Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

MBA – SEMESTER 02– • EXAMINATION – MAY 2014

Subject Code: 2820001 **Date:29/05/2018**

Subject Name: Cost and Management Accounting

Time:10:30 AM To 01:30 PM **Total Marks: 70**

Instructions:

1. **Attempt all questions.**
2. **Make suitable assumptions wherever necessary.**
3. **Figures to the right indicate full marks**

Q-1 **a.** Answer the following MCQs **06**

1. Describe the method of costing to be applied in case of Nursing Home:
   A. Operating Costing B. Process Costing
   C. Unit costing D. Job Costing
2. Cost of abnormal wastage is:
   A. Charged to the product cost B. Charged to the profit & loss account
   C. Charged partly to the product and partly profit & loss account D. Not charged at all.
3. Blanket overhead rate is:
   A. One single overhead absorption rate for the whole factory B. Rate which is blank or nil rate
   C. rate in which multiple overhead rates are calculated for each production department, service department etc. D. Always a machine hour rate
4. Statutory cost audit are applicable only to:
   A. Firm B. Company
   C. Individual D. All mentioned
5. Currently, a company has fixed costs of Rs.32,500, a contribution ratio of 65%, and is selling its product for Rs. 12 per unit. If the sales price per unit is increased by ₹ 4, how much less will the break-even point in sales be when compared to the current condition?
   A. ₹ 14411 B. ₹ 13414
   C. ₹ 17500 D. ₹ 5932
6. The standard unit (SQ) were 5200, the standard price (SP) was 3.25, and the material quantity variance (AV) was ₹ 325 favorable. The actual unit will be .....
   A. 5300 B. 5000
   C. 5100 D. 5200

Q-1 **b.** Explain the following terms **04**

a. Period Cost
b. Cost object
c. Discretionary cost
d. Abnormal Gain

Q-1 **c.** **04**

Actual output	400 units
Standard price	₹ 2 per kg

Actual price	₹ 3 per kg
Actual quantity	2000 kg
Standard quantity	4 kg per unit

Calculate Material cost variance, material price variance and material-usage variance

Q-2 **a.** Write a short note on Cost Accounting Standards (CAS). **07**

b. A company has five department. P, N, R, S are production department and T is a service department. The actual costs for a period are as follows: **07**

Repairs	2000	Insurance	1500
Rent	2500	Lightning	1800
Depreciation	1200	Employers liability insurance	600
Supervision	4000		

The following data are available in respect of the five departments:

	Department				
	P	N	R	S	T
Area (sq.ft)	140	120	110	90	40
No of workers	25	20	10	10	5
Total Wages	10000	8000	5000	5000	2000
Value of Plant	20000	18000	16000	10000	6000
Value of stock	15000	10000	5000	2000	-

Apportion the cost to various departments on equitable bases

OR

b. A factory uses a job costing system. The following data are available from the books at the year ending on 31st March 2013. **07**

Particular	Amount
Direct Material	1800000
Direct wages	1500000
Profit	1218000
Selling and distribution Overhead	1050000
Administrative overhead	840000
Factory overhead	900000

Required:

A. Prepare a job cost sheet showing the prime cost, works cost, production cost, cost of sales and sales value.

B. In the year 2013-14 the factory has received an order for a number of jobs. It is estimated that the direct material would be ₹.2400000 and direct labor would cost Rs.1500000. What would be the price for these jobs if the factory intends to earn the same rate of profit on sales, assuming that the selling and distribution overheads have gone up by 15%. The factory recovers factory overhead as a percentage of direct wages and administrative and selling and distribution overhead as a percentage of works cost respectively, based on the cost rates prevalent in the previous year.

Q-3 **a.** Write a short note on characteristics and features of operating costing. **07**

b. A food- processing company produces four product from a single raw material. The four products are obtained simultaneously at the point of separation. The product R does not require further processing before being taken to the market. The other three products P, Q and S require further processing before being sold. The company follows the net market value method for allocating common cost to product. The cost of raw material used for the year just ended was ₹ 18000. The initial processing costs were ₹ **07**

30000 for the same period. The output, sales and further processing costs for the last year were as follows:

Product	Output (Units)	Sales	Further Processing cost (₹)
P	4000	36000	5000
Q	3500	14000	1750
R	2500	20000	-
S	1200	12000	3250

You are required to.

a. Prepare a comparative profit and loss statement showing the profit/loss made on each of for products:

b. Assess the change in the profit/loss (given in answer to (a) above], if a proposal (stated below) made by the top management is accepted.
Proposal: To sell all the products directly to other processor just after separation without any further processing. The expected price per unit for the products are
P - ₹ 7, Q- ₹ 3.5, R - ₹ 8 and S - ₹ 9

OR

Q-3 **a.** Explain the assumptions of CVP analysis in detail. **07**

b. Following information is available regarding process A for the month of February, 2012 : **07**

Production Record

Units in process as on 1.2.2012	4,000
(All materials used, 25% complete for labour and overhead)	
New units introduced	16,000
Units completed	14,000
Units in process as on 28.2.2012	6,000
(All materials used, 33-1/3% complete for labour and overhead)	
Cost Records	
Work-in-process as on 1.2.2012	(₹)
Materials	6,000
Labour	1,000
Overhead	1,000
	8,000
Cost during the month	(₹)
Materials	25,600
Labour	15,000
Overhead	15,000
	55,600

Presuming that average method of inventory is used, prepare:

(i) Statement of equivalent production.
(ii) Statement showing cost for each element.
(iii) Statement of apportionment of cost.

Q-4 **a.** What is cost plus pricing? Which are the most common methods of cost plus pricing? **07**

b. Auto link Ltd has an annual production of 90000 units for a motor component. The component's cost structure is as follows **07**

Material	₹ 270 per unit
Labour (25% fixed)	₹ 180 per unit
Expenses	

Variable	₹ 90 per unit
Fixed	₹ 135 per unit
Total	₹ 675

a. The purchase manager has an offer from a supplier who is willing to supply the component at ₹ 540. Should the component be purchased and production stopped?

b. Assume the resources now used for this component's manufacture are to be used to produce another new product for which the selling price is Rs. 485

In the latter case, the material price will be ₹ 200 per unit. 90000 units of this product can be produced on the same cost basis as above for labour and expenses. Discuss whether it would be advisable to divert the resources to manufacture the new product, on the footing that the component presently being produced would, instead of being produced, be purchased from the market.

OR

Q-4 **a.** What do you mean by budgetary control? Mention the necessary features of Budget? **07**

b. XYZ corporation produces three product A, B and C. The master budget called for the sale of 10000 units of A at ₹ 12, 6000 units of B at ₹ 15 and 8000 units of C at ₹ 9.The firm actually sold 11000 units of A at ₹ 11.50, 5000 units of B at ₹ 15.10 and 9000 units at ₹ 8.55 **07**

Calculate all sales variance based on Turnover.

Q-5 Data 1-2-3 is a top-selling electronic spreadsheet product. Data is about to release version 5.0. It divides its customers into two groups: new customers and upgrade customers (those who previously purchased Data 1-2-3, 4.0 or earlier versions). Although the same physical product is provided to each customer group, sizable differences exist in selling prices and variable marketing costs: **14**

	New Customer	Upgrade customer
Selling Price	210	120
Variable cost		
Manufacturing	45	20
Marketing	45	20
Contribution Margin	120	80

The fixed costs of Data 1-2-3, 5.0 are ₹ 14,000,000. The planned sales mix in units is 60% new customers and 40% upgrade customers.

1. What is the Data 1-2-3, 5.0 breakeven point in units, assuming that the planned 60%:40% sales mix required is attained?
2. If the sales mix is attained, what is the operating income when 200,000 total units are sold?
3. Show how the breakeven point in units changes with the following customer mixes:
    a. New 50% and Upgrade 50%
4. What should be the sales to attain the targeted income of ₹ 2000000, assuming the ratio of sales to be 60% for new customer and 40% of upgraded customer and income tax rate of 30%?

OR

Q-5 Wigan Associates is a recently formed law partnership. Ellery Hanley, the managing partner of Wigan Associates, has just finished a tense phone call with Martin Offiah, president of Widnes Coal. Offiah strongly complained about the price Wigan charged for some legal work done for Widnes Coal. **14**

Hanley also received a phone call from its only other client (St. Helen's Glass), which was very pleased with both the quality of the work and the price charged on its most recent job.

Wigan Associates operates at capacity and uses a cost-based approach to pricing (billing) each job. Currently it uses a simple costing system with a single direct-cost category (professional labor-hours) and a single indirect-cost pool (general support). Indirect costs are allocated to cases on the basis of professional labor-hours per case. The job files show the following:

	Widnes Coal	St. Helen's Glass
Professional labor	104 hours	96 hours

Professional labor costs at Wigan Associates are ₹70 an hour. Indirect costs are allocated to cases at ₹105 an hour. Total indirect costs in the most recent period were ₹21,000.

Hanley asks his assistant to collect details on those costs included in the ₹21,000 indirect-cost pool that can be traced to each individual job. After analysis, Wigan is able to reclassify ₹14,000 of the ₹21,000 as direct costs:

Other direct cost	Widnes Coal	St. Helen's Glass
Research support labor	₹1,600	3400
Computer time	500	1300
Travel and allowances	600	4400
Telephones/faxes	200	1000
Photocopying	250	750
Total	3150	10850

Hanley decides to calculate the costs of each job as if Wigan had used six direct cost-pools and a single indirect-cost pool. The single indirect-cost pool would have ₹7,000 of costs and would be allocated to each case using the professional labor-hours base.

Required

1. Compute the costs of the Widnes Coal and St. Helen's Glass jobs using Wigan's simple costing system.
2. What is the revised indirect-cost allocation rate per professional labor-hour for Wigan Associates Required when total indirect costs are ₹7,000?
3. Compute the costs of the Widnes and St. Helen's jobs if Wigan Associates had used its refined costing system with multiple direct-cost categories and one indirect-cost pool.
4. Compare the costs of Widnes and St. Helen's jobs in requirement 1 with those in requirement 3 of Problem. Comment on the results.

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