

**LF-137**

April-2014

**4<sup>th</sup> MBA (KS) (Integrated)  
Advanced Cost and Management Accounting****Time : 3 Hours]****[Max. Marks : 70**1. Answer the following questions : **14**

- (1) State and explain main differences between cost accounting and financial accounting.
- (2) List out the different methods of costing and explain their practical application.

**OR**

NI Ltd. has three production departments X, Y, Z and two service departments S and C. The following details are extracted from the books of accounts in respect of indirect expenses incurred during March, 2012 :

<b>Particulars</b>	<b>Amount (₹)</b>
Indirect wages	9,000
Lighting and Heating	1,200
Rent and Rates	12,000
Electric power	6,000
Depreciation	24,000
Sundry Expenses	7,800

Following further details are collected for distribution of the above costs :

<b>Particulars</b>	<b>Departments</b>				
	<b>X</b>	<b>Y</b>	<b>Z</b>	<b>S</b>	<b>C</b>
Value of Machinery (₹ '000)	60	50	80	10	–
Horse power of Machines	40	45	60	5	–
Light points (Nos.)	20	30	40	20	10
Floor space (sq. meters)	150	200	250	100	50
Direct wages (₹ '000)	30	20	40	4	6
Machine hours worked	4250	3380	7120		

The cost of service departments are apportioned percentagewise as follows :

<b>Departments</b>	<b>X</b>	<b>Y</b>	<b>Z</b>	<b>S</b>	<b>C</b>
S	20	30	40	–	10
C	40	20	30	10	–

Calculate :

- (a) Overhead recovery rates based on machine hours showing the apportionment.
- (b) Total cost of Job 123, the job card of which contains the following details :

<b>Particulars</b>	<b>Dept. X</b>	<b>Dept. Y</b>	<b>Dept. Z</b>
Direct materials used	₹ 268	₹ 131	₹ 102
Direct wages	₹ 300	₹ 250	₹ 300
Machine hours worked	10	12	12

2. (a) From the following information for the month ending on October, 2011 prepare process cost account for Process – 3 : 10

Opening WIP	2000 units at ₹ 25,750
Transferred from Process – 2	53,000 units at ₹ 4,11,500
Transferred to Process – 4	48,000 units
Closing stock of Process – 3	5,000 units
Units scrapped	2,000 units
Direct materials added in Process – 3	₹ 1,97,600
Direct wages	₹ 97,600
Production overhead	₹ 48,800

Degree of completion :

Particulars	Opening stock	Closing stock	Scrap
Materials	80%	70%	100%
Labour	60%	50%	70%
Overheads	60%	50%	70%

The normal loss in the process was 5% of production and the scrap was sold at ₹ 3 per unit.

**OR**

Mr. A has taken a contract to run a tourist car on a 20 km. long route for the chief executive of a multinational firm. He buys a car costing ₹ 1, 50,000. The annual cost of insurance and taxes are ₹ 4,500 and ₹ 900 respectively. He has to pay ₹ 500 per month for a garage where he keeps the car when it is not in use. The annual repair costs are estimated at ₹ 4,000. The car is estimated to have a life of 10 years, at the end of which the scrap value is likely to be ₹ 50,000. He hires a driver who is to be paid ₹ 300 per month plus 10% of the takings as commission. Other incidental expenses are estimated at ₹ 200 per month.

Petrol and oil will cost ₹ 100 per 100 kms. The car will make 4 round trips each day. Assuming that a profit of 15% on takings is desired and that the car will be on the road for 25 days on an average per month, what should he charge per round-up ?

- (b) Explain various methods of allocation of joint cost among joint products in brief. 4

3. (a) The relevant data of A Ltd, for its three products A, B and C are given as under : 10

Product	A	B	C
Direct materials (₹/unit)	260	300	250
Direct labour (₹/unit)	130	270	260
Variable overhead (₹/unit)	110	230	180
Selling price (₹/unit)	860	1040	930
Machine hours required (per unit)	12	6	3

The estimated fixed overhead at four different levels of 3600; 6000; 8400 and 10,800 machine hours are ₹ 1,00,000; ₹ 1,50,000; ₹ 2,20,000 and ₹ 3,00,000 respectively. The maximum demand of A, B and C in a cost period are 500; 300 and 1800 units respectively. You are required to find out

- (i) the most profitable product mix at each level  
(ii) the level of activity where the profit would be maximum.

- (b) Explain the concept of BEP with graph. Also mention the assumptions of BEP analysis. 4

**OR**

NI Ltd. proposes to install a machine for the manufacture of a component which at present is being purchased at ₹ 120 each. There are two alternatives, namely (a) semi-automatic machine and (b) automatic machine. The details of the two machines are as under :

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Particulars	Semi-automatic Machine	Automatic Machine
Cost of Machine (₹)	30,00,000	45,00,000
Life (years)	10	10
Cash fixed overhead p.a. (₹)	4,20,000	8,10,000
Variable expenses of the component (₹)	75	60

The company charges depreciation on straight line method. Scrap value of the machine at the end of life is nil.

The demand for the components at present is 50,000 units per annum. This demand is expected to increase to 1,00,000 units.

Required :

- (1) For each of the two volume of output namely 50,000 and 1, 00,000 units, state with supporting calculations whether the components should be purchased or manufactured by installation of machine. If your decision is in favour of installation of machine, which model will you advise ?
- (2) At what volume of output should the company change over from purchase of components to manufacture by installation of (i) semi automatic machine and (ii) automatic machine.
- (3) At what volume of manufacture of the component will the company switch over from installation of one type of machine to the other ?

4. Alfa Ltd. has a standard costing system for its single output. The standard cost for 100 units produced are as follows :

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	₹
Materials – 100 kg. @ ₹ 10/kg.	1,000
Labour – 40 hours @ ₹ 20/hour	800
Variable factory overhead – @ ₹ 10 per direct labour hour	400
Fixed factory overhead – @ ₹ 5 per labour hour	200
<b>Total</b>	<b>2,400</b>

The following operating data were taken for May 2011,

- (a) 500 units were manufactured,
- (b) Normal volume is 220 direct labour hours
- (c) 520 kg. of materials @ ₹ 11 were consumed.
- (d) 190 labour hours @ ₹19 were used.
- (e) Actual variable factory overhead ₹ 2,090.
- (f) Actual fixed factory overhead ₹ 1,150

You are required to calculate all possible cost variances.

**OR**

Prime Ltd. is currently operating at 75% of its capacity. In the past year, the level of operation was 55%. Presently, the production is 75,000 units. The company is planning for 85% capacity level during next year. The cost details are as follows :

<b>Particulars</b>	<b>55%</b>	<b>75%</b>
	<b>₹</b>	<b>₹</b>
Direct materials	1,10,000	1,50,000
Direct labour	55,000	75,000
Factory overheads	31,000	35,000
Selling overheads	32,000	40,000
Administrative overheads	16,000	16,000

Profit is estimated at 20% on sales. The following increases in costs are expected during the next year.

	<b>In %</b>
Direct materials	8
Direct labour	5
Variable factory overheads	5
Variable selling overheads	8
Fixed factory overheads	10
Fixed selling overheads	15
Administrative overheads	10

Prepare a flexible budget for the next year at 85% level of capacity and ascertain the profit on sales.

5. Write short notes on : (any **two**)
- Activity Based Costing – concept and benefits
  - Target costing
  - Cost control and cost reduction

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