

CMA		CA R. K. Mehta
Test - 10		
Time Allowed : 50 min.		Total Marks: 30 Marks

Q.1: Explain the meaning and accounting treatment of under- recovery and over- recovery of overheads. (5 Marks)

Q.2: The following **information** relates to the activities of a production department for a certain period in a factory: -

Material used - ₹ 72,000	Direct Labour hours worked- ₹ 24,000
Direct wages - ₹ 60,000	Hours of machine operation – ₹ 20,000
Overheads chargeable to the department- ₹ 48,000	

On one order carried out in the department during the period, the **relevant data** were:

Materials used - ₹ 4,000	Direct wages - ₹ 3,300
Labour hours - ₹ 1,650	Machine hours - ₹ 1,200

Prepare a comparative **statement of cost** of this order by using the **following** three **methods** of recovery of overheads: -

- (i) Direct Labour-hour rate
- (ii) Direct Labour Cost Rate
- (iii) Machine Hour Rate.

(5 Marks)

Q.3: Calculate machine-hour rate for recovery of overheads for a machine from the following information:

Cost of machine is ₹ 25,00,000 and estimated salvage value is ₹ 1,00,000. Estimated working life of the machine is 10 years. Annual working hours are 3,000 in the factory. The machine requires 400 hours per annum for repairs and maintenance.

Setting-up time of the machine is 156 hours per annum to be treated as productive time. Cost of repairs and maintenance for whole working life of the machine is ₹ 3,50,000. Power used 15 units per hour at a cost of ₹ 5 per unit. No power is consumed during maintenance and setting-up time. The cost of a chemical required for operating the machine is ₹ 9,880 per annum. Wages of an operator is ₹ 4,000 per month. The operator devoted one-third of his time to the machine. Annual insurance charges 2 per cent of the cost of machine.

Light charges for the department is ₹ 2,500 per month, having 48 points in all, out of which only 8 points are used at this machine. Other indirect expenses chargeable to the machine are ₹ 6,500 per month.

(10Marks)

[P.T.O]

Q.4: ABC Ltd. Manufactures two types of machinery equipment Y and Z and applies/absorbs overheads on the basis of direct-labour hours. The budgeted overheads and direct-labour hours for the month of December, 2017 are ₹12,42,500 and 20,000 hours respectively. The information about Company's products is as follows:

	Equipment Y	Equipment Z
Budgeted Production volume	2,500 units	3,125 units
Direct material cost	₹300 per unit	₹ 450 per unit
Direct labour cost		
Y: 3 hours@ ₹150 per hour	₹450	
X: 4 hours@ ₹150 per hour		₹600

ABC Ltd.'s overheads of ₹ 12,42,500 can be identified with three major activities: Order Processing (₹2,10,000), machine processing (₹8,75,000), and product inspection (₹1,57,500). These activities are driven by number of orders processed, machine hour worked, and inspection hours, respectively. The data relevant to these activities is as follows:

	Orders processed	Machine Hours Worked	Inspection Hours
Y	350	23,000	4,000
Z	250	27,000	11,000
Total	600	50,000	15,000

Required:

- i) Assuming use of direct-labour hours to absorb/apply overheads to production, compute the unit manufacturing cost of the equipment Y and Z, if the budgeted manufacturing volume is attained.
- ii) Assuming use of activity-based costing, compute the unit manufacturing costs of the equipment Y and Z, if the budgeted manufacturing volume is achieved.
- iii) ABC Ltd.'s selling prices are based heavily on cost. By using direct-labour hours as an application base, calculate the amount of cost distortion (under-costed or over-costed) for each equipment. **(10 Marks)**