

SOLVED PAPER 2016

QUESTION NO 1

1. Bel Cold Refrigerator Company

Income statement

For the period of 3 months ended March 31, 2015

	Rs.	Rs.
Sales (12,400 units)		6,634,000
Less: Cost of goods sold:		
Direct material inventory (1-1-15)	268,000	
Add: Direct material purchased	1,946,700	
Direct material for sale	2,214,700	
Less: Direct material inventory (31-3-15)	167,000	
Direct material consumed	2,047,700	
Add: Direct labour	2,125,800	
FOH	764,000	
Cost of goods manufactured	4,937,500	
Add: Finished goods (1-1-15)	43,000	
Cost of goods available for sale	4,980,500	
Less: Finished goods ending inventory	79,000	
Cost of goods sold		4,901,500
Goods profit		1,732,500
Less: Operating expenses		
Marketing expenses	516,000	
General and administrative expenses	461,000	977,000
Net Income		755,500

2. The number of units manufactured:

Unit sold	12,400	
+ Units on hand (31-3-15)	200	

	12,600
Less: Units on hand (1-1-15)	100
Units manufactured	12,500

3. Units cost of refrigerator = $\frac{Rs. 3,937,500}{Rs. 12,500} = Rs. 395$

4. Gross profit per unit sold = $\frac{1,732,500}{12,400} = Rs. 139.71$

5. Income per unit sold = $\frac{755,500}{12,400} = Rs. 60.92$

6. The ratio of G.P to sales = $\frac{1,732,500}{6,634,000} = 26.11\%$

7. Income to sales = $\frac{755,500}{6,634,000} = 11.388\%$

QUESTION NO 2

G.P to sales ratio = $\frac{220,000 + 230,000 + 250,000 + 270,000 + 280,000}{650,000 + 700,000 + 750,000 + 800,000 + 850,000} \times 100$
 $= \frac{1,250,000}{3,750,000} \times 100 = \frac{100}{3} \% \text{ or } 33 \times \frac{1}{3} \%$

Gross profit = $450,000 \times 33 \times \frac{1}{3} \% = Rs. 150,000$

Cost of goods sold for 200F = $450,000 - 150,000 = Rs. 300,000$

Statement Showing WIP Inventory Lost and Fire:

	Rs.	Rs.
Raw material opening		20,000
Add: Purchases	175,000	
Freight	7,000	182,000
Raw material available for use		202,000
Less: Raw material ending inventory		30,000
Raw material used		172,000
Add: Direct labour		80,000
FOH applied (80,000 × 60/100)		48,000
Total factory cost		300,000

Add: WIP Opening inventory	400,000
Total cost of works to be accounted	340,000
Less: WIP ending inventory	50,000
Cost of goods manufactured	290,000
Add: Finished goods opening inventory	60,000
Cost of goods available for sale	350,000
Less: Ending finished goods inventory	50,000
Cost of goods sold (estimated)	300,000

Note: After going reverse the value of WIP = Rs. 50,000

QUESTION NO 3

1. Variable FOH cost

	Level	Budget
High	16,000 hrs	Rs. 42,000
Low	10,000 hrs	30,000
Change	6,000 hrs	Rs. 12,000

2. Budgeted Fixed FOH:

Budgeted FOH for 16,000 hrs	Rs. 42,000
Less: Budgeted variable FOH	32,000
Fixed FOH	Rs. 10,000

3. The capacity hours at which FOH applied rate is computed

$$= \frac{\text{Fixed FOH}}{\text{Applied rate} - \text{Variable rate}} = \frac{\text{Rs. } 10,000}{\text{Rs. } 3 - 2} = 10,000 \text{ hrs}$$

4. Applied FOH = Actual volume × FOH applied rate

$$= 15,000 \text{ hrs} \times \text{Rs. } 3 = \text{Rs. } 45,000$$

5. Under or overapplied FOH:

Actual FOH	Rs. 44,000
Applied FOH	45,000
Overapplied FOH	1,000

6. Budget variance:

Actual FOH	Rs. 44,000
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Budgeted FOH (Fixed Rs. 10,000 + Variable 15,000 × 2)	40,000
Budget variance (Unfavorable)	4,000

7. Capacity Variance:

Budget FOH for capacity attained	Rs. 40,000
Actual FOH	46,000
Capacity variance (favorable)	5,000

QUESTION NO 4

Suleman Manufacturing Co.

Income statement

For the month of Feb, 20....

	Rs.	Rs.
Sales		75,000
Less: Cost of sold goods		56,000
Gross profit		19,000
Less: Operating expenses:		
Marketing expenses	3,750	
General and admin expenses	7,500	11,250
Net income		7,750

**Cost of goods
 Manufactured & Statement
 For the month of Feb, 20....**

	Rs.
Material opening	8,000
(+) Purchases	38,600
Material available for use	146,600
(-) Material ending	8,600
Material used	38,000
(+) Direct labour (160% FOH)	16,000
FOH (16,000 × 100/160)	10,000
Total factory cost	64,000
(+) WIP opening inventory	8,000
Cost of goods to be manufactured	72,000
(-) WIP ending inventory	12,000
Cost of goods manufactured	60,000
(+) Finished goods opening inventory	14,000
Cost of goods to be sold	74,000
(-) Finished goods ending inventory	180,000
Cost of goods sold	56,000

Note: the cost of goods sold statement is completed with the help of given cost of goods sold. From bottom to top we find purchases not given.

QUESTION NO 5

Computations of Total and Hourly Earnings:

Arshad:

Taken time	= 210 hrs	
Time saved	= Nil	
Total earning	= 210 × 25	= Rs. 250
Earning per hour	= $\frac{5,250}{210}$	= Rs. 25

Amjad:

Time taken	= 160 hrs	
Time saved	= 200 – 160	= 40 hrs
Total earnings:		
Normal	= 25 × 160	= Rs. 4,000
Bonus	= 25 × 40 × $\frac{10}{100}$	= 100 Rs. 4,100
Earning per hour	= 4,100 ÷ 160	= Rs. 25.625

Nazar:

Time taken	= 120 hrs	
Time saved	= 200 – 120	= 80 hrs
Total earnings:		
Normal	= 25 × 120	= Rs. 3,000
Bonus: 1 st 40 hours		100
Next 40 hours (40 × 25 × 25/100)		250
		3,350
Earning per hour	= $\frac{3,350}{120}$	= Rs. 27.92

Naheed:

Time taken	= 50 hrs	
Time saved	= 200 – 50	= 150 hrs
Total earnings:		
Normal	= 50 × 25	= Rs. 1,250
Bonus: 1 st 40 hours		100
Next 40 hrs		250
Next 60 hrs (25 × 60 × 50/100)		750
Next 10 hrs (25 × 10 × 30/100)		75
		2,375
Earning per hour		$= \frac{2,375}{50} = \text{Rs. } 47.50$

QUESTION NO 6

1. Budgeted fixed FOH = 850,000 × 1.50 × 0.40	=	Rs. 510,000
2. Under or over applied FOH:		
Actual FOH		Rs. 1,100,000
Applied FOH (750,000 × 1.50)		1,125,000
Over applied FOH		25,000
3. <u>Volume variance:</u>		
Budgeted FOH for capacity attained		
Fixed FOH	510,000	
Variable FOH 750,000 × 1.50 × 0.60	675,000	1,185,000
Applied FOH (750,000 × 1.50)		1,125,000
Volume variance (Unfavorable)		60,000
4. <u>Budget variance:</u>		
Actual FOH		Rs. 1,100,000
Budgeted FOH for capacity attained		1,185,000
Budget variance (favorable)		85,000

QUESTION NO 7

Standard rate per hour $= \frac{160}{8} =$ Rs. 20

Standard piece rate $= \frac{20}{80} =$ Rs. 0.25

1. Straight Piece Rate Basis:

Wages earned $(0.25 \times 800) =$ Rs. 200

Labour cost per 100 pieces $= \frac{200}{800} \times 100 =$ Rs. 25

2. Halsey Bonus System:

Regular wages $(8 \text{ hrs} \times 20) =$ 160

Bonus $(800/80 - 8)(20)(50\%) =$ 20

Wages earned Rs. 180

Labour cost per 100 pieces $= \frac{180}{800} \times 100 =$ Rs. 22.50

3. Straight Line Rate with Bonus:

Regular wages $(8 \times 20) =$ Rs. 160.00

Bonus $(800-640) \div 100 \times 23 =$ 36.80

Wages earned Rs. 196.80

Labour cost per 100 pieces $= \frac{196.80}{800} \times 100 =$ Rs. 24.60