Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

MBA - SEMESTER–II EXAMINATION – SUMMER • 2017

Subject Code: 2820001 **Date: 29/05/2017**

Subject Name: Cost and Management Accounting

Time: 10.30 am - 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.
4. Each question carries equal marks

Q.1 (A) Answer the following: (6)

1. Which method of Costing used in a Cement Industries?
   a) Job Costing
   b) Unit Costing
   c) Process Costing
   d) Operating Costing

2. Cost of Production equals to
   a) Work Cost Plus Administrative Overhead
   b) Prime Cost Plus Work Cost
   c) Prime Cost Plus Work Overhead
   d) Work overhead plus Administrative Overhead

3. Which is the smallest segment of activity or area or responsibility for which cost are accumulated?
   a) Cost Object
   b) Cost Center
   c) Cost Driver
   d) Cost Pool

4. When actual loss in a process is less than Anticipated Loss, the difference is considered as
   a) Abnormal Loss
   b) Normal Loss
   c) Abnormal Gain
   d) Normal Gain

5. When sales increases from 40000 to 60000 and profit increase by 5000, P/v ratio would be
   a) 20%
   b) 35%
   c) 25%
   d) 40%

6. Which definition best describes Indirect Cost?
   a) Indirect Cost are those cost which are not controlled directly by Managers
   b) Indirect Cost are those cost which cannot be directly associated with a product or a service.
   c) Indirect Cost are fixed in nature
   d) None of the above

Q.1 (B) Explain the following terms: (4)

a) Opportunity Cost
b) Margin of Safety
c) Apportionment
d) Key factor

Q.1 (C) You are given the following data: (4)

Year	Sales	Profit
2013	120,000	8000
2014	140,000	13000

Compute:

1) P/V Ratio
2) Breakeven Point
3) Profit when sales are 180,000
4) Sales required for earning a Profit of 12000.

Q.2 (A) The following data is available in respect of Process I for March 2015. (7)

The opening stock of work in progress is 800 units at a total cost of Rs. 4000, where materials at 100% completion stage and 60% completion with regard to labour and overheads. During the month material at a total cost of 36800 for 9200 units were introduced. Direct Wages and Production Overheads amounted to Rs. 16740 and Rs. 8370 respectively. Normal loss is 8% of total input. The value of scrap realization is Rs. 4 per unit.

Total units scraped during the period were 1200. The stage of completion of these units is material at 100% completion, while labour and overheads at 80% completion stage. Closing work in progress at the end was 900 units with 100% completion with regards to materials and 70% completion with regards to labour and overheads. 7900 units were completed and transferred to next process. You are required to compute:

1. Statement of equivalent production
2. Cost per equivalent unit for each product
3. Process Account.

Q.2 (B) Define Marginal Cost and Marginal Costing. How would you treat variable and fixed cost in marginal costing? (7)

OR

Q.2 (B) Do you agree that activity based costing is a more refined method of charging overheads to products than traditional method. Explain. (7)

Q.3 (A) Excellent Manufactures can produce 4000 units of a certain product at 100% capacity. The following information is obtained from the books of account: (7)

Particulars	March 2015	April 2015
Units Produced	2800	3600
Repairs & Maintenance	500	560
Power	1700	2000
Shop Labour	700	900
Consumable Stores	1400	1800
Salaries	1000	1000
Inspection	200	240
Depreciation	1400	1400

Rate of production per hour is 10 units. Direct Material cost per unit is Rs.1 and Direct Wage per hour is Rs.4. You are required to compute total cost and total cost per unit at 100%, 80%, and 60% capacity showing the Variable, Fixed and Semi – Variable items under the flexible budget.

Q.3 (B) What is Zero Base Budgeting? What are the advantages of zero base approach over traditional approach? (7)

OR

Q.3 (A) The standard material cost to produce one tonne of Chemical X is: (7)

300 kgs of Material A @ Rs. 10 per kg
400 kgs of Material B @ Rs. 5 per kg
500 kgs of Material C @ RS. 6 per kg

During the period, 100 tonnes of Chemical X were produced from the usage of:

35 tonnes of Material A at a cost of Rs.9000 per tonne
42 tonnes of Material B at a cost of Rs.6000 per tonne
53 tonnes of Material C at a cost of Rs.7000 per tonne

Calculate Material Variances from the following information.

Q. 3 (B) Distinguish between Joint- Products and By- Products by giving examples of each. (7)

Q.4 (A) Sai Travels owns a bus and operates a tourist service on a daily basis. The bus starts from New City to Rest Village and returns back to New City on the same day. Distance between and Rest Village is 250 kms. This trip operates for 10 days in a month. The bus also plies for another 10 days between New City and Shivapur and returns back to New City the same day, distance between these two places is 200 kms. The Bus makes a local sightseeing trip for 5 days in a month, covering a total distance of 60 kms per day. The following data are given:

Cost of Bus	Rs. 350,000
Depreciation	25%
Driver's Salary	Rs. 1200 p.m.
Conductor's Salary	Rs. 1000 p.m.
Clerk's Salary	Rs. 400 p.m.
Insurance	Rs. 1800 p.a.
Diesel Consumption	4 km per litres @ Rs. 8 litre
Token tax	Rs. 2400 p.a.
Permit Fee	Rs. 1000 p.a.
Lubricant Oil	Rs. 100 for every 200 kms
Repairs & Maintenance	Rs. 1500 p.m.
Normal Capacity	50 persons

While plying to and from rest village the bus occupies 90% of the capacity and 80% capacity when it plies between New City to Shivapur (both ways). In the city the bus runs at full capacity. Passenger Tax is 20% of the net takings of the firm.
Calculate the rate to be charged to Rest Village and Shivapur from New City, per passenger if the profit required to be earned is 33% of net takings of the firm. (7)

Q.4 (B) Describe the general features of Process Costing? Discuss with figures the treatment of abnormal loss and abnormal gain in cost accounts? (7)

OR

Q.4 (A) Machine Power Ltd manufactures two products X and Y, using the same equipment and similar processes. An extract of the production data for these products in one period is given below: (7)

Particulars	Product - X	Product - Y
Units produced	10,000	15,000
Direct Labour Hour Per unit	2	4
Machine hour per unit	3	1
Number of set up in the period	20	80
Number of orders handled	30	120

The details of overhead costs are as follow:

Relating to Machine Activity	450,000
Relating to production run setups	40,000
Relating to handling of orders	90,000

You are required to compute production overhead to be absorbed by each unit of product using the following costing methods:

1. A Traditional costing approach using a direct labour hour rate to absorb overheads.
2. An ABC approach using suitable cost drivers to trace overheads to products.

Q.4 (B) "A good system of costing serves as a means of control over expenditure and helps to secure economy in manufacturing" Discuss (7)

Q.5 The top management of Progressive Ltd made the review of the result of its first quarter, which makes only one product.

Sales (in units)	10,000
Loss	Rs. 10,000
Fixed Cost (120,000 p.a.)	Rs.30,000
Variable cost p.u	Rs.8

1) The Finance Manager, who feels perturbed, suggests that the company should at least break-even in the second quarter with a drive for increased sales. Towards this, the company should introduce a better packing which will increase the cost by Rs. 0.50 per unit.
2) The Sales Manager has an alternate proposal for the second quarter that an additional sales promotion expenses can be increased to the extent of Rs.5000and profit of Rs.5000 can be aimed at in the period with increased sales.
3) The Production Manager feels otherwise, to improve the demand the selling price if the product can be reduced by 3%. As a result, the sales volume can be increased to attain a profit level of Rs. 4000 for the quarter.

The Managing Director asks you, as a cost accountant to evaluate these three proposals and calculate the additional sales volume that would be required in each case. Suggest the best alternative giving your supportive answer. (14)

OR

Q.5 Sunshine Ltd is manufacturing three products A, B & C, and selling them in a competitive market. The details of current demand, selling price and cost structure are given as below:

Particulars	A	B	C
Expected Demand (units)	10,000	12,000	20,000
Selling Price per unit	20	16	10
Direct Material (Rs. 10/ kg)	6	4	2
Direct Labour (Rs. 15/ hr)	3	3	1.5
Variable Overhead per unit	2	1	1
Fixed Overhead per unit	5	4	2

The company is frequently affected by acute scarcity of raw material and high labour turnover. Due to this the company is not able to fulfill the expected market demand. During the next period it is expected that the company have to face one of the following situation:

1) Only 12,100 kgs of raw material will be available in the next period.
2) Only 5000 labour hours will be available during the next period.
3) It may be possible to increase the sales of any one product by25% without any additional fixed costs but by spending Rs.20, 000 on advertisement. In this situation there will be no shortage of raw material or labour hours.

Suggest the best production plan in each case and the resultant profit that the company would earn, according to your suggestions. (14)