</u>	<u>4,70,000</u>

During the year Rs.52,000 were paid as dividends. Prepare Cash flow statement.

6. The annual demand of a product is 24,000 units. The buying cost per order is Rs.100 and the estimated cost of carrying one unit in stock for a month is 2%. The normal price of the product is Rs.10 per unit. The supplier offer a discount of 7.5% for an order of at least 3,000 units and a discount of 12.5% if an order is for at least 5,000 units. Find the most economic purchase quantity per order and the total cost.

7. Explain the general principles of a good reporting system.
8. Write short notes on:
- Absorption costing
  - Responsibility accounting
  - Inflation accounting
  - Use of Ms Excel in financial reporting.

### SECTION – B

ANSWER ANY THREE QUESTIONS:

( 3 x 20 = 60)

9. The Balance sheet of Ashwin Ltd. as at 31.3.2007 and 2008 are given below:

Liabilities	2007 Rs.	2008 Rs.
Share capital	4,00,000	5,00,000
Capital reserve	-	20,000
General reserve	1,80,000	2,10,000
Debentures	3,00,000	2,00,000
Profit and loss account	70,000	90,000
Current liabilities	1,30,000	1,20,000
Provision for income tax	80,000	60,000
Proposed dividend	40,000	50,000
	<u>12,00,000</u>	<u>12,50,000</u>
 Assets		
Fixed assets at cost	10,00,000	10,00,000
Less depreciation	2,60,000	3,10,000
	<u>7,40,000</u>	<u>6,90,000</u>
Trade investments	1,10,000	90,000
Current assets	3,20,000	4,50,000
Preliminary expenses	30,000	20,000
	<u>12,00,000</u>	<u>12,50,000</u>

During the year ended 31.3.2008, the company:

- Sold one machine for Rs.40,000, the cost of which was Rs.80,000 and the depreciation provided on it was Rs.30,000
- Provided Rs.1,00,000 as depreciation
- Redeemed the debentures at Rs.105.
- Sold some trade investments at a profit which was credited to capital reserve.
- Decided to write off fixed assets (duly depreciated) costing Rs.20,000.
- Decided to value opening stock at cost which was valued previously at cost less 10%. The opening stock according to the books was Rs.63,000.

Prepare a fund flow statement for the year ended 31.3.2008.

10. Given the following information, for Ashwanth Ltd., at the end of 2007, prepare the final accounts of the company.
- Net sales Rs.1,00,000  
 Debtors turnover ratio based on net sales -2  
 Inventory turnover ratio – 1.25  
 Fixed assets turnover ratio – 0.8  
 Debt to assets ratio – 0.6  
 Net profit margin – 5%  
 Gross profit margin – 25%  
 Return on investments – 2%.
11. Aish Ltd. has three production departments A,B,C and two service department X and Y. The following particulars are available for the month of March 2008:
- |                           |        |
|---------------------------|--------|
|                           | Rs.    |
| Rent                      | 15,000 |
| Municipal taxes           | 5,000  |
| Electricity               | 2,400  |
| Indirect wages            | 6,000  |
| Power                     | 6,000  |
| Depreciation on machinery | 40,000 |
| Canteen expenses          | 30,000 |
| Other labour related cost | 10,000 |

Following further details are available:

	TOTAL	A	B	C	X	Y
Floor space (sq.mts.)	5,000	1,000	1,250	1,500	1,000	250
Light points (Nos.)	240	40	60	80	40	20
Direct wages (Rs.)	40,000	12,000	8,000	12,000	6,000	2,000
Horse-power of machines (Nos.)	150	60	30	50	10	-
Cost of machines (Rs.)	2,00,000	48,000	64,000	80,000	4,000	4,000
Working hours		2335	1510	1525		

The expenses of service department are to be allocated in the following manner

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

You are required to calculate the overhead absorption rate per hour.

12. a) State the importance of EOQ.
- b) A hardware store procures and sells hardware items. Information on an item is given below:
- Expected annual sales 8000 units  
 Ordering cost Rs.180 per order  
 Holding cost 10% of the average inventory value.

The item can be procured according to the following schedule -  
lot size            unit Price – Rs.

1-999	22
1000-1499	20
1500-1999	19
2000 and above	18.50

You are required to determine the best order size and the total cost.

13. ABC Ltd. produces and sells four products A, B C and D. These products are similar and usually in production runs of 10 units and sold in a batch of 5 units. The production details of these products are as follows:

Product	A	B	C	D
Production in units	100	110	120	150
Cost per unit				
Direct material (Rs.)	30	40	35	45
Direct labour (Rs.)	25	30	30	40
Machine hour (per unit)	5	4	3	4

Production overheads during the period are as follows:

Factory work expenses	Rs.19,000
Stores receiving costs	Rs.19,800
Machine set up cost	Rs.12,000
Cost relating to quality control	Rs.4,800
Material handling and dispatch	Rs.9,000

Cost drivers of these overheads are

Cost	Cost drivers
Factory work expenses	Machine hours
Stores receiving cost	Requisition raised
Machine set up cost	No. of production runs
Cost relating to quality control	No. of production runs
Material handling and dispatch	No. of orders executed

No. of requisitions raised on the stores was 25 for each product and the number of orders executed was 96, each order was in batch of 5 units.

Calculate:

- Total cost of each product assuming the absorption of overheads on machine hour basis.
- Total cost of each product assuming the absorption of overheads by using Activity base costing.

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