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14/15

The University of Jordan

Instructor: Prof. Abbas Al-Refaie
 Course: Cost Accounting (Exam 20 %)

Name: [Redacted]
 ID: [Redacted] Exam duration: 45 minutes

Q1 (8 pts: 10 min) Please state whether each of the following statements is True/False then correct the false part:

Statement	Correction
The number of setups is the <u>cost object</u> of setup activities and costs. FALSE ✓	cost driver
The <u>leasing cost</u> of a machine that is unchanged for a year regardless of the number of units of product produced on the <u>machine</u> is a fixed cost. ✓	TRUE
Costs of material used to produce a quantity of products are always <u>variable and direct</u> costs. FALSE	variable \$ maybe direct or indirect
Freight-in costs in the merchandising sector are <u>period costs</u> . FALSE (merchandising) ✓	merchandising
Factors affecting the classification of a cost as fixed or variable include the <u>materiality</u> of the cost in question. FALSE ✓	direct or indirect
Distribution costs in the manufacturing sector are <u>period costs</u> . ✓	TRUE
The number of vehicles assembled is a <u>cost driver</u> of steering wheels on a motor-vehicle assembly line. ✓	TRUE
Service companies incur <u>one</u> inventoriable cost. FALSE ✓	NO
The traced costs of materials used and machining costs are the <u>conversion costs</u> when the cost driver is the quantity produced. FALSE ✓	prime
Employee overtime premium in the <u>service industry</u> is an <u>overhead cost</u> . FALSE ✓	period
Traced design costs of a specific product to support revenues are <u>direct costs</u> . ✓	TRUE
Depreciation costs on mixing machines that change with units of multiple output are <u>direct manufacturing and variable costs</u> . FALSE ✓	INDIRECT VARIABLE
<u>Management accounting</u> is constrained by generally accepted accounting principles. FALSE ✓	FINANCIAL
The computer scientists working on the next generation of minicomputers are the <u>function of design of products and processes</u> . FALSE ✓	R&D
Inventoriable costs are <u>all costs</u> of a product that are <u>expenses</u> in the balance sheet when they are incurred. FALSE ✓	considered as asset.
Electricity used to provide lighting for Star Market's store aisles <u>period cost</u> of a merchandising company. ✓	TRUE

8

G.M = 15% revenues

period = 35,000\$

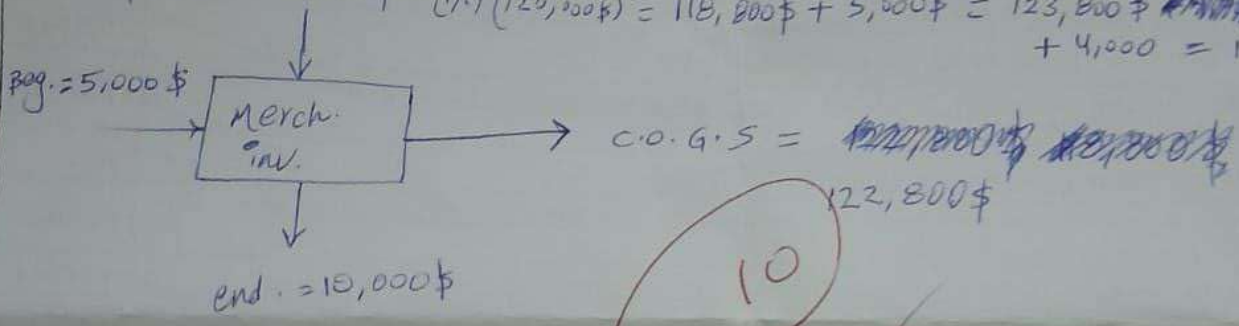
Q2 (10 pts: 15 min). The following data are for the ABC department store. Calculate:

Details	Amount	Details	Amount
Merchandise inventory (1/2/2024) (\$)		Purchases (\$)	120,000
Merchandise inventory (31/2/2024) (\$)	5,000	Freight-in (\$)	5,000
Purchase discounts (\$)	10,000	Insurance during shipping (\$ per.	4,000
Marketing and customer service costs (\$ per.	1% of purchases	Utility costs (\$ per.	10,000
Building depreciation (\$ per.	15,000	General and administrative costs (\$ per.	5,000
Gross margin	5,000		
	15% of revenues		

Question	Answer	Question	Answer
1. The inventoriable costs for the year 2024	127,800\$	4. The cost of goods sold	122,800\$
2. Revenues	144,470\$	5. Operating expenses	35,000\$
3. Cost of goods available for sale	132,800\$		

$$\text{purch.} = 120,000\$ - (1\%) (120,000\$) = 118,800\$ + 5,000\$ = 123,800\$$$

$$+ 4,000 = 127,800\$$$



1.)
$$\text{purch. cost} = \text{purch} - \text{discount} + \text{freight-in} + \text{insurance} = 127,800\$$$

2.)
$$\text{Revenues} - \text{C.O.G.S} = \text{G.M} \rightarrow R - 122,800\$ = (15\%)(R)$$

$$R - 122,800\$ = (15\%)(R) \rightarrow R = 144,470.6\$$$

3.)
$$\text{purch.} + \text{beg.} = (127,800\$) + (5,000\$) = 132,800\$$$

4.)
$$\text{C.O.G.S} = 122,800\$$$

5.)
$$\text{mktg} + \text{depreciation} + \text{utilities} + \text{G\&A} = 15,000 + 5,000 + 10,000 + 5,000 = 35,000\$$$

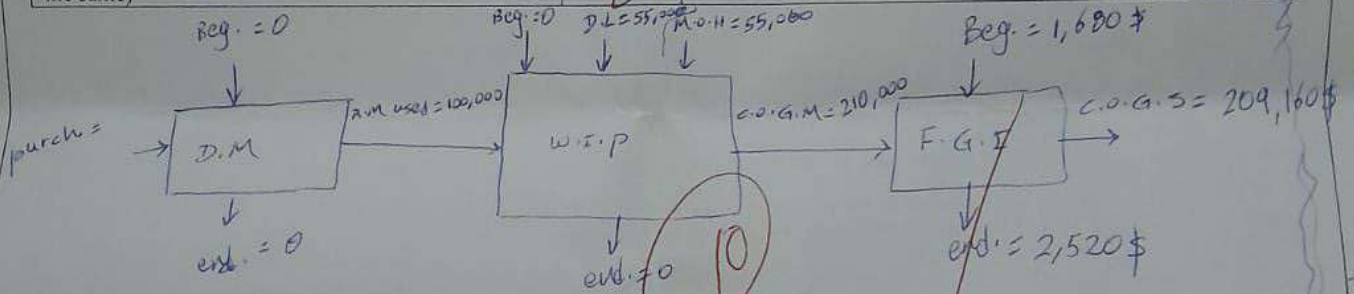
Q3 (12 pts: 15 min) The costs (million \$) incurred to produce 5,000 units in a metal-wood manufacturing industry which began production and sales operations on January 1, 2024, are as follows (V: stands for variable; F: stands for fixed):

Description	F (\$)	V (\$)	Description	F (\$)	V (\$)
Direct material used costs		100,000	Depreciation of plant machines	10,000	5,000
Prime costs (D.M + D.L)		155,000	Indirect manufacturing labor costs	25,000	10,000
Gross Margin		20% revenues	Marketing and distribution costs	1,600	800
Plant energy costs	5,000				

Description	Amount	Remarks
Finished-goods inventory (\$) Jan 31, 2024	2,520	Costs carried out at the average unit manufacturing cost
Finished-goods inventory (\$) Jan 1, 2024	1,680	
The raw material inventory and the WIP.		No beginning and ending inventories

Variable manufacturing costs are variable with respect to units produced. Variable marketing and distribution costs are variable with respect to units sold. Calculate:

Required (During the year 2024)	Answer	4.	Required	Answer
1. The cost of goods manufactured	210,000 \$		Cost of goods available for sale	211,680 \$
2. The selling price	52.5 \$/unit		Revenues	261,450 \$
3. The average manufacturing cost per unit if it is expected to produce 6,000 units (fixed costs remains the same)	40.67 \$/unit		The average cost per unit sold	42 \$



$$1.) \text{C.O.G.M} = \text{R.M. used} + \text{Beg. WIP} + \text{D.L.} + \text{M.O.H.} - \text{End. WIP}$$

$$= (100,000 \$) + (0 \$) + (55,000 \$) + (55,000 \$) - 0 = 210,000 \$$$

$$2.) \text{selling price} = \frac{\text{revenues}}{\text{quantity sold}} = \frac{261,450 \$}{4,980 \text{ unit}} = 52.5 \$/\text{unit}$$

$$\rightarrow R - (209,160 \$) = (20\% \times R) \rightarrow R = 261,450 \$$$

$$\rightarrow Q_s = \frac{\text{C.O.G.S}}{\text{cost per unit sold}} = \frac{209,160 \$}{42 \$/\text{unit}} = 4,980 \text{ unit}$$

$$\rightarrow \text{cost per unit sold} = \frac{210,000 \$}{5,000 \text{ unit}} = 42 \$$$

$$3.) \left(\frac{100,000 \$ + 55,000 \$ + 5,000 \$ + 10,000 \$}{5,000 \text{ unit}} \right) + \left(\frac{5,000 \$ + 10,000 \$ + 25,000 \$}{6,000 \text{ unit}} \right) = 40.67 \$/\text{unit}$$

→ 2.00

4.) Cost of goods available for sale = C.O.G.M. + Beg. F.G.I.F. ~~209,160~~

= 211,680 \$

5.) $R - C.O.G.S = (20\%)R$

$R - (209,160 \$) = (20\%)R \rightarrow R = 261,450 \$$

6.) ~~209,160~~