



# COMSATS Institute of Information Technology Abbottabad

## Department of Management Sciences

First Sessional: Spring 2018

Class: BBA 4  
Subject: Cost Accounting  
Total Time Allowed: 80 Minutes  
Registration #

Date: 18-04-18  
Instructor: *Zaheer A. Swati*  
Max Marks:

### SECTION-A

(Time allowed: 15 Minutes) (Marks: 15)

#### A. Encircle the most appropriate choice.

1. A characteristic of a variable cost is?
  - (a) The total cost varies in proportion to changes in the level of activity
  - (b) The cost per unit remains constant, regardless of the level of activity
  - (c) **Both A and B**
  - (d) Neither A nor B
2. Which of the following is NOT included under the head of FOH cost?
  - (a) Indirect Material
  - (b) Indirect Labor
  - (c) Indirect Expense
  - (d) **Direct labor**
3. The formula for calculating the sales dollars required to meet target operating income is?
  - (a) (Total fixed costs plus Target operating income) divided contribution margin per unit
  - (b) **(Total fixed costs plus Target operating income) divided by contribution margin ratio**
  - (c) (Total fixed costs plus Target operating income) divided total variable costs
  - (d) (Contribution margin plus target operating income) divided by total fixed costs
4. Assume a sales volume of 6,000 units, unit selling price of Rs. 20, unit variable cost of Rs. 12, and total fixed costs of Rs. 20,000. What is the margin of safety in sales dollars?
  - (a) Rs. 25,000
  - (b) **Rs. 50,000**
  - (c) Rs. 70,000
  - (d) Rs. 120,000
5. If activity level decreases, what happens to the unit fixed cost?
  - (a) It decreases
  - (b) **It increases**
  - (c) It remains the same
  - (d) It depends on how much the activity level increases
6. Which one of the following types of costs is most likely to be included in determining the cost of inventory?
  - (a) **Freight-in**
  - (b) Interest cost for amounts borrowed to finance the purchase of inventory
  - (c) Freight-out
  - (d) Marketing costs
7. Assume a sales price per unit of Rs. 25, variable cost per unit Rs. 15, and total fixed costs of Rs. 18,000. What is the breakeven point?
  - (a) 45,000 units
  - (b) **Rs. 45,000**
  - (c) 37,500 units
  - (d) Rs. 37,500
8. The level to which inventory must fall in order to signal that an order must be placed to replenish an item?
  - (a) Safety stock
  - (b) EOQ
  - (c) **Ordering point**
  - (d) Just in time

9. Suppose you are charged a Rs. 40 per month base charge for your electrical service. You are also charged an additional Rs. 3.00 for every unit of electricity you use. The cost is an example of a?
- (a) Variable cost                      (b) Fixed cost                      (c) **Mixed cost**                      (d) Step cost
10. The quantity of an inventory item to order so that total inventory costs are minimized over the firms planning period\_\_\_\_\_?
- (a) **EOQ**                      (b) Optimal order quantity                      (c) Inventory control                      (d) All of above
11. Following are the inventories of Manufacturing Concern except?
- (a) Work in process                      (b) **Fuel and Power**                      (c) Finished goods                      (d) Raw material
12. Which of the following is not an example of a fixed cost?
- (a) Rent on factory warehouse                      (b) Insurance on factory equipment  
(c) **Indirect material**                      (d) Advertising costs
13. The point at which it becomes essential to initiate purchase order for its fresh material is called?
- (a) EOQ                      (b) Ordering Level                      (c) Ordering Point                      (d) **b and c**
14. Fixed cost per unit increases when?
- (a) **Production volume decreases**                      (b) Production volume increases  
(c) Variable cost per unit decreases                      (d) None of the above
15. Factory overhead includes all manufacturing costs except direct material and direct labor. Which of the following items would not be considered to be a factory overhead cost?
- (a) **Repainting the corporate office building**                      (b) Indirect labor  
(c) Repair and maintenance expenditures on multiple factory machinery  
(d) Small expenditures pertaining to items like rags, screws, etc., used in the production process

## SECTION-B

(Time allowed: 65 Minutes)

Q1. Mr. Zubari has following data of Income Statement to know No Cost No Benefit of firm's operations (Marks 15)

### Income Statement

Sales (100 units at Rs. 100 a unit) .....	Rs. 10,000
<i>Cost of goods sold:</i>	
Direct Labor .....	Rs. 1,500
Direct Material Used .....	1,400
Variable Factory Overheads .....	800
Fixed Factory Overheads .....	700
Total Cost of goods Sold .....	Rs. (4,400)
<b>Gross Profit .....</b>	<b>Rs. 5,600</b>
<i>Marketing Expenses:</i>	
Variables .....	Rs. 1,200
Fixed .....	1,000
<i>Administrative Expenses:</i>	
Variable .....	500
Fixed .....	1,300
Total Marketing and Administrative Expenses .....	Rs. (4,000)
<b>Operating Income .....</b>	<b>Rs. 1,600</b>

#### **Requirements:**

- 1) The breakeven point in Rupees, using the figures given in the budget
- 2) The breakeven point in Units, using the figures given in the budget
- 3) If target profit is Rs. 3,000 what will be target sales in rupees

#### **Solution:**

$$\text{Variable Cost} = 1,500 + 1,400 + 800 + 1,200 + 500 = \text{Rs. } 5,400$$

$$\text{Fixed Cost} = 700 + 1,000 + 1,300 = \text{Rs. } 3,000$$

- (1) The breakeven point in Rupees

$$\text{Breakeven in Rupees} = \frac{\text{Total Fixed Cost}}{1 - \frac{\text{Variable Cost}}{\text{Selling Price}}}$$

$$\text{Breakeven in Rupees} = \frac{3,000}{1 - \frac{5,400}{10,000}}$$

**Answer: Breakeven in Rupees = Rs. 6,522**

(2) The breakeven point in Units

$$\text{Breakeven in units} = \frac{\text{Total Fixed Cost}}{\text{Price} - \text{Variable Cost}}$$

$$\text{Breakeven in Rupees} = \frac{3,000}{0.46}$$

$$\text{Breakeven in units} = \frac{3,000}{100 - 54}$$

**Answer: Breakeven in Units = 65 Units**

(3) If target profit is Rs. 3,000 what will be target sales in rupees

$$\begin{aligned} \text{Target Sales (in Dollars)} &= \frac{\text{Total Fixed Costs} + \text{Target Profit}}{\text{Contribution Margin Ratio}} \\ \text{Target Sales (in Dollars)} &= \frac{3,000 + 3,000}{1 - \frac{5,400}{10,000}} \end{aligned}$$

**Answer: Target Sales (in Dollars) = Rs. 13,043**

Q2. These data relate to Sana Maqsood Co.'s March 2018 operations: (Marks 10)

Materials, Beginning .....	Rs. 8,000	Materials, Ending .....	Rs. 9,000
WIP, Beginning .....	7,500	WIP, Ending .....	3,500
Finished goods, Beginning .....	10,000	Finished goods, Ending .....	12,000
Materials used .....	46,000	Direct Labor .....	8,000
Selling and general expenses .....	6,700		

Factory overhead is applied at the rate of 50% of direct labor cost.

**Requirement:**

Prepare Cost of Goods Sold Statement?

**Sana Maqsood**  
**Cost of Goods Sold Statement**  
*For the Ended March 2018*

Opening Inventory	8,000
<b>Net Purchases (Calculated)</b>	<b>47,000</b>
Material Available for use	55,000
Closing Inventory	(9,000)
Direct Material used	46,000

Direct Labor	8,000
Prime Cost	54,000
Factory Overhead Cost (50% of direct labor cost)	4,000
Total Factory Cost	58,000
Opening Work in Process	7,500
Cost of Goods Available for Manufactured	65,500
Closing Work in Process	(3,500)
Cost of Goods Manufactured	62,000
Opening Finished Goods	10,000
Cost of Goods Available for Sold	72,000
Closing Finished Goods	(12,000)
<b>Cost of Goods Sold</b>	<b>60,000</b>

Q3. From the following Calculate: (Marks 10)

(a) Re-order level	(b) Minimum stock level	(c) Danger Level
Economic order quantity	5,000 units	Consumption 250 to 400 units
Re-order period	6 to 12 days	Normal lead time 10 days
Normal consumption	300 units	Emergency Time 6 days

**Solution:**

(a) Ordering Level

$$\text{Ordering level} = \text{Maximum consumption} * \text{Lead Time [maximum]}$$

$$\text{Ordering level} = 400 * 12$$

$$\text{Ordering level} = \mathbf{4,800 \text{ Units per day}}$$

(b) Minimum Level

$$\text{Minimum level} = \text{Reorder level} - (\text{Average consumption} * \text{lead time [Average]})$$

$$\text{Minimum level} = 4,800 - (300 * 10)$$

$$\text{Minimum level} = \mathbf{1,800 \text{ Units per day}}$$

(c) Danger Stock Level

$$\text{Danger stock level} = \text{Average consumption} * \text{Emergency lead time}$$

$$\text{Danger stock level} = 300 * 6$$

$$\text{Danger stock level} = \mathbf{1,800 \text{ Units per day}}$$