

15. CONTRACT COSTING

ASSIGNMENT SOLUTIONS

PROBLEM NO: 1

Dr.		Contract A/c		Cr.	
Particulars	Amount (Rs.)	Particulars	Amount (Rs.)		
To Material purchased	6,00,000	By Work-in-progress:			
" Stores issued	1,00,000	" Value of work certified	13,00,000		
" Wages	2,25,000	" Cost of work uncertified	60,000		
" Plant	75,000	" Material unused	40,000		
" Chargeable expenses	75,000	" Plant less depreciation	30,000		
" Indirect expenses	25,000				
" Costing P&L A/c (Notional profit) (bal. figure)	3,30,000				
	14,30,000				14,30,000

An alternative method of presentation can be to deduct the balance of profit to be carried down (Rs. 1,54,000 in the above case) from the work certified before it is entered in the contract account. It will be Rs. 11,46,000 in the illustration given above. Of course, the reserve to be so deducted from the work certified will have to be first ascertained by considering the value of the work certified.

PROBLEM NO: 2

i) Works cost of the contract:

Dr.		Contract A/c		Cr.	
Particulars	Amount (Rs.)	Particulars	Amount (Rs.)		
To Materials	8,52,000	By Closing Stock	38,000		
To Wages	10,48,000	By cost incurred (Works cost)	22,60,000		
To Indirect Expenses	92,000				
To Depreciation (WN-1)	1,08,000				
To Supervisor salary (10,000 x 12 x 2/3)	80,000				
	22,98,000				22,98,000

ii) Value of work uncertified

Percentage (%) of total work done = 66.67% (2/3)

Less: work certified = 50%

Percentage (%) of work uncertified = 16.67%

Cost of work uncertified = 5,65,085

iii) Notional Profit

Notional Profit = Work Certified + Work Uncertified - Cost Incurred to Date

= (45,00,000 x 50%) + 5,65,085 - 22,60,000 = Rs.5,55,085

PROBLEM NO: 3

Dr.		Contract Account		Cr.	
Particulars	(Rs.)	Particulars	(Rs.)		
To Material issued	2,51,000	By Machine (Working note 1)	2,46,000		
" Wages	5,65,600	" Material (in hand)	35,400		
" Foreman's salary	81,300	" Works cost (balancing figure)	10,49,000		
" Machine	2,60,000				

" Supervisor's salary (8,000 × 9)/2	36,000		
"Administrative charges	1,36,500		
	13,30,400		13,30,400
" Works cost	10,49,000	" Value of work certified	10,00,000
" Costing P&L A/c (Notional profit)	2,13,250	" Cost of work uncertified (WN 2)	2,62,250
	12,62,250		12,62,250

Working Notes:

1. Written down value of Machine: $\frac{2,60,000 - 15,000}{7\text{years}} \times \frac{146\text{days}}{365\text{days}} = 14,000$

Hence the value of machine after the period of 146 days = 2,60,000 - 14,000 = 2,46,000

2. The cost of 2/3rd of the contract is 10,49,000

Cost of 100% of the contract is $\frac{\text{Rs. } 10,49,000}{2} \times 3 = 15,73,500$

Cost of 50% of the contract which has been certified by the architect is 7,86,750.

Also the cost of 1/3rd of the contract, which has been completed but not certified by the architect is 2,62,250.

PROBLEM NO: 4

Dr. Contract Account in the Books of Mr. Bhagwandas
2005

Cr.

Particulars	Amount	Particulars	Amount
To Material	1,80,000		
To wages	1,70,000	By WIP:	
To Carriage	6,000	Work Certified	3,75,000
To Cartage	1,000	Work Uncertified	Nil
To Sundry Exp.	3,000		
To Costing P&L A/c	15,000		
	3,75,000		3,75,000

CONTRACTEE A/C

Particulars	Amount	Particulars	Amount
		By Bank	3,00,000
		(3,75,000 × 80%)	
To balance c/d	3,00,000		
	3,00,000		3,00,000

2006

CONTRACT A/C

Particulars	Amount	Particulars	Amount
To Opening WIP:			
Work Certified	3,75,000		
Work Uncertified	Nil	By WIP:	
To Material	2,20,000	Work Certified	11,25,000
To wages	2,30,000	Work Uncertified	20,000
To Carriage	23,000		

To Cartage	2,000		
To Sundry Exp.	4,000		
To Costing P&L A/c	2,91,000		
	11,45,000		11,45,000

CONTRACTEE A/C

Particulars	Amount	Particulars	Amount
		To balance b/d	3,00,000
		By Bank	6,00,000
		(11,25,000-3,75,000)x80%	
To balance c/d	9,00,000		
	9,00,000		9,00,000

2007

CONTRACT A/C

Particulars	Amount	Particulars	Amount
To Opening WIP:			
Work Certified	11,25,000		
Work Uncertified	20,000	By Contractee	15,00,000
To Material	1,26,000		
To wages	1,70,000		
To Cartage	6,000		
To Sundry Exp.	3,000		
To Costing P&L A/c	50,000		
	15,00,000		15,00,000

CONTRACTEE A/C

Particulars	Amount	Particulars	Amount
To Contract A/c	15,00,000	To balance b/d	9,00,000
		By Bank (B/F)	6,00,000
	15,00,000		15,00,000

PROBLEM NO: 5

Dr.

Contract Account for the year ended 31.03.2014

Cr.

Particulars	HP-1 (Rs.)	HP-2 (Rs.)	Particulars	HP-1 (Rs.)	HP-2 (Rs.)
To Balance b/d (W-I-P)	7,80,000	2,80,000	By Closing Material at site	47,000	52,000
To Material Purchased	6,20,000	8,10,000	By WIP		
To Wages: (Rs. 85,000 + Rs. 12,000) (Rs. 62,000 + Rs. 8,400)	97,000	70,400	Value of work certified	20,50,000	16,10,000
To Donation to local club	5,000	2,500	Cost of work uncertified	1,90,000	1,40,000
To Plant hire charges: (Rs. 72,000 x $\frac{1}{3}$) (Rs. 57,000 x $\frac{1}{3}$)	24,000	19,000			
To Depreciation on Concrete	60,658	33,699			

mixture (Rs.8,20,000 X 15 % x $\frac{180}{365}$)					
(Rs.8,20,000 X 15 % x $\frac{100}{365}$)					
To Notional Profit (Balance C/d)	7,00,342	5,86,401			
	22,87,000	18,02,000		22,87,000	18,02,000

- Assuming donation paid to local club was exclusively for the above Projects, hence included in the contract Account.
- Depreciation on concrete Mixture Machine is charged on the basis of number of Days used For the Projects, as it is clearly mentioned in the question that this machine can be used for other projects also.

WORKING NOTES:

1. Computation of stage of completion of the projects: $\frac{\text{value of work certified}}{\text{value of contract}} \times 100$

$$\text{HP-1} = \frac{\text{Rs.20,50,000}}{\text{Rs.48,00,000}} \times 100 = 42.71\%$$

$$\text{HP-2} = \frac{\text{Rs.16,10,000}}{\text{Rs.36,00,000}} \times 100 = 44.72\%$$

(Land Purchased and Brokerage and Registration Fee paid for this purpose cannot be charged to contract Account, hence not included in the contract Account)

PROBLEM NO: 6**Computation of National Profit**

Particulars	Amount (Rs.)	Amount (Rs.)
Value of work certified		5,50,800
Less: Cost of work certified (Rs.4,50,000 - Rs.34,000)		4,16,000
Notional Profit		1,34,800
Computation of estimated Profit		
Contract Price		6,12,000
Less: Cost of work to date	4,50,000	
Estimated Further expenditure to Complete the Contract	25,000	
Estimated total Cost		4,75,000
Estimated Profit		1,37,000

PROBLEM NO: 7**PQR Construction Ltd.**

Dr. Contract A/c (April 1, 2013 to March 31, 2014) Cr.

Particulars	Amount (Rs.)	Particulars	Amount (Rs.)
To Materials Issued	4,56,000	By Plant returned to Stores (Working Note 1)	60,000
To Labour 3,05,000		By Materials at Site	30,000
Add: Outstanding 24,000	3,29,000	By W.I.P.	
To Plant Purchased	2,25,000	Certified 12,75,000	
To Expenses 1,00,000		Uncertified 40,000	13,15,000
Less: Prepaid 22,500	77,500	By Plant at Site (Working Note 2)	1,20,000
To Notional Profit c/d	4,37,500		
	15,25,000		15,25,000

PQR Construction Ltd.

Dr. Contract A/c (April 1, 2013 to December 31, 2014) (For Computing estimated profit) Cr.

Particulars	Amount (Rs.)	Particulars	Amount (Rs.)
To Materials Issued (Rs. 4,56,000 + Rs. 8,14,000)	12,70,000	By Material at Site	75,000
To Labour Cost (Rs. 3,05,000 + Rs. 24,000 + Rs. 3,56,000* + Rs. 37,500)	7,22,500	By Plant returned to Stores on 31.3.2014.	60,000
To Plant purchased	2,25,000	By Plant returned to Stores on 31.12.2014 (Working Note 3)	1,02,000
To Expenses (Rs. 77,500 + Rs. 1,97,500 + Rs.25,000)	3,00,000	By Contractee A/c	27,12,500
To Estimated profit	4,32,000		
	29,49,500		29,49,500

* Labour paid in 2014-15: Rs. 3,80,000 - Rs. 24,000 = Rs. 3,56,000

Working Notes:

Particulars	Amount (Rs.)
1. Value of the Plant returned to Stores on 31.03.2014	
Historical Cost of the Plant returned	75,000
Less: Depreciation @ 20% of WDV for one year	(15,000)
	60,000
2. Value of Plant at Site 31.03.2014	
Historical Cost of Plant at Site (Rs. 2,25,000 - Rs. 100,000)	1,50,000
Less: Depreciation @ 20% on WDV for one year	(30,000)
	1,20,000
3. Value of Plant returned to Stores on 31.12.2014	
Value of Plant (WDV) on 31.3.2014	1,20,000
Less: Depreciation @ 20% of WDV for a period of 9 months	(18,000)
	1,02,000
4. Expenses Paid for the year 2013-14	
Total expenses paid	1,00,000
Less: Pre-paid at the end	(22,500)
	77,500

PROBLEM NO: 8

Dr. Contract A/c Cr.

Particulars	Amount Rs.	Particulars	Amount Rs.
To materials A/c	1,00,000	By closing stock	25,000
To Wages A/c 45,000		By WIP A/c	
(+) O/S 5,000	50,000	WC 2,00,000	
To General Expenses A/c	10,000	WUC 15,000	2,15,000
To Depreciation A/c	5,000	By Contractee (W.N.1) A/c	5,000
To Costing P & L A/c (Notional Profit)	80,000	(Escalation claim)	
	2,45,000		2,45,000

WORKING NOTES 1:

Calculation of Escalation claim:

Increase in Prices = 25%

Less: Normal Increase = (5%)

Add: Price Increase = 20%

% eligible for Escalation claim = $20 \times 25\% = 5\%$

Escalation claim = $1,25,000 \times \frac{5}{125} = 5,000$

Material cost $1,00,000 - 25,000 = 75,000$

Wage cost $45,000 + 5,000 = \underline{50,000}$

1,25,000

PROBLEM NO: 9

In case of escalation clause in a contract, a contractor is paid for the any increase in price of materials and rate of labours which are beyond the control of the contractor. Any increase in the cost due to inefficiencies in usage of the materials and labours are not admissible. Thus any increase in cost due to usage in excess of standard quantity or hours are not paid.

a) Statement showing Additional claim due to Escalation clause.

	Standard Qty / Hours	Std. Rate (Rs.)	Actual Rate (Rs.)	Variation in Rate (Rs.)	Escalation claim (Rs.)
	(a)	(b)	(c)	(d) = (c - b)	(e) = (a × d)
Material:					
A	3,000	1,000	1,100	100	3,00,000
B	2,400	800	700	(100)	(2,40,000)
C	500	4,000	3,900	(100)	(50,000)
D	100	30,000	31,500	1,500	1,50,000
Material escalation claim					1,60,000
Labour:					
L ₁	60,000	15	18	3	1,80,000
L ₂	40,000	30	35	5	2,00,000
Labour escalation claim					3,80,000

Statement showing Final Contract Price

	Amount (Rs.)	Amount (Rs.)
Agreed contract price		1,50,00,000
Add: Agreed escalation claim:		
Material Cost	1,60,000	
Labour Cost	3,80,000	5,40,000
Final Contract Price		1,55,40,000

b) Dr. Contract Account Cr.

Particulars	Amount (Rs.)	Particulars	Amount (Rs.)
To Material:		By Contractee's A/c	1,55,40,000
A - (3,400 × Rs. 1,100) 37,40,000			
B - (2,300 × Rs. 700) 16,10,000			
C - (600 × Rs. 3,900) 23,40,000			
D - (90 × Rs. 31,500) 28,35,000	1,05,25,000		
To Labour:			
L ₁ - (56,000 × Rs.18) 10,08,000			
L ₂ - (38,000 × Rs.35) 13,30,000	23,38,000		
To Other expenses	13,45,000		
To Estimated Profit	13,32,000		
	1,55,40,000		1,55,40,000

THE END

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