

Seat No. : _____

AA-119

April-2016

4th Year MBA Integrated

Advanced Cost & Management Accounting

Time : 3 Hours]

[Max. Marks : 100

1. (a) The summarized trading and profit and loss account of ABC Cycles Ltd. for the year ended 31st December, 2015 is as under :

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	₹		₹
To Cost of Materials	1,00,000	By sales	5,80,000
To Direct Wages	1,50,000		
To Manufacturing Expenses	80,000		
To Gross Profit c/d	2,50,000		
	5,80,000		5,80,000
To Staff Salaries	60,000	By Gross Profit b/f	2,50,000
To Rent and Rates	10,000		
To Selling Expenses	50,000		
To General Expenses	40,000		
To Net Profit	90,000		
	2,50,000		2,50,000

During the year the company manufactured 2000 cycles. For the year ending 31st December, 2015 it is estimated that :

- (1) Output and sales will be of 2100 cycles
- (2) Price of materials will rise by 30% on the previous year's level
- (3) Wages rates will rise by $33\frac{1}{3}\%$

- (4) Manufacturing cost will rise by 25%
- (5) A bonus of $\frac{1}{6}$ th of salary is expected to be paid to office staff.
- (6) Selling cost and other expenses will rise in proportion to the cost of materials.

You are required to submit a statement for the directors showing the price at which cycles should be marketed so as to show a profit of 10% on the selling price.

(b) Answer the following :

- (1) Distinguish between Cost Accounting & Management Accounting. 5
- (2) Write a short note on classification of cost. 5

OR

A firm contractor undertook a contract on 1st April, 2014. The following was the expenditure on the contract which was ₹ 4,00,000 : 10

Particulars	₹
Materials issued to contract	60,000
Plant used for contract	20,000
Wages incurred	80,000
Other expenses	5,000

Cash received on account upto 31st March, 2015 amounted to ₹ 1,60,000 being 80% of work certified.

Of the plant and material charged to the contract, plant which costs ₹ 4,000 and materials which cost ₹ 3,000 were lost.

On 31st March, 2015 plant which costs ₹ 5,000 was returned to stores; the cost of work done but uncertified was ₹ 2,000 and material costing ₹ 3,000 were in hand on site.

Charge 10% depreciation on plant and prepare Contract Account, Work-in-Progress account and Contractee's Account from the above particulars. Show how Work-in-Progress would appear in the Balance Sheet.

2. (a) Solve the following : (any two)

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XYZ Operators Ltd. has been given a 20 km long route to run a bus. The cost of the bus is ₹ 50,000 and has been insured @6% p.a., while annual taxes amount to ₹ 2,000. Garage rent is ₹ 100 p.m. Yearly repairs will be ₹ 2,000 and the bus is likely to last for 5 years.

The driver's salary will be ₹ 3,000 p.a. and that of contractor's ₹ 1,800 p.a. in addition to 10% of the taking as commission (to be shared by drivers and conductor equally). The cost of stationary will be ₹ 600 p.a. Manager's salary is ₹ 400 p.m. who also looks after accounts:

Petrol and Oil will be ₹ 25 per 100 km. The bus will make 3 round trips carrying on the average 40 passengers on each trip. Assuming 25% profit on taking, calculate the bus fare to be charged from each passenger. The bus runs on an average 25 days in a month.

(b) Product A passes through three processes, before it is transferred to the finished stock. The following information is obtained for the month of July.

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	Process I (₹)	Process II (₹)	Process III (₹)	Finished Stock (₹)
Opening Stock	5,000	8,000	10,000	20,000
Direct Materials	40,000	12,000	15,000	—
Direct Wages	35,000	40,000	35,000	—
Manufacturing Overheads	20,000	24,000	20,000	—
Closing Stock	10,000	4,000	15,000	30,000
Profit percentage on transfer to next process	25%	20%	10%	—
Inter-process profit for opening stock	—	1395	2690	6534

Stock in process is valued at prime cost and finished stock has been valued at the price at which it is received from the process III. Sales during the period were ₹ 4,00,000. Prepare process cost accounts.

- (c) AB Limited produces four joint products. A, B, C and D, all of which emerge from the processing of one raw material. The following are the relevant data
Production for the period :

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Joint-Product	Number of Units	Selling Price per Unit (₹)
A	600	20.00
B	1000	10.00
C	500	6.00
D	200	12.00

The company budget for a profit of 15% of sales value. The other estimated costs are

Carriage inwards	₹ 900
Direct Wages	₹ 2,500
Manufacturing overhead	₹ 1,800
Administrative overhead	10% of sales value

You are required to :

- (1) Calculate the maximum price that may be paid for the raw material.
- (2) Prepare a comprehensive cost statement for each of the products allocating the materials and other costs based upon.
 - (i) Number of units
 - (ii) Sales value

3. (a) Explain BEP analysis.

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OR

Write a notes on :

- (1) Uses of Differential costing
- (2) Various Product mix decision

- (b) A farmer owns an orchard having an area of 300 acres on which he wants to grow apples, apricots, cherries and plums. 200 acres are unsuitable for apples or plums; on the remaining 100 acres any of the four fruits can be grown. Marketing considerations require that all fruits must be grown so as to produce at least 6000 boxes in a season per fruit. The following details are available :

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	Apples	Apricots	Cherries	Plums
	(₹)	(₹)	(₹)	(₹)
Selling price per box	10	10	20	30
Seasonal yield (boxes per acre)	500	150	100	200
Weight per box (kgs)	30	30	40	20
Cost				
Materials per acre	180	70	60	100
Labour	200	150	100	130
Harvesting & Packing per box	1	1	2	3
Transport per box	2	2	1	3

Fixed Overheads per season	₹
Cultivating and tending trees	1,28,000
Harvesting	21,000
Transport	5,000
Administration	42,000
Land Revenue	9,000

Advise the farmer as to how much area he should allot to each fruit. Work to the nearest acre and show the estimated profit.

4. (a) The standard mix to produce one unit of product is as follows : 10

Material A 60 units @ ₹ 15 per unit =	₹ 900
Material B 80 units @ ₹ 20 per unit =	₹ 1,600
Material C <u>100 units</u> @ ₹ 25 per unit =	<u>₹ 2,500</u>
240 units	₹ 5,000

During the month of March, 10 units were actually produced and consumption was as follows :

Material A 640 units @ ₹ 17.50 per unit =	₹ 11,200
Material B 950 units @ ₹ 18.00 per unit =	₹ 17,100
Material C <u>870 units</u> @ ₹ 27.50 per unit =	<u>₹ 23,925</u>
2460 units	₹ 52,225

Calculate the following :

- (1) Material Cost variance
 - (2) Material Price variance
 - (3) Material Usage variance
 - (4) Material Mix variance
 - (5) Material Yield variance
 - (6) Material sub-usage variance
- (b) What are requisites of effective budgetary control ? Explain. 10

OR

A factory is currently running at 50% capacity and produces 5000 units at a cost of ₹ 100 per unit as per details below : 10

Materials	₹ 40
Labour	₹ 20
Factory overhead	₹ 20 (₹ 10 fixed)
Administrative overheads	₹ 20 (₹ 10 fixed)

The current selling price is ₹ 120 per unit. At 60% working, material cost per unit increases by 2% and selling price per unit falls by 2%.

At 80% working, material cost per unit increases by 5% and selling price per unit falls by 5%.

Estimate profits of the factory at 60% and 80% working and offer your comment.

5. (a) Company A produces two products P and Q. Both are produced on the same equipment and use similar processes. The products differ by volume. Product P is a high volume product while Q is a low volume product. Details of product inputs, outputs and cost of activities are as follows : 10

	Machine Hour per Unit	Direct Labour Hour per Unit	Annual Output (units)	Total Machine Hours	Total Direct Labour Hours	No. of Purchase Orders	No. of Set-up
Product P	2	4	1000	2000	4000	80	40
Product Q	2	4	10,000	20,000	40,000	160	60
			11,000	22,000	44,000	240	100

The cost centres costs (overheads) are ₹ 4,40,000 but have been further analysed as follows :

Volume related	₹ 1,10,000
Purchasing related	₹ 1,20,000
Set-up related	<u>₹ 2,10,000</u>
	₹ 4,40,000

Calculate overhead cost under :

- (1) Traditional volume based costing system
 - (2) ABC system
- (b) Answer the followings : (Any two) 10
- (1) Distinguish between cost control and cost reduction.
 - (2) Explain importance of control reports and state how they should be drawn up the role of cost accountant in cost control.
 - (3) Explain different methods of pricing.

