

Note: All questions are compulsory.

Question 1 (6 Marks)

$$(a) \text{ Labour Turnover by Replacement Method} = \frac{\text{No.of workers replaced during the quarter}}{\text{Average no.workers onroll during the quarter}}$$

$$\text{Or,} \quad 0.03 = \frac{\text{No.of workers replaced during the quarter}}{(990+1,010 \div 2)}$$

Or, No. of worker replaced during the quarter = $0.03 \times 1,000 = 30$ workers **(2 marks)**

(i) **Labour Turnover by Separation Method (2 marks)**

$$= \frac{\text{No.of workers replaced during the quarter}}{\text{Average no.workers onroll during the quarter}} \times 100$$

$$= \frac{\text{Worker at beginning} + \text{Fresh recruitment} + \text{Replacements} - \text{workers at closing}}{\text{Average no.workers onroll during the quarter}} \times 100$$

$$= \frac{990+4030-1,010}{(990+1,010) \div 2} \times 100 = \frac{50 \text{ workers}}{1,000 \text{ workers}} \times 100 = 5\%$$

(ii) **Labour Turnover by Flux Method (2 marks)**

$$\frac{\text{No.of workers (Separated+ replaced+ Fresh Recuriment) during the quarter}}{\text{Average no.workers onroll during the quarter}} \times 100$$

$$= \frac{50+30+40}{(990+1,010) \div 2} \times 100 = \frac{120 \text{ workers}}{1,000 \text{ workers}} \times 100 = 12\%$$

Question 2 (4 marks) (1 mark for each point)

These contracts provide for the payment by the contractee of the actual cost of construction plus a stipulated profit, mutually decided between the two parties.

The main features of these contracts are as follows:

1. The practice of cost-plus contracts is adopted in the case of those contracts where the probable cost of the contracts cannot be ascertained in advance with a reasonable accuracy.
2. These contracts are preferred when the cost of material and labour is not steady and the contract completion may take number of years.
3. The different costs to be included in the execution of the contract are mutually agreed, so that no dispute may arise in future in this respect. Under such type of contracts, contractee is allowed to check or scrutinize the concerned books, documents and accounts.

4. Such a contract offers a fair price to the contractee and also a reasonable profit to the contractor. The contract price here is ascertained by adding a fixed and mutually pre-decided component of profit to the total cost of the work.

Question 3 (8 marks)

Cash Budget for the month of October 2016 to December 2016 (Amount in lakhs)

Particulars	October(Rs.)	November (Rs.)	December(Rs.)
(i) Opening cash balance (1/2 mark)	10.00	14.25	21.25
(ii) Cash Sale (1/2 mark)	4.00 (10% of 40)	4.50 (10% of 45)	4.60 (10% of 46)
(iii) Cash collection for credit sale: (2 marks)			
-For August sale	15.75 (35x90% x50%)	-	-
-For September sale	18.00 (40x90% x 50%)	18.00 (40x 90% x 50%)	-
-For October sale	-	18.00 (40x90% x 50%)	18.00 (40x90% x 50%)
-For November sale	-	-	20.25 (40x90% x 50%)
Total cash collection from credit sales (iii)	33.75	36.00	38.25
Total Cash inflow	47.75	54.75	64.10
(iv) Payment to creditors: (2marks)			
-For September purchase	29.00 {{(80% OF Rs.40)-3}}	-	-
-For October purchase	-	29.00 {{(80% OF Rs.40)-3}}	-
-For November purchase	-	-	33.00 {{(80% OF Rs.45)-3}}
Total of payment made to creditors (iv)	29	29	33
(v) Payment of wages & salaries (1/2 mark)	3.00	3.00	3.00
(vi) Interim dividend (1/2 mark)	-	-	2.00
(vii) Installment for machinery (1/2 mark)	0.50	0.50	0.50
(viii) Administrative expenses (1/2 mark)	1.00	1.00	1.00
Total Cash outflow(B)	33.50	33.50	39.50
Closing cash balance (A-B) (1 mark)	14.25	21.25	24.60

Question 4 (8 marks)

(a) Working Notes :

- Total Kilometers to be run during the year 2016-17
 = 50km x 2 sides x 3trips x 25 days x 12 month x 6 buses = 5,40,000 Kilometers
 = 5,40,000km. x 48 passengers x 75% = 1,94,40,000 Passenger –km.

Operating Cost Sheet for the year 2016-17

Particulars	Total Cost(Rs.)
A. Fixed Charges (1/2 mark for each cost)	
Garage rent (Rs. 6,000 x 12 months)	72,000

Salary of drivers (Rs.4,000 x 6 drivers x 12 months)	2,88,000
Wages of Conductors (Rs. 1,600 x 6 conductor x 12 months)	1,15,200
Wages of Clearance (Rs.1,000 x 6 clearance x 12 months)	72,000
Manager's salary (Rs. 10,000 x 12 months)	1,20,000
Road Tax ,Permit fee etc. (Rs.6,000 x 4 quarters)	24,000
Office expenses (Rs. 2,500 x 12months)	30,000
Depreciation (Rs.7,50,000 x 6 buses x 20 %)	9,00,000
Insurance (Rs. 7,50,000 x 6 buses x 4%)	1,80,000
Total (A)	18,01,200
B. Variable Charges: (1/2 mark for each cost)	
Repairs and Maintenance (Rs. 24,000 x 6 buses)	1,44,000
Diesel {(5,40,000km. ÷ 6 km.)x Rs.66}	59,40,000
Engine oils &lubricants {(Rs. 2000 ÷ 1000 km.) x 5,40,000km}	10,80,000
Total (B)	71,64,000
Total Cost (A+B)	89,65,200
Add 33^{1/3} %Profit on takings or 50% on cost (1/2 mark)	44,82,600
C. Total Takings (Total bus fare collection)	1,34,47,800
D. Total Passenger-km.(Working Note 2) (1 ½ mark)	1,94,40,000
E. Bus fare to be charged from each passenger per km. (C ÷ D)	0.6918

Question 5 (8 marks)

Apportionment of Joint Costs (2 marks)

Particulars	A(Rs.)	B(Rs.)
Selling Price	16,000	8,000
Less: Estimated profit	4,000	1,600
	(25% of Rs. 16,000)	(25% of Rs. 8,000)
Cost of sales	12,000	6,400
Less :Selling & Distribution exp . (Refer to working note)	267	133
	(Rs.400 x2/3)	(Rs.400 x 1/3)
Less :Subsequent cost	5,000	3,000
Share of Joint cost	6,733	3,267

So, Joint cost of manufacture is to be distributed to A & B in the ratio of 6733: 3267

Statement showing Cost of Production of A and B

Elovements of cost	Joint Cost (3 marks)		Subsequent Cost (1 mark)		Total Cost(1 mark)	
	A	B	A	B	A	B
Material	3,367	1,633	3,000	1,500	6,367	3,133
Labour	2,020	980	1,400	1,000	3,420	1,980
Overheads	1,346	654	600	500	1,946	1,154
	Cost of Production				11,733	6,267

Working Note:

Calculation of Selling and Distribution Expenses(1 mark)

Particulars	(Rs.)
Total Sales Revenue (Rs. 16,000+Rs.8,000)	24,000
Less : Estimated profit(Rs. 4,000+Rs. 1,600)	(5,600)
Cost of sales	18,400
Less :Cost of production:	
-Joint Costs	(10,000)
-Subsequent costs (Rs.5,000+Rs.3,000)	(8,000)
Selling and Distribution expenses (Balancing figure)	400

Question 6 (8 marks)) (1 mark for each working)

Statement of Equivalent Units (Process- I)

Input (Units)	Particulars	Output (Units)	Equivalent Production			
			Materials		Labour and Overheads	
			Units	(%)	Units	(%)
40,000	Introduced and completed	36,000	36,000	100	36,000	100
	Normal Loss	2,000	-	-	-	-
	Closing stock	2,000	2,000	100	1,000	50
40,000		40,000	38,000		37,000	

Computation of cost per Equivalent Unit for each element of cost (Process- I)

Element of Cost	Total Cost(Rs.)	Equivalent units	Cost per Equivalent units (Rs.)
Direct Material	6,00,000	38,000	15.7895
Labour	1,20,000	37,000	3.2432
Factory Overheads	2,40,000	37,000	6.4865

Statement of Apportionment of Cost

Items	Elements	Equivalent units	Cost per units (Rs.)	Cost (Rs.)	Total(Rs.)
Units Introduced and completed	Material	36,000	15.7895	5,68,422.00	
	Labour	36,000	3.2432	1,16,755.20	
	Overheads	36,000	6.4865	2,33,514.00	9,18,691.20
Closing Stock	Material	2,000	15.7895	31,579.00	
	Labour	1,000	3.2432	3,243.20	
	Overheads	1,000	6.4865	6,486.50	41,308.70

Process- I Account

Particulars	Units	Amount (Rs.)	Particulars	Units	Amount (Rs.)
To Material	40,000	6,00,000	By Normal loss	2,000	-
To Labour		1,20,000	By Process II	36,000	9,18,691
To Overheads		2,40,000	By Closing stock	2,000	41,309
	40,000	9,60,000		40,000	9,60,000

Statement of Equivalent Units (Process –II)

Input (Units)	Particulars	Output (Units)	Equivalent Production			
			Materials		Labour and Overheads	
			Units	(%)	Units	(%)
36,000	Units transferred from Process –I					
	Normal Loss	1,500	-	-	-	-
	Completed	32,000	32,000	100	32,000	100

	Closing Stock (balancing figure)	2,500	2,500	100	1,250	50
36,000		36,000	34,500		33,250	

Computation of cost per Equivalent Unit for each element of cost (Process- I)

Element of Cost	Total Cost(Rs.)	Equivalent units	Cost per Equivalent units (Rs.)
Cost of 36,000 units transferred from Process –I	9,18,691	34,500	26.6287
Labour	1,60,000	33,250	4,8120
Factory Overheads	2,00,000	33,250	6.0150

Statement of Apportionment of Cost

Items	Elements	Equivalent units	Cost per units (Rs.)	Cost (Rs.)	Total(Rs.)
Units Introduced and completed	Material	32,000	26.6287	8,52,118.40	
	Labour	32,000	4,8120	1,53,984.00	
	Overheads	32,000	6.0150	1,92,480.00	11,98,582.40
Closing Stock	Material	2,500	26.6287	66,571.00	
	Labour	1,250	4,8120	6,015.00	
	Overheads	1,250	6.0150	7,518.75	80,105.50

Process- II Account

Particulars	Units	Amount (Rs.)	Particulars	Units	Amount (Rs.)
To Units introduced	36,000	9,18,691	By Normal loss	1,500	-
To Labour		1,60,000	By Process II	32,000	11,98,582
To Overheads		2,00,000	By Closing stock	2,500	80,109
	36,000	12,78,691		36,000	12,78,691

*Difference arose due to rounding-off has been adjusted.

Question 7 (8 marks) (1/2 mark for each entry)

**Store Ledger Account
For the three months ending 30th June, 2014
(Weighted Average Method)**

Date	Receipt				Issues				Balance		Rate for further Issues (Rs.)
	GRN No.PR No.	QTY. (Kg.)	Rates (Rs.)	Amount	MR No.	Qty. (Kg.)	Rates (RS.)	Amount (Rs.)	Qty (kg)	Amount	
2014											
April 1									1,500	7,200	4.80
April 4						1,100	4.80	5,280	400	1,920	4.80
April 10		1,600	5.00	8,000					2,000	9,920	$\frac{9,920}{2,000}=4.96$
April 20		2,400	4.90	11,760					4,400	21,680	$\frac{21,680}{4,400}=4.93$
April 24						1,600	4.93	7,888	2,800	13,792	$\frac{13,792}{2,800}=4.93$
May 5		1,000	5.10	5,100					3,800	18,892	$\frac{18,892}{3,800}=4.97$

May10						1,500	4.97	7,455	2,300	11,437	$\frac{11,437}{2,300}=4.97$
May 17		1,100	5.20	5,720					3,400	17,157	$\frac{17,157}{3,400}=5.05$
May 25		800	5.25	4,200					4,200	21,357	$\frac{21,357}{2,500}=5.09$
May 26						1,700	5.09	8,653	2,500	12,704	$\frac{12,704}{32,500}=5.09$
May 31					Shortage	80			2,420	12,704	$\frac{12,704}{2,420}=5.25$
June 11		900	5.40	4,860					3,320	17,564	$\frac{17,564}{3,320}=5.229$
June 15						1,500	5.29	7,935	1,820	9,629	$\frac{9,629}{1,820}=5.29$
June 21						1,200	5.29	6,348	620	3,281	$\frac{3,281}{620}=5.29$
June 24		1,400	5.50	7,700					2,020	10,981	$\frac{10,981}{2,020}=5.44$
June 30					Shortage	60			1,960	10,981	$\frac{10,981}{1,980}=5.60$
