

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

**ZN-120**

**May-2014**

**M.B.A. Sem.-II**

**Cost & Management Accounting (CMA)**

**Time : 3 Hours]**

**[Max. Marks : 100**

**Instructions :** (1) All questions are compulsory. Read internal options and attempt carefully.

(2) Put your assumptions clearly wherever required.

1. (a) A company manufactures three products. The budgeted quantity, selling prices and unit costs are as under :

| Particulars                    | (Amt. in ₹) |      |      |
|--------------------------------|-------------|------|------|
|                                | A           | B    | C    |
| Raw Materials (@ ₹ 20 per kg)  | 80          | 40   | 20   |
| Direct wages (@ ₹ 5 per hour)  | 5           | 15   | 10   |
| Variable Overheads             | 10          | 30   | 20   |
| Fixed Overhead                 | 9           | 22   | 18   |
| Budgeted Production (in units) | 6400        | 3200 | 2400 |
| Selling price per unit (in ₹)  | 140         | 120  | 90   |

Required :

- (1) Present a statement of budgeted profit.
- (2) Set optimal product mix and determine the profit, if the supply of raw materials is restricted to 18,400 kgs. **10**
- (b) Explain the following terms with example : **10**
- (i) Sunk Cost
- (ii) Opportunity Cost
- (iii) Relevant Cost
- (iv) Replacement Cost

**OR**

- (a) Write a note on difference between Cost Accounting and Management Accounting.
- (b) Write a note on difference between Absorption Costing and Marginal Costing. How profit is determined under both the methods ? Explain by example.
- (c) Manufacture of product A takes 20 hours on Machine No. "A 101". It has a selling price of ₹ 150 and marginal cost ₹ 110. Component Y could be made on Machine no. "A 10" in 4 hours. The marginal cost of component part is ₹ 9 of which outside supplier's price is ₹ 15.

Should one make or buy the component Y. Discuss in both situations when

(i) Machine no. "A 101" is working at full capacity.

(ii) There is idle capacity for Machine no. "A 101".

**5 + 10 + 5**

2. (a) Write a note on distinction between joint products and by-products. Give names of methods of Apportionment of Joint Costs.

**OR**

- (a) In an Oil mill four products emerge from a refining process. The cost of input during the quarter ending March is ₹ 1,48,000. The output, sales and additional processing costs are as under :

| Products | Output in litres | Additional processing cost after split off point (₹) | Total value (₹) |
|----------|------------------|--|-----------------|
| A        | 8000             | 43,000   | 1,72,500        |
| B        | 4000             | 9,000  | 15,000          |
| C        | 2000             | —  | 6,000           |
| D        | 4000             | 1,500  | 45,000          |

In case these products were disposed of at split off point, that is before further processing, the selling price would be :

|      |     |     |       |
|------|-----|-----|-------|
| A    | B   | C   | D     |
| ₹ 15 | ₹ 6 | ₹ 3 | ₹ 7.5 |

- (i) If the products are sold after further processing
- (ii) If they are sold at the split off point.

- (b) Shanghai Toys Ltd. has budgeted the following sales for a month :

Toy A – 9000 units @ ₹ 5 per unit

Toy B – 6500 units @ ₹ 10 per unit

Toy C – 12000 units @ ₹ 7.5 per unit

Against this, the actual sales were :

Toy A – 10000 units @ ₹ 5.5 per unit

Toy B – 7000 units @ ₹ 9.5 per unit

Toy C – 11000 units @ ₹ 7.8 per unit

The costs per unit of A, B and C were ₹ 4.5, ₹ 8.5 and ₹ 6.5 respectively.

Compute the different (Sales) variances to explain the difference between the budgeted and actual sales.

- (c) Give names of six industries where operating costing is applicable. **7 + 10 + 3**

3. (a) Moonrizers Ltd. produces a product “SUNRIZERS” which passes through two processes, viz., Process I and Process II. The output of each process is treated as raw material of the next process to which it is transferred and output of the second process is transferred to finished stock. The following data related to December 2013 :

| Particulars                              | Process I  | Process II |
|--|------------|------------|
| 25000 units introduced at a cost of      | ₹ 4,00,000 | —          |
| Material Consumed                        | ₹ 3,84,000 | ₹ 1,92,040 |
| Direct Labour                            | ₹ 4,48,000 | ₹ 2,56,000 |
| Manufacturing Expenses                   | ₹ 2,80,000 | ₹ 1,20,000 |
| Normal Wastage                           | 10%        | 10%        |
| Scrap value of normal wastage (per unit) | ₹ 19.80    | ₹ 17.20    |
| Output in units                          | 22,000     | 20,000     |

Required :

- (i) Prepare Process I and II Account
- (ii) Prepare Abnormal effective/wastage Account as the case may be in each process.

- (b) The variable cost structure of a product manufactured by a company during the current year is as under :

|          |     |
|----------|-----|
|          | ₹   |
| Material | 120 |
| Labour   | 30  |
| Overhead | 12  |

The selling price per unit is ₹ 270 and the fixed cost and sales during the current year are ₹ 14 lakhs and ₹ 40.5 lakhs, respectively.

During the forthcoming year, the direct workers will be entitled to a wage increase of 100% from the beginning of the year and the material cost, variable overhead and fixed overheads are expected to increase by 7.5%, 5% and 3% respectively.

The following are required to be computed :

- (a) New sale price in the forthcoming year if the current P/V ratio is to be maintained.
- (b) Number of the units that would require to be sold during the forthcoming year, so as to yield the same amount of profit in the current year assuming that the selling price per unit will not be increased.

**OR**

- (b) Write a note on Break Even Point and its assumptions.
- (c) Write a note on Zero Base Budgeting.

**10 + 6 + 4**

4. (a) A single product company estimated in sales for the next year, quarter wise as under :

| Quarter | Sales Units |
|---------|-------------|
| I       | 30,000      |
| II      | 37,500      |
| III     | 41,250      |
| IV      | 45,000      |

The opening stock of finished goods is 10,000 units and the company expects to maintain the closing stock of finished goods at 16,250 units at the end of the year. The production pattern in each quarter is based on 80% of the sales of the current quarter and 20% of the next quarter.

The opening stock of raw materials in the beginning of the year is 10,000 kgs and the closing stock at the end of the year is required to be maintained at 5,000 kgs. Each unit of finished output requires 2 kgs of raw materials.

The company proposes to purchase the entire annual requirement of raw materials in the first three quarters in the proportion and at the prices given below :

| Quarter | Purchase of raw materials % of total annual requirement in quantity | Price per kg (₹) |
|---------|---|------------------|
| I       | 30%   | 2                |
| II      | 50%   | 3                |
| III     | 20%   | 4                |

The value of opening stock of raw materials in the beginning of the year is ₹ 20,000. You are required to present the following for the next year, quarter-wise :

- Production budget in units
  - Raw material consumption budget in quantity
  - Raw material purchase budget in quantity and value.
- (b) Taxi wala no. 9211 operates a fleet of 12 taxies owned by him. He provides the following information :

|                              |                            |
|------------------------------|----------------------------|
| Cost of Taxi                 | ₹ 2,00,000 per taxi        |
| Salary of Manager            | ₹ 2,400 per month          |
| Salary of Accountant         | ₹ 1,800 per month          |
| Wages of Cleaner             | ₹ 1,200 per month          |
| Wages of Mechanic            | ₹ 1,200 per month          |
| Garage Rent                  | ₹ 900 per month            |
| Annual Tax                   | ₹ 900 per taxi             |
| Repairs                      | ₹ 1,200 per taxi           |
| Driver salary                | ₹ 1,200 per month per taxi |
| Insurance premium for taxies | 6% per annum               |

Approximate life of a taxi is 2,50,000 kms. A taxi runs in all 5000 kms a month of which 12% it runs empty. CNG consumption is one litre for 10 kms @ 36 per litre. Calculate the cost of running a taxi per km.

**12 + 8**

**OR**

- Write a note on difference between Cost Audit and Financial Audit.
- Write a note on Advantages of Cost Audit.
- Write a note on Cost Control and Cost Reduction.
- Give name of any four methods of costing for ascertainment of cost

**6 + 6 + 6 + 2**

5. Write a short note on :

- (a) Advantages of Activity based Costing
- (b) Target Costing
- (c) Kaizen Costing
- (d) Life Cycle Costing

5 + 5 + 5 + 5

**OR**

- (a) Subhiksha store wants information about the profitability of individual product lines : Soft Drinks, Fresh Produce and Packaged Food. The store provides the following data for the year 2013-14 for each product line :

| Particulars                       | Soft Drink | Fresh Producte | Packaged Food |
|-----------------------------------|------------|----------------|---------------|
| Revenues                          | ₹ 7,93,500 | ₹ 21,00,600    | ₹ 12,09,900   |
| Cost of Goods sold                | ₹ 6,00,000 | ₹ 15,00,000    | ₹ 9,00,000    |
| Cost of bottles returned          | ₹ 12,000   | 0              | 0             |
| Number of purchases orders placed | 360        | 840            | 360           |
| Number of deliveries received     | 300        | 2190           | 660           |
| Hours of shelf-stocking time      | 540        | 5400           | 2700          |
| Items sold                        | 1,26,000   | ₹ 11,04,000    | ₹ 3,06,000    |

The store also provides the following information for the year 2013-14 :

| Activity         | Descriptive of Activity                                    | Total Cost | Cost Allocation basis             |
|------------------|--|------------|-----------------------------------|
| Bottles returned | Returning of empty bottles                                 | ₹ 12,000   | Direct tracing to soft drink line |
| Ordering         | Placing of orders for purchases                            | ₹ 1,56,000 | 1560 purchase orders              |
| Delivery         | Physical delivery and receipt of goods                     | ₹ 2,52,000 | 3150 deliveries                   |
| Shelf stocking   | Stocking of goods on store shelves and on going restocking | ₹ 1,72,800 | 8640 hours of shelf stocking time |
| Customer support | Assistance provided to customers including check out       | ₹ 3,07,200 | 15,36,000 items sold              |

**Required :**

- (i) The store currently allocates support cost (all costs other than cost of goods sold) to product lines on the basis of cost of goods sold of each product line. Calculate the operating income (in rupees) and operating income (as % of revenues for each product line).
- (ii) If Subhiksha store allocates support costs (all costs other than cost of goods sold) to product lines using an activity based costing system, calculate the operating income (in rupees) and the operating income (as % of revenues for each product line)
- (b) Machine shop in a factory is working to its full capacity and earning a contribution of ₹ 50 per hour. The management receives a high priority order which it wants to execute immediately. Material will be supplied by the customer and special order will take a minimum of 10 hours. Wages payable will be ₹ 15 per hour and variable overheads will be 150% of wages. If customer is prepared to pay ₹ 800 for the order, should the order be accepted ? **15 + 5**
-

