

# Cost Accounting Guess Paper For B.Com Annual Exam 2020

## Question No.1

Fawad Limited imports a high value machinery for its manufacturing process. Following data, relating to the machinery, has been extracted from Fawad's records for the last twelve months:

Maximum usage in a month	300 units
Minimum usage in a month	200 units
Average usage in a month	225 units
Maximum lead time	6 months
Minimum lead time	2 months
Re-order quantity	750 units

**Calculate the average stock level for the machinery**

## Solution.

*Average stock level:*

Average stock level = minimum level +  $\frac{1}{2}$

(reorder quantity) As minimum level is not given it will be computed as follows:

Re-order level = maximum usage  $\times$  maximum lead time

Re-order level =  $300 \times 6 = 1,800$  units.

Minimum level = Re-order level – ( average usage  $\times$  average lead time)

Minimum level =  $1,800 - (225 \times (6+2/2)) = 900$  units.

Therefore, Average stock level =  $900 + (\frac{1}{2} 750) = 1,275$  units.

## Question No.2

The Babar Company uses both a Factory Ledger and a General Ledger. It records its costs under job order cost system. The following transactions took place during the month of July 2009:

- (i) Materials purchased and delivered directly to production (without going to store room), which was used as follows:

Direct Materials	Rs. 2,800	
Indirect Materials	Rs. 500	Rs. 3,300

- (ii) Labour cost charged to production during the month as follows:

	Rs.
Direct labour cost	20,000
Indirect labour cost	5,000
Sales Salaries	2,000
General Office Salaries	3,000

- (iii) Factory over applied to production during the month at the rate of 110% of Direct Labour Cost.  
(iv) Depreciation at an annual rate of 10% of the original cost of machinery Rs. 120,000 was recorded.  
(v) Goods completed totaled Rs. 65,000.  
(vi) Goods Costing Rs. 60,000 were sold for Rs. 100,000 on account.  
(vii) Sales Returns by the customer Rs. 1,000, the Cost of Sales Return being Rs. 600.

### REQUIRED:

Journal entries in the General office and Factory Office Books.

### Solution:

#### General Office Book

Date	Particulars	Debit (Rs)	Credit (Rs)
(i)	Factory ledger Voucher payable (Material purchased and directly issued to production)	3,300	3,300
(ii)	Payroll Accrued payroll (Payroll and accrued payroll recorded)	30,000	30,000
(iii)	Accrued payroll	30,000	

	Voucher payable (Accrued payroll vouched)		30,000
(iv)	Voucher payable Cash (Payment to workers)	30,000	30,000
(v)	Factory ledger Selling expenses General office expenses Payroll (Distribution of payroll)	25,000 2,000 3,000	30,000
(vi)	Factory ledger Allowance for depreciation on machinery (Depreciation on machinery recorded)	12,000	12,000
(vii)	Cost of goods sold Factory ledger (Cost of goods sold recorded)	60,000	60,000
(viii)	Accounts receivable Sales (Goods sold on account)	100,000	100,000
(ix)	Sales return Accounts receivable (Credit sales return by customers)	1,000	1,000
(x)	Factory ledger Cost of goods sold (Cost of sales return recorded)	600	600
	<b>TOTAL</b>	<b>296,900</b>	<b>296,900</b>

### Factory Office Book

Date	Particulars	Debit (Rs)	Credit (Rs)
(i)	W.I.P F.O.H Control General Ledger (Direct material & indirect materials purchased & directly issued to production)	2,800 500	3,300
(ii)	W.I.P F.O.H Control General Ledger (Direct & indirect payroll recorded & payroll sheet sent to head office)	20,000 5,000	25,000
(iii)	W.I.P F.O.H Applied cost (F.O.H cost applied to production @ 110% of direct labour cost)	22,000	22,000
(iv)	F.O.H Control General Ledger (Depreciation on machinery charged to F.O.H control A/c)	12,000	12,000

(v)	Finished goods W.I.P (Goods completed)	65,000	65,000
(vi)	General ledger Finished goods (Cost of goods sold recorded)	60,000	60,000
(vii)	Finished goods General ledger (Cost of sales return recorded)	600	600
<b>TOTAL</b>		<b>187,900</b>	<b>187,900</b>

### Question No.3

Cost accountant of Loyal Manufacturing Company has prepared following summary:

Inventories at 1<sup>st</sup> July, 2010:

Raw materials	Rs. 30,000
Work in process	18,000
Fuel	2,000
Factory repair parts	1,000
Finished goods	13,000
<b>During the month following transaction took place</b>	
Raw material purchased	130,000
Fuel purchased	18,000
Direct labour	120,000
Miscellaneous factory overhead	4,000
Repairs of factory (including purchase of parts)	5,000
Depreciation of plant	3,000
Superintendence	2,000
Transportation out	2,000
Purchase discount lost	1,000
Indirect factory labour	3,000
<b>Inventories at 31<sup>st</sup> July, 2010:</b>	
Raw materials	32,000
Work in process	22,000
Fuel	3,000
Factory repair parts	2,000
Finished goods	18,000

**Required:** Prepare a statement of Cost of Goods Sold.

**Solution:**

**Loyal Manufacturing Company  
Cost of Goods Manufactured & Sold Statement  
For the period ended 31<sup>st</sup> July 2010**

	Rs.	Rs.
<b><u>Direct Material Cost:</u></b>		
Opening Inventory	30,000	
<b>Add:</b> Raw material purchased	130,000	
Cost of Raw material available for use	160,000	
<b>Less:</b> Closing Inventory	(32,000)	
Raw Material Used / Consumed / Put into Process		128,000
<b>Add:</b> Direct Labour Cost		120,000
Prime Cost		248,000
<b>Add:</b> Factory Overhead cost		33,000
Total factory cost		281,000
<b>Add:</b> Work in process – Opening Inventory		18,000
Cost of Goods to be manufactured		299,000
<b>Less:</b> Work in process – closing inventory		(22,000)
Cost of goods manufactured		277,000
<b>Add:</b> Finished Goods – opening inventory		13,000
Cost of goods available for sale		290,000
<b>Less:</b> Finished Goods – closing inventory		(18,000)
<b>Cost of Goods Sold</b>		<b>272,000</b>

**WORKING:**

	Rs.	Rs.
<b><u>Factory Overhead Cost:</u></b>		
<b><u>Fuel used:</u></b>		
Opening Inventory of fuel	2,000	
<b>Add:</b> Fuel purchased	18,000	
	20,000	
<b>Less:</b> Closing inventory of fuel	(3,000)	17,000
<b><u>Factory Repair Parts Used:</u></b>		
Opening Inventory of parts	1,000	
<b>Add:</b> Parts purchased	5,000	
	6,000	
<b>Less:</b> Closing Inventory of parts	(2,000)	4,000
Miscellaneous Factory Overhead	4,000	
Depreciation of plant	3,000	
Superintendence	2,000	

Indirect Factory Labour	3,000
	33,000

**Question No. 4**

Zakir electrical industry produces U.P.S. Assembling the last producing department during April received 1,700 units from preceding department at unit cost of Rs. 2,544.

During the month a total of 1,626 units were assembled. At the end of month 10 of the assembled units were in the department awaiting transfer.

70 in process units were estimated to be 4/5 complete as to materials and 3/5 complete as to labor and factory overhead. Remaining units were lost during processing. Direct materials Rs. 3,767,680, direct labor Rs. 420,336 and factory overhead RS. 380,304 were charged to the department during April.

There was no work in process beginning inventory.

**Required: a. Schedule of equivalent production  
b. Cost of production report**

**Solution:**

**(a) Schedule of Equivalent Production:**

Material =  $1,616 \div 10 + (70 \times 4/5) = 1,682$  units  
 Labour =  $1,616 \div 10 + (70 \times 3/5) = 1,668$  units  
 F.O.H =  $1,616 \div 10 + (70 \times 3/5) = 1,668$  units

**(a) Cost of Production Report:**

**Zakir electric Industry  
Department No 2  
Cost of Production report  
For the period ended April .....**

<b>1. <u>Quantity Schedule:</u></b>	<b>Units</b>	<b>Units</b>
Units received from preceding department		<u>1,700</u>
Units completed and transferred	1,616	
Units completed but not transferred	10	
Units still in process	70	
Units lost in process (Normal)	4	
		<u>1,700</u>
<b>2. <u>Cost charged to the department:</u></b>	<b>Cost</b>	<b>P.U. Cost</b>
	<b>Rs.</b>	<b>Rs.</b>
i. Cost received from preceding dept.	<u>4,324,800</u>	<u>2,544</u>
ii. Cost added by the dept.		

Material cost	3,767,680		2,240
Labour cost	420,336		252
F.O.H Cost	380,304		228
Revised per unit cost (Due to lost units)		-	<u>2,550</u>
	<u>8,893.120</u>		<u>5,270</u>

3. <b><u>Cost accounted for as follows:</u></b>		<b>Rs.</b>	<b>Rs.</b>
<b><u>a. Cost of units completed &amp; transferred</u></b>			
= 1,616 units × Rs. 5,270 =			8,516,320
<b><u>b. Cost of units completed but not transferred:</u></b>			
= 10 units × Rs. 5,270 =			52,700
<b><u>c. Cost of units still in process</u></b>			
i. <u>Cost received from preceding dept.</u>			
= 70 units × Rs. 2,550 =		178,500	
ii. <u>Cost added by the dept.</u>			
Material Cost = 70 × 4/5 × Rs. 2,240 =		125,440	
Labour cost = 70 × 3/5 × Rs. 252 =		10,584	
F.O.H Cost = 70 × 3/5 × Rs. 228 =		9,576	
			324,100
<b>Total cost accounted for</b>			<b>8,893,120</b>

#### 4. **Computation explanation:**

##### i. Equivalent production:

Material	= 1,682 units
Labour	= 1,668 units
F.O.H	= 1,668 units

##### ii. Per unit cost

Material cost	= 3,767,680 ÷ 1,682	=	Rs. 2,240
Labour cost	= 420,336 ÷ 1,668	=	252
F.O.H cost	= 380,304 ÷ 1,668	=	228

##### iii. Revised per unit cost of preceding dept.

(Due to lost units)	
= <u>4,324,800</u>	
1,696	

### **Question No.5**

A worker takes 9 hours to complete a job in daily wages and 6 hours on a scheme of payment by results. His day rate is Rs. 7.50 per hour. Materials cost of the product is Rs. 400 and overheads are recovered at 150% of total direct wages. REQUIRED: Calculate factory cost of the product under:

- (1) Piece work plan
- (2) Hasley plan

#### **Calculation of factory cost of the product.**

	<b>1</b>	<b>2</b>
	<b>Piece Work Plan Rs.</b>	<b>Halsey Plan Rs.</b>
Direct Materials	400.00	400.00
Direct labour	67.50	56.25
Overheads (150% of direct labour)	101.25	84.37
Total factory cost	568.75	540.62

#### **WORKING NOTES:**

##### **Calculation of direct labour cost under:**

##### **(w-1) Piece Work Plan:**

The worker will get wages for 9 hours (i.e. the time allowed) irrespective of the time worked.

Direct labour cost. = Rs. 7.50 × 9 hours = Rs. 67.50

##### **(w-2) Halsey plan:**

Regular	6 hours × Rs. 7.50	Rs. 45.00
Premium	(3 hours × Rs. 7.50) × 50%	11.25
Total wages		Rs. 56.25



### **Question No.6**

Following figures are taken from annual budget of ABC manufacturers for the year

2013: Fixed factory overhead	Rs. 400,000
Factory overhead absorption rate	Rs. 70 per direct labour hour
hour Variable factory overhead rate	Rs. 30 per direct labour hour

**Following are a few figures of actual results of the year 2013:**

Capacity attained	110,000 hours
Factory overhead	Rs. 8,000,000

### **REQUIRED:**

- Budgeted capacity that was used to compute factory overhead absorption rate.
- Analysis of under or over absorbed factory overhead into volume and budget variances.

### **Solution**

FOH absorption rate	Rs. 70
Variable FOH absorption rate	30
Fixed FOH absorption rate	<u>40</u>

$$(a) \text{ Budgeted capacity} = \frac{\text{Fixed FOH}}{\text{Fixed FOH absorption rate}}$$

$$\frac{\text{Rs. 4,000,000}}{\text{Rs. 40}}$$

$$= 100,000 \text{ hrs}$$

### **(b) Under Over Applied F.O.H**

Applied FOH	Rs. 8,000,000
Applied FOH (110,000 × 70)	7,700,000

Under applied FOH 300,000

**Budget variance:**

Actual FOH Rs. 8,000,000

Budget FOH for capacity attained fixed:

Fixed	Rs. 4,000,000	
Variable (110,000 × 300)	3,300,000	7,300,000
(Unfavorable)		700,000

**Volume Variance:**

Budgeted FOH	Rs. 7,300,000	
Applied FOH	7,700,000	
Volume variance (Favorable)		400,000

**Question No. 7**

FNS manufacturing company submits the following information on June 30, 2005.

Sales for the year	450,000
Raw material inventory, July 1, 2004	15,000
Finished goods inventory, July 1, 2004	70,000
Purchases	120,000
Direct labor	65,000
Power, heat and light	2,500
Indirect material purchased and consumed	4,500
Administrative expenses	21,000
Depreciation of plant	14,000
Selling expenses	25,000
Depreciation of building	7,000
Bad debts	1,500
Indirect labor	3,000
Other manufacturing expenses	10,000
Work in process, July 1, 2004	14,000
Work in process, June 30, 2005	19,000
Raw materials inventory, June 30, 2005	21,000
Finished goods inventory, June 30, 2005	60,000
Applied factory head rate is 20% of the prime cost	

**Required**

- 1) Cost Of Goods Manufactured Statement.
- 2) Cost Of Goods Sold Statement at normal and at actual
- 3) Income statement.

**SOLUTION:**

**FNS manufacturing company  
Cost of goods manufactured statement  
For the year ended June 30, 2005**

Raw materials inventory, July 1 2004	15,000
Add: purchases of materials	120,000
Less: materials inventory, June 30, 2005	<u>(21,000)</u>
Cost of materials consumed	114,000
Add: direct labor	<u>65,000</u>
Prime cost/Direct cost	179,000
Factory overhead applied (179,000x20%)	<u>35,800</u>
Manufacturing cost/Factory cost	214,800
Add: Inventory of work in process, July 1, 2005	14,000

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Less: Inventory of work in process, June 30, 2006	(19,000)
Cost of goods manufactured	<u>209,800</u>

2)

**FNS manufacturing company**  
**Cost of goods sold statement**  
**For the year ended June 30, 2006**

Cost of goods manufactured	209,800
Add: inventory of finished goods, July 1, 2004	70,000
Less: inventory of finished goods, June 30, 2005	<u>(60,000)</u>
Cost of goods sold at normal	219,800
Less: over-applied factory overhead (working)	<u>1,800</u>
Cost of goods sold at actual	<u>218,000</u>

3)

**FNS manufacturing company**  
**Income statement**  
**For the year ended June 30, 2006**

Sales	450,000
Less: cost of goods sold	<u>(218,000)</u>
Gross profit	232,000
Less: operating expenses	
Bad debts	1,500
Depreciation of building	7,000
Selling expenses	25,000
Administrative expenses	<u>21,000</u>
Net profit	<u>177,500</u>

**Working**

Applied factory overhead cost	35,800
Actual factory overheads	
Power, heat and light	2,500
Indirect material purchased and consumed	4,500
Depreciation of plant	14,000
Indirect Labor	3,000
Other manufacturing expenses	<u>10,000</u>
Over-applied factory overhead	<u>1,800</u>

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### Question No.8

The information relating to cost department of BETA Corporation is as follows

<u>Inventory</u>	<u>Jan 1</u>	<u>Dec 31</u>
Material	34,000	49,000
Work in process	82,000	42,000
Finish goods	48,000	?

  

Finish goods inventory	Jan 1	300 units
	Dec 31	420 units

  

Sold during the year                      3,380 units at Rs. 220 per unit.

	<b>Rupees</b>
Material Purchased	360,000
Conversion cost	214,400
Freight In	8,600
Purchase discount	8,000
Opening material inventory	34,000
Closing material inventory	49,000

### Prepare Cost of Goods Sold Statement from the above information

#### Solution

	<b>Rupees</b>
Direct material opening inventory	34,000
<u>Add Net purchases</u>	
Material Purchased	360,000
Add Freight Inward	8,600
Less Purchase discount	<u>8,000</u>
	<u>360,600</u>
Material available for use	394,600
Less raw material closing stock	<u>49,000</u>
<b>Direct Material consumed</b>	<b>345,600</b>
Add Conversion cost	<u>214,400</u>
<b>Total factory cost</b>	<b>560,000</b>
Add Opening Work in process inventory	<u>82,000</u>
Cost of goods to be manufactured	642,000
Less Closing Work in process	<u>42,000</u>
<b>Cost of goods manufactured</b>	<b>600,000</b>
<b>Cost of Goods Sold</b>	
Cost of goods manufactured	600,000
Add Opening finished goods inventory	<u>48,000</u>
Cost of goods to be sold	648,000
Less Closing finish goods <i>(working)</i>	<u>63,000</u>
Cost of goods sold	<b>585,000</b>
<i>(working)</i>	

	Units sold	3,880
Add	Units closing finished goods inventory	300
Less	Units opening finished goods inventory	<u>420</u>
	Units manufactured	<b><u>4,000</u></b>

This can also be understood through the following algebraic manner:

$$\text{Opening finished goods units} + \text{Units produced} - \text{Closing finished goods units} = \text{Units sold}$$

$$300 + X - 420 = 3880$$

$$\text{Units produced} = \text{Units sold} + \text{Closing finished goods units} - \text{Opening finished goods units}$$

$$X = 3,880 + 420 - 300 = \mathbf{4,000}$$

$$\text{Cost per unit} = \frac{\text{Cost of goods manufactured}}{\text{Number of units manufactured}}$$

$$= \frac{600,000}{4,000}$$

$$= \mathbf{150}$$

#### Value of Closing Finish Goods Inventory

$$\text{Closing finish goods} = \text{Closing finish goods units} \times \text{Cost Per unit}$$

$$= 420 \times 150$$

$$= \mathbf{63,000}$$

### Question No.9

From the following information calculate the Maximum stock level, Minimum stock level, Re-ordering level and Danger stock level;-

- (a) Average consumption 330 units per day
- (b) Maximum consumption 420 units per day
- (c) Minimum consumption 240 units per day
- (d) Re-order quantity 3,600 units
- (e) Re-order period 10 to 15 days
- (f) Emergency Re-order period 12 days

#### Solution :

Re-ordering level:

***Maximum consumption x Lead Time [maximum]***

$$420 \times 15 = 6,300 \text{ units.}$$

Maximum stock level:

***Reorder level – (Minimum consumption x Lead time [minimum]) + EOQ***

$$6,300 - (240 \times 10) + 3,600 = 7,500 \text{ units}$$

Minimum stock level:

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

$$\begin{aligned} \text{Average lead time} &= \frac{\text{Maximum} + \text{Minimum}}{2} = \frac{15+10}{2} = 12.5 \\ 6,300 - 330 \times 12.5 &= 2,175 \text{ units} \end{aligned}$$

Danger stock level:

***Average consumption x Emergency lead time***

$$330 \times 12 = 3,960 \text{ units}$$

**Question.10**

A & Co manufactured 500 ceiling fans to fill an order by incurring:

Direct material	Rs.	150,000
Direct labor cost		100,000
F.O.H ( <b>60% of labor cost</b> )		<u>60,000</u>
Total production cost		<u>310,000</u>

Some of the work was found defective, to make good such loss, following cost was incurred:

Rework cost on defective work

Material	Rs.	10,000
Labor		30,000
F.O.H ( <b>60% of Labor cost</b> )		18,000

**Required:** Pass accounting entries to record the cost incurred along with the adjusting entry for re-work cost, treating the loss as:

- Normal
- Abnormal

**Solution****a) Normal loss**

Work in process A/C	310,000	
Material		150,000
Payroll		100,000
F.O.H applied		60,000
FOH – Control A/C	58,000	
Material		10,000
Payroll		30,000
F.O.H applied		18,000
Finished goods A/C	310,000	
Work in process A/C		310,000

$$\text{Cost per unit} = \frac{310,000}{500} = \text{Rs. 620 per unit}$$

**b) Abnormal loss**

Work in process A/C	310,000	
Material		150,000
Payroll		100,000
F.O.H applied		60,000
Work in process A/C	58,000	
Material		10,000
Payroll		30,000
F.O.H applied		18,000
Finished goods A/C	368,000	
Work in process A/C		368,000

$$\text{Cost per unit} = \frac{368,000}{500} = \text{Rs. 736 per unit}$$



### Question. No.11

From the following particulars, calculate the earnings of workers under straight piece basis and Taylor's Differential Piece Rate Plan.

Standard Time per piece	20 minutes
Normal rate per hour	Rs. 0.90
In a 9 hour day;	
A produces	25 units
B produces	35 units
Differential to be applied 80% of piece rate below standard. 120% of piece rate at or above standard.	

#### Solution:

Standard production per hour	$60 \text{ min}/20 \text{ min}$	= 3 units
Standard production per day	$3 \text{ units} \times 9 \text{ hours}$	= 27 units
Per Piece rate	$\text{Rs. } 0.90/3 \text{ units}$	= Rs. 0.30

Efficiency of:

Worker "A" is less than 100%

Worker "B" is more than 100%

*Wages under Straight Piece Rate Basic:*

Earnings of A

No. of units X Rate per unit  
 $25 \times 0.30 = \text{Rs. } 7.50$

Earnings of B

$30 \times 0.30 = \text{Rs. } 9.00$

*Wages Taylor's differential piece rate basis:*

Efficiency of A 92.25%

Efficiency of B 111%

Low piece rate in case of A = 80% of Rs. 0.30 = Rs. 0.24

High piece rate in case of B = 120% of Rs. 0.30 = Rs. 0.36

Earning of A  $25 \times 0.24 = \text{Rs. } 6.00$

Earning of B  $30 \times 0.36 = \text{Rs. } 10.80$

### Question. No.12

Shahzewaz Associates prepared following estimates for the year 2006.

Fixed factory overhead

Variable factory overhead

Direct labor hours Actual results for the year 19xx were as follow:

Fixed factory overhead	Rs. 450,000
Variable factory overhead	Rs. 600,000
Direct labor hours	200,000

Required: Calculate

- (i) Total factory overhead variance.
- (ii) Capacity variance.
- (iii) Budget variance.

Solution:

(i)	Total Factory Overhead Variance	
	Actual factory overhead	
	<b>Fixed FOH + Variable FOH</b>	
	Rs. 450,000 + Rs. 680,000	Rs. 1,130,000
	Absorbed factory overhead	
	Capacity attained x Absorption rate	
	220,000 hours x Rs. 5.25	1,155,000
	Over applied	25,000
(ii)	Capacity Variance	
	Absorbed factory overhead (220,000 x 5.25)	Rs. 1,155,000
	Budgeted factory overhead for capacity attained	
	Fixed factory overhead + (Capacity attained x Variable rate)	
	(Rs. 450,000 + 220,000 hours x Rs. 3)	1,110,000
	Favorable	45,000
(iii)	Budget Variance	
	Budgeted factory overhead for capacity attained	Rs. 1,110,000
	Actual factory overhead	1,130,000
	Unfavorable	20,000

Supporting Calculations

Absorption rate =	(Rs 450,000 + Rs. 600,000)
	200,000 direct labor hours
	= Rs. 5.25 per direct labor hour
Variable rate =	Rs. 600,000
	2,00,0000 direct labor hours
	= Rs. 3 per direct labor hour

### Question. No.13

Predetermined factory overhead absorption rate computed by AI-Nasr Associates Rs. 6 per machine hour. Budgeted factory overhead for activity level of 150,000 machine hours is Rs. 800,000 and for activity level of 100,000 machine hours it is Rs. 700,000. Actual factory overhead incurred during the year is Rs. 710,000 at an actual volume of 120,000 machine hours.

Required:

- (i) Variable factory overhead absorption rate.
- (ii) Budgeted fixed factory overhead,
- (iii) Budgeted activity level on which the absorption rate is based
- (iv) Over or under absorbed factory overhead.
- (v) Volume variance
- (vi) Spending variance

**Solution:**

**(i) Variable Factory Overhead Absorption Rate:**

	Activity Level (Machine Hours)	Budgeted FOH (Rs.)
High	150,000	800,000
Low	<u>100,000</u>	<u>700,000</u>
	50,000	100,000

For a change of 50,000 machine hour's in activity level there is a change of Rs, 100,000 in budgeted factory overhead. This change in budgeted factory overhead is due to variable factory overhead. Therefore,

$$\begin{aligned} \text{Variable rate} &= \frac{\text{Change in budgeted FOH}}{\text{Change in activity level}} \\ &= \text{Rs } 100,000 / 50,000 \text{ machine hours} \\ &= \text{Rs. 2 per machine hour} \end{aligned}$$

**(ii) Budgeted Fixed Factory Overhead:**

$$\begin{aligned} \text{Total FOH for 150,000 machine hours} &= \text{Rs. 800,000} \\ \text{Budgeted variable FOH} = 150,000 \text{ hrs Rs } 2 &= \text{Rs. 300,000} \\ \text{Budgeted fixed FOH} = \text{Rs } 800,000 \text{ less Rs. 300,000} &= \text{Rs. 500,000} \end{aligned}$$

OR

$$\begin{aligned} \text{Total FOH for 100,000 machine hours} &= \text{Rs } 700,000 \\ \text{Budgeted variable FOH} = 100,000 \text{ hrs x Rs. } 2 &= \text{Rs } 200,000 \\ \text{Budgeted fixed FOH} = \text{Rs. } 700,000 \text{ less Rs. } 200,000 &= \text{Rs. } 500,000 \end{aligned}$$

**(iii) Budgeted Activity Level**

$$\begin{aligned} \text{Budgeted activity level} &= \frac{\text{Fixed FOH}}{\text{Fixed rate}} \\ &= \text{Rs. } 500,000 / (\text{Rs. } 6 \text{ less Rs. } 2) \\ &= 125,000 \text{ machine hours} \end{aligned}$$

(iv) Over or under absorbed Factory Overhead:

<b>Actual factory overhead</b>	<b>Rs. 710,000</b>
Absorbed factory overhead	
Actual volume x FOH absorption rate	
120,000 hrs x Rs. 6	720,000
Over absorbed	10,000

(v) **Volume Variance:**

Absorbed factory overhead	Rs. 720,000
Budgeted FOH for actual volume	
Fixed FOH + (Actual volume x Variable rate)	
Rs, 500,000 + (120,000 hrs, x Rs. 2)	740,000
Unfavorable	20,000

(vi) **Spending Variance:**

Budgeted FOH for actual volume	Rs. 740,000
Actual factory overhead	710,000
Favorable	30,000

#### Question. No.14

Mini Soap Manufacturing unit completed and transferred out 600 soaps to department-11 at the end of the week. In department-11 450 soaps completed and transferred to finished goods. Units which were still in process 100 and 50 units lost (Normal). Units in process 100% with the reference of material and 60% with conversion cost. **Rs.**

Cost received from preceding department	540	
Following costs were incurred by department-II:		
Direct Material	150	
Direct Labor	112	
Factory overhead	168	<u>430</u>
		<b><u>970</u></b>

**Required:** Prepare cost of production report

**Solution:**

Cost of Production Report  
Department-II

I-Quantity Schedule:

Units received previous department		<u>600</u>
Units completed and transfer to		
Finished goods	450	
Units still in process	100	
Units lost (Normal)	50	
		<u>600</u>

II-Cost Accumulated in the Department / Process:

		Rs.
Cost received from preceding department		540
Cost added by department-11:		
Direct Material	150	
Direct Labor	112	
Factory overhead	168	
		<u>430</u>
		970

III-Calculation of Equivalent Units Produced:

(100% of completed units + % of units in process)

Units completed in department-I = 450 + 100 = 550

Direct Material: 450+(100x100%) = 550

Direct Labor : 450+(100x60%) = 510

F.O.H : 450+(100x60%) = 510

IV- Unit Cost:

Previous department = 540 / 550 = 0.98182

Direct Material 150 / 550 = 0.272727

Direct Labor 112 / 510 = 0.21961

F.O.H 135 / 510 = 0.32941

1.80357

V- Apportionment of the Accumulated Cost :

Transferred to finished goods

450	x	1.80357	812
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Work in process:

Cost of preceding department		
(100 x 0.98182)		98

Direct Material	(100 x 0.272727)		27
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Direct Labor	(60 x 0.21961)		13
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F.O.H	(60 x 0.32941)		20
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158970

Transfer to Finished Goods

Cost of preceding department (450 x 0.98182)		442
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Direct Material	(450 x 0.272727)	123
Direct Labor	(450 x 0.21961)	99
F.O.H	(450 x 0.32941)	<u>148</u>
		<u>812</u>

### Question No.15

Mini Soap Manufactures Co. started to incurring cost in first department for 1000 soaps. At the end of the week 600 soaps were completed and 300 still in process . 100% of direct material had been incurred. But 75% conversion cost was yet incurred on the incomplete work. Remaining 100 units were abnormally lost (completed 100% material, 50% conversion cost)

Following in the detail of cost incurred:

Direct material Rs.	500
Direct labor	225
Factory Overhead	<u>135</u>
	<u>860</u>

**Required:** Prepare cost of production report

#### Cost Of Production Report Department-I

#### III-Calculation of Equivalent Units Produced:

Direct material:	$600 + (400 \times 100\%) + (100 \times 100\%) = 1000$
Direct labor :	$600 + (300 \times 75\%) + (100 \times 50\%) = 875$
F.O.H :	$600 + (300 \times 75\%) + (100 \times 50\%) = 875$

#### IV- Unit Cost:

Direct material:	$500/1,000$	$= 0.50$
Direct labor :	$225/875$	$= 0.25714$
F.O.H :	$135/875$	$= 0.15428$
		<u>0.91142</u>

#### V- Apportionment Of the Accumulated Cost to Finished Goods:

Cost of units transferred to the next department		
600	x	0.91142
	=	547

#### Closing W.I.P Inventory:

Direct Material	$300 \times 0.50$	$= 150$
Direct Labor	$300 \times 75\% \times 0.25714$	$= 58$
F.O.H	$300 \times 75\% \times 0.15428$	$= 34$
		242

#### Abnormal Loss

Direct Material	$= 100 \times 0.5$	$= 50$
Direct Labor	$= 50 \times 0.25714$	$= 13$
FOH	$= 50 \times 0.15428$	$= 8$

71  
860