



# 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: 50

### SECTION-A

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

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

1. On the breakeven graph, the point at which the total sales revenue line and the total cost line intersect is?  
(a) Contribution margin      (b) **Breakeven point**      (c) Net income      (d) Operating income
2. Which of the following is used to determine the cost of goods sold?  
(a) Beginning inventory + Purchases  
(b) Beginning inventory + Purchases – Sales  
(c) **Beginning inventory + Net Purchases + Direct expenses – Ending inventory**  
(d) Ending inventory + Purchases – Beginning inventory
3. Costs that do not change when the activity base fluctuates are known as?  
(a) Variable costs      (b) Discretionary costs      (c) **Fixed costs**      (d) Mixed costs
4. 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**
5. 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
6. 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
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. As volume changes, which of the following items also change?  
(a) Total sales revenue      (b) Total variable costs  
(c) Total contribution margin      (d) **All of the above change as volume changes**
9. 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

10. 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**
11. An example of a semi variable cost would be?  
 (a) The costs of insuring assets (b) **Electricity costs**  
 (c) The salaries of supervisors in a department (d) The costs of material to be used for production
12. Which one of the following could not be used to describe a summary of a company's assets, liabilities and capital at a specific date?  
 (a) **Profit and loss account** (b) Balance sheet  
 (c) Position statement (d) Statement of financial condition
13. Which of the following expressions is incorrect?  
 (a) Gross profit – operating expenses = operating income  
 (b) Sales – cost of goods sold – operating expenses = operating income  
 (c) Operating income + operating expenses = gross profit  
 (d) **Operating expenses – cost of goods sold = gross profit**
14. Which of the following cost is used in the calculation of cost per unit?  
 (a) Total production cost (b) Cost of goods available for sales  
 (c) **Cost of goods manufactured** (d) Cost of goods Sold
15. Direct expenses are such expenses?  
 (a) Which are directly paid to the employee (b) **Which are directly associated with the purchase**  
 (c) Which are directly associated with the sale (d) All of above

## **SECTION-B**

*(Time allowed: 60 Minutes) (Marks: 10)*

**Q1.** Following data has been extracted from the books of AAA Wood Company; you are required to prepare Cost of Goods Sold Statement at the end of June 30<sup>th</sup>, 2008.

Cash	810	
Account Receivable	1,878	
Allowance for doubtful accounts		90
Direct Material Inventory, July 01, 2007	375	
Work-in-process, July 01, 2007	450	
Finished goods, July 01, 2007	333	
Carriage inward	54	
Factory Equipment	5,880	
Accumulated Depreciation _ Factory Equipment		1,695
Office Equipment	1,842	
Accumulated Depreciation _ Office Equipment		738
Account Payable		1,113
Miscellaneous Expenses Payable		366
Capital		7,167
Net Sales		16,290
Net Purchases	3,201	
Direct Labor	4,605	
Factory Overheads	3,687	
Selling Expenses	2,616	
Administrative Expense	978	
Income Tax	750	
<b>Total</b>	<b>Rs. 27,459</b>	<b>Rs. 27,459</b>

Inventory on June 30<sup>th</sup>, 2008 are

Direct Material Inventory Rs. 453; Work-in- Process Inventory Rs. 294 and Finished Goods Inventory Rs. 402

**AAA Wood Company**  
**Cost of Goods Sold Statement**  
*For the Ended June, 2008*

Opening Inventory	375
Purchases	3,201
Carriage inward	54

Material Available for use	3,630
Closing Inventory	(453)
Direct Material used	3,177
Direct Labor	4,605
Prime Cost	7,782
Factory Overhead Cost	3,687
Total Factory Cost	11,469
Opening Work in Process	450
Cost of Goods to be Manufactured	11,919
Closing Work in Process	(294)
Cost of Goods Manufactured	11,625
Opening Finished Goods	333
Cost of Goods to be Sold	11,958
Closing Finished Goods	(402)
<b>Cost of Goods Sold</b>	<b>Rs. 11,556</b>

Q2. Two components A and B are used follows.

Normal usage per week	50 units	Minimum usage	25 units week each
Maximum usage	75 units per week each	Re-order quantity	A: 300 units      B: 500 units
Re-order period	A: 4 to 6 weeks	B: 2 to 4 weeks	

**Required for both components:**

(a) Re-order level

(b) Minimum Level

(c) Maximum Level

**Solution:**

(i) Ordering Level

*Ordering level = Maximum consumption \* Lead Time [maximum]*

Ordering level (A) = 75 \* 6

**Ordering level (A) = 450 Units per week**

Ordering level (B) = 75 \* 4

**Ordering level (B) = 300 Units per week**

(ii) Minimum Level

*Minimum level = Reorder level – (Average consumption x lead time [Average])*

$$\text{Minimum level (A)} = 450 - (50 \times 5)$$

**Minimum level (A) = 200 Units per week**

$$\text{Minimum level (B)} = 300 - (50 \times 3)$$

**Minimum level (B) = 150 Units per week**

(iii) Maximum Level

*Maximum stock level = Reorder level – (Min consumption \* Lead time [minimum]) + EOQ*

$$\text{Maximum stock level (A)} = 450 - (25 * 4) + 300$$

**Maximum stock level (A) = 650 Units per week**

$$\text{Maximum stock level (B)} = 300 - (25 * 2) + 500$$

**Maximum stock level (B) = 750 Units per week**

**Q2.** Powell Company sells a number of products to many restaurants in the area. One product is a special meat cutter with a disposable blade. Blades are sold in a package of 12 at Rs. 20 per package. It has been determined that the demand for the replacement blades is at a constant rate of 2,000 packages per month. The packages cost the company Rs. 10 each from the manufacturer and require a three-day lead time from date of order to date of delivery. The ordering cost is Rs. 1.20 per order, and the carrying cost is 10% per annum. The company uses the economic order quantity formula. (Marks 10)

**Requirements:**

1. The economic order quantity
2. The number of orders needed per year
3. Total cost of ordering and carrying blades for the year

**Solution:**

$$EOQ = \sqrt{\frac{2 * RU * OC}{UC * CC\%}}$$

$$EOQ = \sqrt{\frac{2 * 24,000 * 1.2}{10 * 10\%}}$$

$$EOQ = 240 \text{ units}$$

$$\text{No of order per year} = \text{Annual Requirements} / EOQ$$

$$\text{No of order per year} = 24,000 / 240$$

$$\text{No of order per year} = 100 \text{ orders per year}$$

$$\text{Total Inventory Cost} = \text{Ordering cost} + \text{Carrying Cost}$$

*Total Inventory Cost = [Fixed ordering cost (F) \* Number of Order per year N] + Carrying Cost (C)\* EOQ/2*

*Total Inventory Cost = [1.2 \* 100] + [1 \* 240/2]*

*Total Inventory Cost = 120 + 120*

***Total Inventory Cost =Rs. 240***