



Seat No. : _____

XZ-138

April-2013

Five Years MBA Integrated (K.S.)

4th M.B.A.

Advanced Cost & Management Accounting

Time : 3 Hours]

[Max. Marks : 70

1. (A) Arrow Construction Ltd. with a paid up Share Capital of ₹ 1 crore undertook a contract to construct MIG apartments. The work commenced on the contract on 1st April 2012. The contract price was ₹ 120 lakh. Cash received on account of the contract upto 31st March, 2013 was ₹ 36 lakhs (being 90% of work certified) work completed but not certified was estimated at ₹ 2,00,000. As on 31st March, 2013 material at site was estimated at ₹ 60,000 machinery at site costing ₹ 4,00,000 was returned to stores and wages outstanding were ₹ 10,000. Plant & Machinery at site to be depreciated at 5%. **10**

The following were the ledger balance as per Trial Balance as on 31st March, 2013.

	₹
Land & Building	46,00,000
Plant & Machinery (60% at site)	50,00,000
Furniture	1,20,000
Materials	28,00,000
Fuel & Power	2,50,000
Site expenses	10,000
Office expenses	24,000
Rates & taxes	30,000
Cash & Bank	2,66,000
Wages	5,00,000

Prepare Contract A/c and Balance Sheet.

- (B) Given below is a list of eight industries. Give the method of costing & unit of cost against each industry. **4**
- (1) Bridge construction
 - (2) Steel
 - (3) Furniture
 - (4) Road transport
 - (5) Nursing home
 - (6) Oil refining mill
 - (7) Coal
 - (8) Advertising

OR

1. (A) The following is the summarized Trading & Profit & Loss A/c. of T.V. valves manufacturers Ltd. for the year 31-3-2013 in which 8000 T.V. valves were sold. **10**

TRADING & PROFITS & LOSS A/c.

Particulars	Amt. ₹	Particulars	Amt. ₹
Cost of Material	3,20,000	Sales	16,00,000
Direct wages	4,80,000		
Manufacturing charges	2,00,000		
Gross Profit C/F	6,00,000		
	16,00,000		16,00,000
Office Salary	2,40,000	Gross Profit b/f	6,00,000
Rent & taxes	40,000		
Selling expenses	80,000		
General expenses	1,20,000		
Net Profit	1,20,000		
	6,00,000		6,00,000

Following estimates were made by the costing department of the company for the year ending 31st March, 2014.

- (i) The output and the sales will be 10000 T.V. valves.
- (ii) The price of materials will rise by 25% on the previous level.
- (iii) Wages during the year will rise by 12 ½%.
- (iv) Manufacturing cost will rise in proportion to the combined cost of materials & wages.
- (v) Selling cost per unit will remain unchanged.
- (vi) Other expenses will remain unaffected by the use in output.

Prepare cost statement showing the price at which the T.V. valves would be marketed so as to show a profit of 10% on selling price.

1. (B) Explain the following :

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- (1) Cost centre
- (2) Shutdown cost
- (3) Cost unit
- (4) Differential costs

2. (A) A product passes through three processes A, B & C. The details of expenses incurred on the three processes during the year 2012 are as under : 10

Particulars	A	B	C
	(₹)	(₹)	(₹)
Units issued/introduced (cost per unit ₹ 100)	22,500	–	–
Sundry Material	22,500	33,750	11,250
Labour	67,500	1,80,000	1,46,250
Direct expenses	13,500	40,840	61,200
Selling price per unit of output	120	165	250

Actual output of the three processes was :

A : 9300 units

B : 5400 units

C : 2100 units

$\frac{2}{3}$ rd of the output of Process A & $\frac{1}{2}$ of the output of Process B were passed on to the next process and the balance was sold. The entire output of Process C was sold.

The normal loss of the three processes, calculated on the input of every process was :

Process A : 5%

Process B : 15%

Process C : 20%

The loss of Process A was sold at ₹ 2 per unit, that of B at ₹ 5 per unit & Process C at ₹ 10 per unit.

Prepare the three processes accounts and Profit & Loss A/c. Assume Management expenses during the year were ₹ 1,80,000 & selling expenses ₹ 11,25,000. These are not allocated to the processes.

2. (B) Distinguish between Job costing and process costing. 4

OR

2. (A) Following information given by the owner of a hotel. You are requested to advise him what rent should be charged by him from his customers per day so that he is able to earn 20% on cost other than interest. 7

(1) There are 100 rooms in the hotel and 90% of the rooms are generally occupied in the year. Normal days in a month may be taken to be 30.

(2) Room attendants' salaries ₹ 1,98,000 p.a.

(3) Staff salaries ₹ 3,30,000 p.a.

- (4) Lighting, heating & power ₹ 13,750 p.m.
- (5) Repairs to building ₹ 55,000 p.a.
- (6) Linear etc. ₹ 2,300 p.m.
- (7) Interior decoration ₹ 66,000 p.a.
- (8) Cost of Building ₹ 27,50,000 rate of depreciation 4%.
- (9) Other equipments ₹ 11,00,000, rate of depreciation 5%.
- (10) Interest on capital investment in building & equipment may be charged @ 5% p.a.

(B) CSK Ltd. produces five joint products A, E, I, O, U, all of which emerge from the processing of one raw material. The following are the relevant data giving production for a period. 7

Joint Product	Number of units	Selling price per unit
		₹
A	250	1,800
E	450	800
I	200	400
O	100	1100
U	150	1500

The company budgets for a Profit of 10% of sales value the other estimated cost are :

Carriage inward ₹ 50,000

Direct wages ₹ 3,80,000

Manufacturing overheads ₹ 3,00,000

Administrative overheads 10% of sales value

Calculate :

- (a) The maximum price that may be paid for raw material.
- (b) Prepare a comprehensive cost statement for each of the products allocating the materials & other cost based on number of units.

3. Answer any **two** from the following :

(A) (i) Write a note on Break Even Analysis. 7

OR

(ii) Distinguish between Marginal Costing & Absorption costing. 7

- (B) The following costs and sales of a manufacturing company for the first half and second half of 2012-13 are given. 7

	first half	second half
	₹	₹
Sales	24,00,000	30,00,000
Total costs	21,80,000	26,00,000

You are required to calculate :

- (i) Contribution/Sales Ratio of the firm.
 - (ii) Annual fixed cost.
 - (iii) Break-even point.
 - (iv) Margin of safety as percentage of sales.
- (C) A doll manufacturer earns an average net profit of ₹ 6 per doll in a selling price of ₹ 30 by producing and selling 60000 dolls at 60% of the potential capacity. Composition of his cost of sales is : 7

Direct material	₹ 8
Direct wages	₹ 2
Works overhead	₹ 12 (50% fixed)
Sales	₹ 2 (25% variable)

During the current year, he intends to produce the same number but anticipates that :

- (a) The fixed charge will go up by 10%.
- (b) Rates of direct labour will increase by 20%.
- (c) Rates of Direct material will increase by 5%.
- (d) Selling price cannot be increased.

Under these circumstances, he obtains an order for a further 20% of his capacity. What minimum price will you recommend for accepting the order to ensure the manufacturer an overall profit of ₹ 3,61,000 ?

4. (A) The following information was obtained from the records of a manufacturing unit using standard costing system : 8

	Standard	Actual
Production	4000 units	3800 units
Working days	20	21
Fixed overheads	40,000	39,000
Variable overheads	12,000	12,000

You are required to calculate the following overhead variances.

- (a) Variable overhead variance.

- (b) Fixed overhead variance
- (i) Expenditure variance
 - (ii) Volume variance
 - (iii) Efficiency variance
 - (iv) Calendar variance
- (c) Also prepare a Reconciliation statement for the standard fixed expenses worked out as standard fixed overhead rate and actual fixed overhead.

4. (B) For production of 10,000 steel sheets, the following are the budgeted expenses : **6**

	Per unit (₹)
Direct material	60
Direct labour	30
Variable overheads	25
Fixed overheads (₹ 1,50,000)	15
Variable expenses (direct)	5
Selling expenses (10% fixed)	15
Administrative expenses (₹ 50,000 rigid for all levels of production)	5
Distribution expenses (20% fixed)	5
Total cost of sales per unit	160

Prepare a budget for production of 6000 & 8000 units of steel sheets, showing distinctly the marginal cost & total cost.

OR

- 4 (A) A company has to select any one of the two alternative projects whose particulars are given as follows : **8**

Projects	Initial outlay (₹)	Net cash flow (₹)			
		Year 1	Year 2	Year 3	Year 4
I	11872	10000	2000	1000	1000
II	10067	1000	1000	2000	10000

The company can arrange a fund at 8%. Compute NPV & IRR of each project & comment on the result.

The present value of ₹ 1 at different cost of capital are given as follows :

Year	1	2	3	4
PV factor @ 8% p.a.	0.926	0.857	0.794	0.735
PV factor @ 10% p.a.	0.909	0.826	0.751	0.683
PV factor @ 12% p.a.	0.893	0.797	0.721	0.636
PV factor @ 14% p.a.	0.877	0.770	0.675	0.592

4. (B) Write a note on the following (any **two**)

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- (1) Distinguish between Cost Audit & Management Audit.
- (2) Throughout Costing system.
- (3) Distinguish between cost reduction & cost control.
- (4) Target costing.

5. A Company assembles two products U & V. Details of their manufacture are given below :

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	U	V
Output in units	20000	30000
Components used (number)	16	8
Component cost (per unit in ₹)	9	7.2
Number of production urns	400	100
Machine hours per 100 units	5.2	10.6
Number of items packed in a carton	20 units	100 units

Overhead cost are budgeted as below :

	₹
(1) Components purchasing & handling cost	2,80,000
(2) Production control cost	3,60,000
(3) Machine setups cost	5,00,000
(4) Machine running cost	12,87,100
(5) Packing cost	6,24,000

The Activity & cost derives are as follows :

Activity	Cost derives
(1) Components purchasing & handling	Components numbers
(2) Production control	Production urns
(3) Machine setup	Production urns
(4) Machine running	Machine hours
(5) Packing	No. of cartons used

You are required to calculate :

- (a) Overhead recovery rates using Activity Based Costing.
- (b) Cost of production per unit of two components.

OR

5. From the following records of the company.

Compute Material & Labour variances :

An input of 100 k.g. of materials yields to a standard output of 10,000 units.

Standard price per kg of material : ₹ 20.

Actual quantity of material issued and used by production department 10000 k.g.

Actual price per kg of material : ₹ 21 per kg

Actual output : 900,000 units.

Number of employees : 200.

Standard wage rate per employee per day : ₹ 40.

Standard daily output per employee : 100 units

Total number of days worked : 50 days

(Idle time paid for and included in the above half day for each employee)

Actual wage rate per day : ₹ 45
