Seat No.: \_\_\_\_

Enrolment No.

# **GUJARAT TECHNOLOGICAL UNIVERSITY**

MBA – SEMESTER 02– • EXAMINATION – SUMMER 2016

| Subject Code: 2820001 | Date: 25/05/2016 |
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**Subject Name: Cost & Management Accounting (CMA)** 

Time: 10:30 AM to 1:30PM 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) From the four alternative answers given against each of the following cases, **6** indicate the correct answer:
  - 1. The primary objective of Cost accounting is to .........
    - a. Cost determination
    - b. Cost Control
    - c. Performance evaluation
    - d. All of the above.
  - 2. In cement industry method of costing used is known as ........
    - a. Job Order Costing
    - b. Terminal Costing
    - c. Batch Costing
    - d. Process Costing
  - 3. Miscellaneous overheads are apportioned to various production departments on the basis of .........
    - a. Indirect wages
    - b. Floor area
    - c. Direct wages
    - d. Number of workers
  - 4. ...... Is a hypothetical hour which represents the amount of work which should be performed in one hour under stated conditions.
    - a. Actual Hour
    - b. Budgeted Hour
    - c. Standard Hour
    - d. All of the above.
  - 5. Contribution + Variable cost = .....
    - a. Profit
    - b. Fixed cost
    - c. Selling price
    - d. None of the above
  - 6. A budget that gives a summary of all the functional budgets & projected profit & loss a/c is known as ........
    - a. Capital budget
    - b. Master budget
    - c. Flexible budget
    - d. Discretionary budget
- Q.1) (b) Explain the following terms (any 4):
  - a. Cost Accounting
  - b. Direct Labour

- c. Cost Sheet
- d. Marginal costing
- e. Budgetary Control
- Q.1) (c) Distinguish between Cost Accounting & Financial Accounting on any five bases
- Q.2) (a) Define Budgetary control. State the objectives & limitation of budgetary control.

Q.2) (b) The following extract of costing information relates to commodity D for the vear ending 31<sup>st</sup> December 2014

| Purchase of Raw Materials                       | Rs. 60,000   |
|---|--------------|
| Direct Wages                                    | Rs. 50,000   |
| Rent, rates, insurance & works on cost          | Rs. 20,000   |
| Stock on 1 <sup>st</sup> January 2014:          |              |
| Raw materials                                   | Rs.10,000    |
| Finished Goods – 2000 tons                      | Rs. 8000     |
| Stock on 31 <sup>st</sup> December 2014         |              |
| Raw Material                                    | Rs. 11,000   |
| Finished Goods- 4000 tons                       | -            |
| Work-in-progress 1 <sup>st</sup> January 2014   | Rs. 2400     |
| Work-in-progress 31 <sup>st</sup> December 2014 | Rs. 8000     |
| Carriage inward                                 | Rs. 1000     |
| Cost of factory supervision                     | Rs. 4000     |
| Sales of finished goods                         | Rs. 1,50,000 |

Advertising, discount allowed & selling costs Re. 0.40 per ton sold.32,000 tons of the commodity were produced during the period. Ascertain:

- 1) The cost of the output of the period & the cost per ton of production.
- 2) The net profit per ton of the commodity.

### OR

## Q.2) (b) Relevant data relating to a company are:

| Particulars                 | P      | Q      | R      | TOTAL     |
|-----------------------------|--------|--------|--------|-----------|
| Production & sales (Units)  | 60,000 | 40,000 | 16,000 |           |
| Raw materials used in units | 10     | 10     | 22     |           |
| Raw material costs rupees   | 50     | 40     | 22     | 24,76,000 |
| Direct labour hours         | 2.5    | 4      | 2      | 3,42,000  |
| Machine hour                | 2.5    | 2      | 4      | 2,94,000  |
| Direct labour costs (Rs)    | 16     | 24     | 12     |           |
| No. of production run       | 6      | 14     | 40     | 60        |
| No. of deliveries           | 18     | 6      | 40     | 64        |
| No. of receipts             | 60     | 140    | 880    | 1080      |
| No. of production orders    | 30     | 20     | 50     | 100       |

| Overheads   | Rs        |
|-------------|-----------|
| Setup       | 60,000    |
| Machines    | 15,20,000 |
| Receiving   | 8,70,000  |
| Packing     | 5,00,000  |
| Engineering | 7,46,000  |

The company operates a JIT Inventory policy & receives each component once per production run.

### Required:

1) Compute the product cost based on direct labour hour recovery rate of over heads.

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- 2) Compute the product cost using activity based costing.
- Q.3)(a) What is operating costing? Draw a specimen cost sheet for canteen costing?

  Q.3)(b) A transport service company is running 4 buses between two towns which are 50 miles apart. Seating capacity of each bus is 40 passengers. The following

particulars were obtained from their books for April:

| Particulars                             | Rupees |
|---|--------|
| Wages of drivers, conductors & cleaners | 2,400  |
| Salaries of office & supervisory staff  | 1,000  |
| Diesel oil & other oil                  | 4,000  |
| Repairs & Maintenance                   | 800    |
| Taxation, Insurance etc                 | 1,600  |
| Depreciation                            | 2,600  |
| Interest & other charges                | 2,000  |
|   | 14,400 |

Actual Passengers carried were 75 % of the seating capacity. All the four buses ran on all days of the month. Each bus made one round trip per day. Find out the cost per passenger mile.

#### OR

- Q.3) (a) What is process Costing? Explain the main features of process costing. Mention 7 the industries where it is applied.
- Q.3) (b) AB Limited furnished you the following information relating to process B for 7 the month of October 2014
  - 1) Opening WIP Nil
  - 2) Units introduced 10,000 units @ Rs. 3 per unit.
  - 3) Expenses debited to the process; direct materials Rs. 14,650; labour Rs. 21,148; overheads Rs. 42,000.
  - 4) Finished output -9,500 units
  - 5) Closing WIP 350 units; degree of completion : materials 100 %; labour & overheads 50 %
  - 6) Normal loss in the process one percent of input
  - 7) Degree of completion of abnormal loss; materials 100 %; labour & Overheads 80 %
  - 8) Units scrapped as normal loss were sold at Rs. 1 per unit
  - 9) All the units of abnormal loss were sold at Rs. 2.50 per unit.

#### Prepare

- a) Statement of Equivalent Production
- b) Statement of cost
- c) Process B Account
- d) Abnormal loss Account
- Q.4) (a) What do you understand by CVP Analysis? How CVP analysis is useful for the 7 management?
- Q.4) (b) A Company sold in two successive periods 7,000 units & 9,000 units and has 7 incurred a loss of Rs. 10,000 & earned Rs. 10,000 as profit respectively.

The selling price per unit can be assumed at Rs. 100

You are required to calculate:

- a) The amount of fixed cost
- b) The number of units to break even
- c) The number of units to earn a profit of Rs. 40,000

### OR

- Q.4) (a) Define flexible budget. Explain its importance as a budgeting technique & a tool 7 of control.
- Q.4) (b) The Standard cost of a chemical mixture is as follows:

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40 % material A at Rs. 20 per kg

60 % material B at Rs. 30 per kg

A standard loss of 10 % of input is expected in production. The cost records for a period showed the following usage:

90 kg material A at a cost of Rs. 18 per kg

110 kg material B at a cost of Rs. 34 per kg

The quantity produced was 182 kg of good product.

Calculate all material variances.

- Q.5 Tasty Bread makes & Supplies bread throughout the state of Gujarat. Three 14 types of bread are produced: loaves, rolls, & buns. Seven operations describe the production process.
  - a) Mixing; flour, milk, yeast, salt, butter, & so on are mixed in large vat.
  - b) Shaping; A conveyor belt transfers the dough to machine that weights it & shapes it into loaves, rolls, or buns, depending on the type being produced.
  - c) Rising; the individually shaped dough is allowed to sit & rise.
  - d) Baking; the dough is moved to 100 feet long funnel oven. (the dough entres the oven on rack & spends 20 minutes moving slowly through the oven).
  - e) Cooling; the bread is removed from the oven & allowed to cool.
  - f) Slicing; for loaves & buns (Hamburger & hot dog), the bread is sliced.
  - g) Packaging; the bread is wrapped (packaged)

Tasty bread produces its products in batches. The size of the batch depends on the individual orders that must be filled (orders come from retail grocers throughout the state). The production is continuous.

- 1) Identify the condition that must be present for operating costing be used in this setting. If these conditions are not met, explain how process costing would be used. If process costing is used, would you recommend the weighted average method or FIFO method? Justify your answer.
- 2) Assume that operating costing is the best approach for this bread manufacturer. Describe in detail how you would use operation costing. Use a batch of dinner rolls (Consisting of 1000 packages of 12 rolls) & a batch of whole loaves (Consisting of 5000, 24 –oz sliced loaves) as examples.

OR

Q.5) Manav Ltd is producing a software equipment from 5 components, three of 14 which are made by using general purpose machines & two by manual labour. The data for the manufacture of equipment are as follows:

| Components                  | A  | В   | С   | D  | Е  | TOTAL |
|-----------------------------|----|-----|-----|----|----|-------|
| Machine hours required per  | 20 | 28  | 24  | -  | 1  | 72    |
| unit                        |    |     |     |    |    |       |
| Labour hours required per   | -  | -   | -   | 4  | 2  | 6     |
| unit                        |    |     |     |    |    |       |
| Variable cost per unit (Rs) | 32 | 54  | 58  | 12 | 4  | 160   |
| Fixed cost per unit         | 48 | 102 | 116 | 24 | 26 | 316   |
| (apportioned)               |    |     |     |    |    |       |
| Total component cost        | 80 | 156 | 174 | 36 | 30 | 476   |
| Assembly cost/unit (All     |    |     |     |    |    | 40    |
| Variable )                  |    |     |     |    |    |       |
| Selling price/unit          |    | ·   |     |    |    | 600   |

The marketing department of the company anticipates a 45 % increase in demand during the next period. General purpose machinery used to manufacture

A, B & C which are already working to maximum capacity of 9504 hours & there is no possibility of increasing this capacity during the next period. But labour is available for making component D & E & also for assembly according to the demand. The management is considering the purchase of one of the components A, B or C from the market to meet the increase in demand. These components are available in the market at following prices:

Component A – Rs 100, Component B – Rs 300, & Component C- Rs 200. Required:

- a) Profit made by the company from the current operations.
- b) If the company buys any one of the components A, B or C, what is the extent of additional capacity that can be created?
- c) Assuming a 50 % increase in demand during the next period, which component should be bought from the market?
- d) The increase in the profit, if any, if the component suggested in C is purchased from the market.
- e) Which component should be purchased & in what quantity if production is increased by 55 %?

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