



**J.K. SHAH**<sup>®</sup>  
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**SUGGESTED SOLUTION**

**IPCC NOVEMBER 2018 EXAM**

**COSTING**

**Test Code -**

**BRANCH - (MUMBAI-2 (DB) (Date : 01.07.2018)**

**Head Office : Shraddha, 3<sup>rd</sup> Floor, Near Chinai College, Andheri (E), Mumbai – 69.**

**Tel : (022) 26836666**

**MNP Construction Ltd.**

**Dr. Contract Account (1st April 1999 to 31 March, 2000) Cr.**

Particulars	Amount	Particulars	Amount
To Materials issued	Rs. 3,00,000	By Plant returned to stores	Rs. 37,500
To Labour paid Rs. 2,00,000		(Note 1)	
Outstanding <u>20,000</u>	2,20,000	By Materials at site	20,000
To Plant purchased	1,50,000	By Work certified	8,00,000
To Expenses paid 75,000		By Work uncertified	25,000
Less : Prepaid <u>15,000</u>	60,000	By Plant at site	75,000
Notional Profit c/d	2,27,500	(Note 2)	
	<b>9,57,500</b>		<b>9,57,500</b>
To Profit and Loss A/c(Note 4)	66,321.43	By Notional Profit b/d	2,27,500
To Work-in-Progress A/c	1,61,178.57		
	<b>2,27,500.00</b>		<b>2,27,500.00</b>

**MNP Construction Ltd.**

**Contract Account (1st April, 1999 to 31st December, 2000)**

**(For computing estimated profit)**

Particulars	Amount	Particulars	Amount
To Materials used (Rs.3,00,000 + 5,50,000)	8,50,000.00	By Material at site	50,000.00
To Labour (2,00,000 + 2,50,000 + 30,000)	4,80,000.00	By Plant returned to store on 31 <sup>st</sup> March 1999	37,500.00
To Plant purchased	1,50,000.00	By Plant returned to store on 31.12.2000 (Note 3)	60,937.50
To Expenses (75,000 + 1,50,000)	2,25,000.00	By Contractor A/c	17,50,000.00
To Estimated Profit	1,93,437.50		
	<b>18,98,437.50</b>		<b>18,98,437.50</b>

**Working Notes :**

- Value of Plant returned to store on 31st March, 2000  
Historical cost of plant returned Rs.50,000  
Less : Depreciation at 25% for 1 year 12,500  
Value of Plant returned to store on 31st March, 2000 37,500
- Value of Plant at site  
Historical cost Rs.1,00,000  
Less : Depreciation at 25% for 1 year 25,000  
75,000
- Value of Plant returned to store on 31st December, 2000  
Value of Plant on 31st March, 2000 Rs.75,000.00  
Less : Depreciation at 25% for 9 months  
Rs. 75,000 x (25/100) x (9/12) 14,062.50

4. Profit to be credited to P/L A/c on 31st March, 2000 for the contract likely to be completed on 31st December, 2000.

$$\begin{aligned} & \text{Estimated Profit} \times \frac{\text{Cash received}}{\text{Work certified}} \times \frac{\text{Work certified}}{\text{Total contract price}} \\ & = \text{Rs.}1,93,437.50 \times \frac{\text{Rs.}6,00,000}{\text{Rs.}8,00,000} \times \frac{\text{Rs.}8,00,000}{\text{Rs.}17,50,000} \\ & = \text{Rs.}66,321.43 \end{aligned}$$

**Answer-1 :B**

Before computing the comprehensive machine hour rate, it is necessary to find out the total machine hours utilized and total wages paid to the operators.

Computation of total machine hours utilized :

Normal available hours p.m. per operator		208 hours
Less: Unutilised hours due to:		
Absenteeism	18hours	
Leave	20	
Idle time	<u>10</u>	<u>48</u>
Total hours utilized p.m. per operator		<u>160</u>
Total hours utilized for 6 months for 6 operators = 160 x 6 x 6 or		5,760 hrs.

It is given in the question that the machines cannot work without an operator wholly engaged on it. Therefore, hours utilized for 6 operators, i.e., 5,760 hrs. represents the total machine hours. Total wages to 6 operators for 6 months :

Average rate of wages per hour = Rs. 20 ÷ 8 hrs. = Rs. 2.50

Normal hours for which wages are to be paid = 208 - 18 or 190 hrs.

Wages for 6 months for 6 operators @ Rs. 2.50/hr = 190 x 6 x 6 x 2.50 or Rs. 17,100.

**Computation of Comprehensive Machine Hour Rate for the Machine Shop**

Operators' wages (as above)	Rs. 17,100
Production Bonus	2,565
Power consumed	8,050
Supervision and indirect labour	3,300
Lighting and electricity	1,200
Repairs and maintenance (3% of Rs. 8 lakhs) ÷ 2	12,000
Insurance (given for 12 months: reduced to 50% for 6 months)	20,000
Depreciation for 6 months	40,000
Other sundry works expenses for 6 months	6,000
General management expenses for 6 months	<u>27,265</u>
Total overheads for 6 months	<u>1,37,480</u>

Comprehensive Machine Hour Rate = 1,37,480 ÷ 5760 hrs = Rs.23.87 per hour.

**Answer-2 :A**

Consumption of raw material has to be worked out as follows :

Cost of goods sold	Rs. 56,000
Less : Selling expenses	3,400
	<u>52,600</u>
Less : General and administration expenses	2,600

	50,000
Add : Closing Stock of Finished Goods	18,000
	68,000
Less : Opening Stock of Finished Goods	14,000
	54,000
Add : Closing Stock of Work-in-progress	12,000
	66,000
Less : Opening Stock of Work-in-progress	8,000
	58,000
Less : Factory overheads (16,000 x 100/160)	10,000
Prime Cost	48,000
Less : Direct labour	16,000
Raw Material consumed	32,000

### Statement of Cost and Profit

Opening stock of raw materials	8,000
Add : Purchase of raw materials (balancing figure)	32,000
	40,600
Less : Closing stock of raw materials	8,600
Raw Material consumed	32,000
Add ; Direct Labour post	16,000
Prime Cost	48,000
Add : Factory Overheads	10,000
	58,000
Add : Opening Stock of Work-in-progress	8,000
	66,000
Less : Closing Stock of Work-in-progress	12,000
	54,000
Add : General and Administration Expenses	2,600
	56,600
Add : Opening Stock of Finished Goods	14,000
	70,600
Less ; Closing Stock of Finished Goods	18,000
	52,600
Add : Selling Expenses	3,400
	56,000
Sales	75,000
Profit	19,000

#### Answer-2 :B 1

Decrease in stock = 760 units - 320 units = 440 units

Difference in profit = 440 units x Rs. 5 = Rs. 2,200

Stock decreased. Therefore the absorption profit would be lower as overheads are released from stock.

Absorption Costing Profit = Rs. 78,000 - Rs. 2,200 = Rs. 75,800.

**Answer-2 :B 2**

Charge to P & L A/c for fixed cost in Marginal Costing (Manufacturing) Rs.1,80,000

Charge to P & L A/c for fixed cost in Absorption Costing (Rs. 1,80,000 ÷ 1,00,000) x 80,000 1,44,000  
36,000

If marginal costing is used, fixed cost will be charged to profit and loss account for the period and profit will be relatively lower by Rs. 36,000. Charge for selling and adm. cost will be the same under both the methods.

**Answer-3 :A**

Working Note: Let x be the cost of material and y be the normal rate of wage per hour.

**Factory Cost of workman Vishnu:**

Material cost Rs. x

Wages 60 y

$$\begin{aligned} \text{Bonus under Rowan System} &= \frac{\text{Time saved}}{\text{Time allowed}} \times \text{Hrs. worked} \times \text{Rate per hr.} \\ &= (40 + 100) \times 60 y = 24 y \end{aligned}$$

Overhead, i.e., 60 x 10 = 600

$$\text{Factory cost} = x + 60 y + 24 y + \text{Rs. } 600 = \text{Rs. } 7280 \text{ or } x + 84 y = \text{Rs. } 6680 \quad \dots(1)$$

**Factory cost of workman Shiva:**

Material Rs. x

Wages 80 y

$$\begin{aligned} \text{Bonus under Halsey Premium Plan} &= \text{Hrs. Saved} \times 50 + 100 \times \text{Rate per hr.} \\ &= 20 \times \frac{1}{2} \times y = 10 y \end{aligned}$$

Overhead (80 x 10) = 800

$$\text{Factory cost} = x + 80y + 10y + \text{Rs. } 800 = 7,600 \text{ or } x + 90y = \text{Rs. } 6,800 \quad \dots(2)$$

From (i) and (ii) value of y = 20

∴ Rate per hour Rs, 20

Bonus paid to Vishnu = 24 x Rs. 20 = Rs. 480

Bonus paid to Shiva = 10 x Rs. 20 = Rs. 200

(a) Normal Wages = Rs. 20 per hour as per Working Note above.

(b) The cost of material:

We know that x + 90y = Rs. 6,800

or x + (90 x 20) = Rs. 6,800 or x = Rs. 5,000

(c) Comparative statement of the factory cost of the product made by the two workmen

	Vishnu	Shiva
Material Cost	Rs. 5,000	Rs. 5,000
Direct Wages 60 x 20	1,200	-
80 x 20	-	1,600
Bonus (See Working Note above)	480	200
Factory Overhead	600	800
Factory Cost	7,280	7,600

**Answer-3 :B1**

**Production:**

Sales	53,000 units
Finishing goods inventory	<u>6,000 units</u>
	<u>59,000 units</u>

Requirements of Chemical L:	Kilos
Production of 59,000 needs (59,000 x 4 kilos)	2,36,000
Decrease in inventory	<u>50,000</u>
Total kilos needed	<u>1,86,000</u>

Note : Each unit of N require 4 kilos of chemical L,

**Answer-3 B :2**

Actual expenditure on overheads	Rs. 1,08,000
Fixed overheads under-budget	<u>8,000</u>
Budgeted expenditure on overheads	1,16,000
Less: Budgeted variable overhead 22,000 x RS. 3	<u>66,000</u>
Budgeted fixed overhead expenditure	<u>50,000</u>

**Answer : 4 A 1**

	Units	Rs.
High activity	3,000	12,900
Low activity	<u>2,000</u>	<u>11,100</u>
	<u>1,000</u>	<u>1,800</u>

Variable cost per unit = Rs. 1,800 ÷ 1,000 = Rs. 1.8

Fixed cost, substituting in high activity :

= Rs. 12,900 - 3,000 x 1.8 = Rs. 7,500

**Budget Cost Allowance for 4,000 units**

Variable cost = 4,000 x Rs.1.8 = 7,200

Fixed cost = 7,500

14,700

**Answer-4 A 2 :**

		Received in September	
June sales	Rs. 35,000 x 0.12	=	Rs. 4,200
July sales	Rs. 40,000 x 0.25	=	10,000
August sales	Rs. 60,000 x 0.60 x 0.98*	-	<u>35,280</u>
Total receipts in September			<u>49,480</u>

\* This reduction is for 2% settlement discount

**Answer-4 B**

**Dr.** **Integral Ledger** **Cr.**  
**Store Control A/c.**

	Rs.		Rs.
To Balance b/d	1,00,000	By Work in progress A/c	2,00,000
To Creditors A/c	1,60,000	By Inventory Adj. A/c	8,000
		By Balance c/d	52,000
	<b>2,60,000</b>		<b>2,60,000</b>
<b>To Balance b/d</b>	<b>52,000</b>		

Dr.		Work in Progress A/c/		Cr.	
	Rs.		Rs.		Rs.
To stores Control A/c	2,00,000	By Finished Stock A/c		3,82,000	
To Wages Control A/c	1,86,000	By Balance c/d		1,90,000	
To Production Overhead A/c	1,86,000				
	<b>5,72,000</b>			<b>5,72,000</b>	
<b>To Balance b/d</b>	<b>1,90,000</b>				

Dr.		Finished Goods A/c		Cr.	
	Rs.		Rs.		Rs.
To Work in progress A/c	3,82,000	By Cost of Sales A/c		3,82,000	
	<b>3,82,000</b>			<b>3,82,000</b>	

Dr.		Wages Control A/c		Cr.	
	Rs.		Rs.		Rs.
To Bank	1,90,000	By W.I.P.A/c.		1,86,000	
		By Balance c/d		4,000	
	<b>1,90,000</b>			<b>1,90,000</b>	
<b>To Balance b/d</b>	<b>4,000</b>				

Dr.		Production Overhead A/c.		Cr.	
	Rs.		Rs.		Rs.
To Bank	1,75,000	By work in progress A/c		1,86,000	
To Balance c/d	11,000				
	<b>1,86,000</b>			<b>1,86,000</b>	

Dr.		Selling and Distribution Expenses A/c.		Cr.	
	Rs.		Rs.		Rs.
To Bank	20,000	By Cost of Sales A/c		20,000	
	<b>20,000</b>			<b>20,000</b>	

Dr.		Cost of Sales A/c.		Cr.	
	Rs.		Rs.		Rs.
To Finished Stock A/c.	3,82,000	By Balance c/d		4,02,000	
To Selling & Distribution Overhead A/c					
To Balance b/d	20,000				
	<b>4,02,000</b>			<b>4,02,000</b>	

Dr.		Sales A/c.		Cr.	
	Rs.		Rs.		Rs.
To Balance c/d	5,72,000	By Debtors A/c		5,72,000	
	<b>5,72,000</b>			<b>5,72,000</b>	
		By Balance b/d		5,72,000	

Dr.		Share Capital A/c.		Cr.	
	Rs.		Rs.		Rs.
		By Balance b/d		2,00,000	
				<b>2,00,000</b>	

Dr.		Reserve A/c.		Cr.	
	Rs.		Rs.		Rs.
		By Balance b/d		50,000	
				<b>50,000</b>	

Dr.		Plant and Machinery A/c.		Cr.	
	Rs.		Rs.		Rs.
To Balance b/d	2,50,000				
	<b>2,50,000</b>				

Dr.		Sundry Debtors A/c.		Cr.	
	Rs.		Rs.		Rs.
To Balance b/d	40,000	By Bank A/c		6,00,000	
To Sales	5,72,000	By Balance c/d		12,000	
	<b>6,12,000</b>			<b>6,12,000</b>	

Dr.		Sundry Creditors A/c.		Cr.	
	Rs.		Rs.		Rs.
To Bank	1,70,000	By Balance b/d		60,000	
To Balance c/d	50,000	By Stores Control A/c		1,60,000	
	<b>2,20,000</b>			<b>2,20,000</b>	
		By Balance b/d		<b>50,000</b>	

Dr.		Bank Account		Cr.	
	Rs.		Rs.		Rs.
To Sundry Debtor's A/c	6,00,000	By Balance b/d		80,000	
To Balance c/d	35,000	By Wages Control A/c		1,90,000	
		By Production Control A/c		1,75,000	
		By Selling & Dist.Exp. Control A/c		20,000	
		By Sundry Creditor's A/c		1,70,000	
	<b>6,35,000</b>			<b>6,35,000</b>	
		By Balance b/d		<b>35,000</b>	

Dr.		Inventory Adjustment A/c		Cr.	
	Rs.		Rs.		Rs.
To Store Ledger Control A/c	8,000	By Balance c/d		8,000	
	<b>8,000</b>			<b>8,000</b>	
To Balance b/d	<b>8,000</b>				



**Dr. Trial Balance as on 31<sup>st</sup> December, 2002 Cr.**

	<b>Dr. Rs.</b>	<b>Cr. Rs.</b>
1. Share Capital		2,00,000
2. Reserve Account		50,000
3. Sundry Debtors	12,000	-
4. Sundry Creditors		50,000
5. Plant and Machinery Account	2,50,000	-
6. Bank Account		35,000
7. Stores Ledger Control Account	52,000	-
8. Work in progress Account	1,90,000	
9. Wages Control Account	4,000	
10. Production Overhead Account		11,000
11. Inventory Adjustment Account	8,000	
12. Cost of Sales Account	4,02,000	
13. Sales Account		5,72,000
	<b>9,18,000</b>	<b>9,18,000</b>

**Dr. Profit and Loss Account for the year ended 31.12.2002 Cr.**

	<b>Rs.</b>		<b>Rs.</b>
To Cost of Sales A/c	4,02,000	By Sales A/c	5,72,000
To Inventory Adjustment A/c	8,000	By Production Overhead A/c	11,000
To Wages Control A/c	4,000		
To Net Profit	1,69,000		
	<b>5,83,000</b>		<b>5,83,000</b>

**Dr. Balance Sheet as at 31<sup>st</sup> December, 2002 Cr.**

<b>Liabilities</b>	<b>Rs.</b>	<b>Assets</b>	<b>Rs.</b>
Share Capital	2,00,000	Plant and Machinery	2,50,000
Reserve	50,000	Stock of :	
Profit	<u>1,69,000</u>	Finished goods	52,000
Sundry Creditors	50,000	W.I.P.	<u>1,90,000</u>
Bank Overdraft	35,000	Sundry Debtors	12,000
	<b>5,04,000</b>		<b>5,04,000</b>

**Answer-5 A:**

**(i) Computation of overhead absorption rate**

**(as per the current policy of the company)**

<b>Department</b>	<b>Budgeted Factory Overhead</b>	<b>Budgeted Direct Wages</b>
Machinery	Rs. 3,60,000	Rs. 80,000
Assembly	1,40,000	3,50,000
Packing	1,25,000	70,000

	6,25,000	5,00,000
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$$\begin{aligned} \text{Overhead absorption rate} &= \frac{\text{Budgeted Factory Overheads}}{\text{Budgeted Direct Wages}} \times 100 \\ &= \frac{\text{Rs. } 6,25,000}{5,00,000} \times 100 = 125\% \text{ of Direct Wages} \end{aligned}$$

Selling Price of the Job No. CW—7083	
Direct Material (Rs. 1200 + Rs. 600 + Rs. 300)	Rs.2,100.00
Direct Wages (Rs. 240 + Rs. 360 + Rs. 60)	660.00
Factory Overheads (125% or Rs. 660)	<u>825.00</u>
Total Factory Cost	3,585.00
Add: Mark-up (30% of Rs. 3585)	<u>1,075.50</u>
Selling Price	<u>4,660.50</u>

**(ii) Methods available for absorbing factory overheads and their overhead recovery rates in different departments**

1. In machining department, machine usage is predominant. The overhead recovery rate based on machine hours should be calculated for this department as follows :

$$\begin{aligned} \text{Machine Hour Rate} &= \frac{\text{Budgeted Factory Overheads}}{\text{Budgeted Machine Hours}} \\ &= \text{Rs. } 3,60,000 \div 80,000 = \text{Rs. } 4.50 \text{ per hour} \end{aligned}$$

2. In Assembly department, labour hour is predominant. The overhead recovery rate based on labour hours should be calculated for this department as follows :

$$\begin{aligned} \text{Machine Labour Hour Rate} &= \frac{\text{Budgeted Factory Overheads}}{\text{Budgeted Direct Labour Hours}} \\ &= \text{Rs. } 1,40,000 \div 1,00,000 = \text{Rs. } 1.40 \text{ per hour} \end{aligned}$$

3. Packing Department— Labour is predominant factor in this department. Hence Direct Labour Hour method should be used in this department as follows :

$$\begin{aligned} \text{Machine Labour Hour Rate} &= \frac{\text{Budgeted Factory Overheads}}{\text{Budgeted Labour Hours}} \\ &= \text{Rs. } 1,25,000 \div 50,000 = \text{Rs. } 2.50 \text{ per hour} \end{aligned}$$

Selling Price of the Job No. CW 7083	
Direct Material	Rs. 2,100.00
Direct Wages	660.00
Factory Overheads(*Refertooverhead summary statement below)	<u>1078.00</u>
Factory Cost	3,838.00
Add : Mark-up (30%of Rs.3,838)	<u>1,151.40</u>
Selling Price	4,989,40

**\* Overhead Summary Statement**

Deptt.	Basis	Hours	Rate/Hour	Overhead Rs.
Machining	Machine hour	180	4.50	810.00
Assembly	Direct labour hour	120	1.40	168.00
Packing	Direct labour hour	40	2.50	100.00
				1,078.00

(iv) **Departmentwise statement of total under or over recovery of overheads :**

(a) Under Current Policy

	Department			
	Machining	Assembly	Packing	Total
	Rs.	Rs.	Rs.	Rs.
Direct Wages (Actual)	96,000	2,70,000	90,000	
Overheads recovered @ 125% of Direct Wages	1,20,000	3,37,500	1,12,500	5,70,000
Actual Overhead	3,90,000	84,000	1,35,000	6,09,000
(Under )/Over-recovery of overheads	(2,70,000)	2,53,500	(22,500)	(39,000)

(b) As per method suggested

	Department			
	Machining	Assembly	Packing	Total
Basis	96,000 Machine hrs.	90,000 labour hrs.	60,000 labour hrs	
Rate/hour (Rs.)	4.50	1.40	2.50	
Overhead Recovered (A)	4,32,000	1,26,000	1,50,000	7,08,000
Actual Overhead (B)	3,90,000	84,000	1,35,000	8,09,000
Under/Over recovery (A-B)	42,000	42,000	15,000	99,000

**Answer-5 :B**

Dr.	Raw Material Control Account		Cr.
	Rs.		Rs.
To Balance b/d	48,836	By WIP Control A/c	17,000
To Nominal Ledger Control A/c	22,422	By Nominal Ledger Control A/c	1,000
		By Nominal Ledger Control A/c	1,300
		By Balance c/d	51,958
	<b>71,258</b>		<b>71,258</b>
<b>To Balance b/d</b>	<b>51,958</b>		

Dr.	Work in Progress Control A/c		Cr.
	Rs.		Rs.
To Balance b/d	14,745	By Finished Stock Control A/c	36,834
To Nominal Ledger Control A/c	11,786	By Nominal Ledger Control A/c	1,800
To Raw Material Control A/c	17,000	By Balance c/d	23,267
To Nominal Ledger Control A/c	18,370		
	<b>61,901</b>		<b>61,901</b>
<b>To Balance b/d</b>	<b>23,267</b>		

Dr.	Finished Stock Account		Cr.
	Rs.		Rs.

To Balance b/d	21,980	By Nominal Ledger Control A/c	42,000
To WIP Control A/c	36,834	By Balance c/d	19,814
To Nominal Ledger Control A/c	3,000		
	<b>61,814</b>		<b>61,814</b>
<b>To Balance b/d</b>	<b>19,814</b>		

Dr.		Nominal Ledger Control Account		Cr.	
	Rs.			Rs.	
To Raw Material Control A/c	1,000	By Balance b/d		85,561	
To Raw Material Control A/c	1,300	By Raw Material Control A/c		22,422	
To Finished Stock Control A/c	42,000	By WIP Control A/c		11,786	
To WIP Control A/c	1,800	By WIP Control A/c		18,370	
To Balance c/d	95,039	By Finished Stock Control A/c		3,000	
	<b>1,41,139</b>			<b>1,41,139</b>	
		<b>By Balance b/d</b>		<b>95,039</b>	

Answer-6 : A

Dr. Contract Account for the year ended 31st March, 1994 Cr.

	Rs.		Rs.
To Material issued	7,500	By Material returned from site	250
“ Direct Wage Paid	4,000	“ Material at site	200
“ Wages Outstanding	270	“ Work-in-Progress :	
“ Wage related Cost	500	Work Certified	20,000
“ Direct Expenses	902	Work not Certified	149
“ Plant Hire Charges	1,750		
“ Planning and Estimating Cost	1,000		
“ Site Office Cost	678		
” Head Office Expenses apportioned	375		
“ Depreciation of plant (Refer to Note 1)	300		
“ Notional Profit	3,324		
	<b>20,599</b>		<b>20,599</b>
“ Profit & Loss A/c (Refer to Note 2)	1,662	By Notional Profit	3,324
To Work in Progress (Profit in reserve)	1,662		
	<b>3,324</b>		<b>3,324</b>
To Work in progress b/d		By Work in progress	1,662
Work certified	20,000	(Profit in reserve)	
Work uncertified	199		

**Working Note :**

Depreciation:

Original Cost of Plant	Rs. 20,06,000
Less : Residual Value	<u>5,00,000</u>
Cost of Plant Used	<u>15,00,000</u>
Life of Plant	5 years

Annual Depreciation = (Rs. 15,00,000 ÷ 5 = Rs. 3,00,000)

(ii) This contract is between 50% to 90% complete. Therefore, two-thirds of the notional profit reduced by the proportion of cash received to work certified should be transferred to the profit and loss account as shown below :

$$= \frac{2}{3} \times \text{Notional Profit} \times \frac{\text{Cash Received}}{\text{Work certified}}$$

$$= \frac{1}{2} \times \text{Rs.}3.324 \times \frac{\text{Rs.}15,000}{\text{Rs.}20,000} = \text{Rs.}1,662$$

**(iii) Balance Sheet (extract) as on 31st March, 1994**

Liabilities	Rs. '000	Assets	Rs. '000
Profit and Loss A/c	1,662	Plant at site (2000-300)	1,700
Wages Accrued	270	Material at site	200
		Work-in-progress * {Refer to Note}	3,487

**Note :**

* Work-in-progress A/c (Refer to Contract A/c)	20,149
Less : Profit in Reserve	<u>1,662</u>
	18,487
Less : Cash received	<u>15,000</u>
Net W.I.P. (to be shown in B/S)	<u>3,487</u>

**Answer-6 :B**

(i) Actual direct labour cost per hour based on the given data

$$= \text{Rs. } 48,00,000 \div 4,80,000 = \text{Rs. } 10 \text{ per hour}$$

$$\text{Cost of potential hours lost} = 12,000 \text{ hrs.} \times \text{Rs. } 10 = \text{Rs. } 1,20,000$$

(ii) It is given that 12,000 manhours could not be availed of because of delayed replacement,

∴ Direct labour cost if there was no labour turnover

$$= \text{Rs. } 48,00,000 + \text{Rs. } 1,20,000 = \text{Rs. } 49,20,000$$

(iii) Potential loss of sales due to:

Hours lost for delayed replacement 12,000

Unproductive hours: 50% of 9,000 hrs. 4,500

Total hours lost 16,500

(iv) Actual hours of labour spent 4,80,000

Less: Unproductive labour hours 4,500

4,75,500

Sales related to productive hours = Rs. 6,00,00,000

∴ Potential loss of sales due to 16,500 hours lost

$$= (6,00,00,000 \div 4,75,500 \text{ hrs.}) \times 16,500 \text{ hrs.} = \text{Rs. } 20,82,019$$

Total sales if there had been no labour turnover

$$= \text{Rs. } 6,00,00,000 + \text{Rs. } 20,82,019 = \text{Rs. } 6,20,82,019$$

Other variable expenses (i.e., except material) are Rs. 2,10,00,000 for a sales of Rs.6,00,00,000. Other variable expenses for sales of Rs. 6,20,82,019:

$$= (2,10,00,000 \div 6,00,00,000) \times \text{Rs. } 6,20,82,019 = \text{Rs.}2,17,28,707.$$

**Comparative statement showing the loss of profit due to labour turnover**

	Actual	If labour turnover was Nil
Sales (A)	Rs.6,00,00,000	Rs.6,20,82,019
Direct labour	48,00,000	49,20,000
Other variable costs	2,10,00,000	2,17,28,707
Fixed cost	80,00,000	80,00,000
Separation replacement cost	1,00,000	-
Total cost (B)	3,39,00,000	3,46,48,707
Profit (A) – (B)	2,61,00,000	2,74,33,312

Loss of profit due to labour turnover: Rs. 2,74,33,312 - 2,61,00,000 = Rs. 13,33,312.