

**MAIN MATERIAL / CA INTER / GR. 1 / BOOK 54 / COSTING – PART 10 / 42E**

CHAPTERS INCLUDED – CONTRACT COSTING

(APPLICABLE TO MAY 2020 ATTEMPT OF CA INTER. SYNCHRONISED WITH JULY 2019 EDITION OF CAISM.  
ISSUED ON 29/11/19)**15. CONTRACT COSTING**

NO. OF PROBLEMS IN 40E OF CA INTER: CLASSROOM - 14, ASSIGNMENT - 19

NO. OF PROBLEMS IN 41E OF CA INTER: CLASSROOM - 14, ASSIGNMENT - 21

NO. OF PROBLEMS IN 42E OF CA INTER: CLASSROOM - 08, ASSIGNMENT - 09

**MODEL WISE ANALYSIS OF PAST EXAM PAPERS OF IPCC & CA INTER**

No.	MODEL NAME	N-10	M-11 TO N-11	M-12	N-12	M-13 TO N-13	M-14	N-14	M-15	N-15	M-16	N-16	M-17	N-17	M-18 (O)	M-18 (N)	N-18 (O)	N-18 (N)	M-19 (N)
1.	PREPARATION OF CONTRACT ACCOUNT	8	-	8	-	-	8	8	-	-	-	-	-	-	-	10	8	5	10
2.	PROFIT / LOSS ON INCOMPLETE CONTRACTS		-	-	4	-		-	-	-	-	-	-	5	-	-	-	-	-
3.	CALCULATION OF ESTIMATED PROFIT	-	-	-	-	-	-	-	8	-	-	-	-	-	-	-	-	-	-
4.	CONTRACTS WITH ESCALATION CLAUSE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

**SIGNIFICANCE OF EACH PROBLEM COVERED IN THIS MATERIAL**

Problem No.in this material	Problem No.in NEW SM	Problem No.in OLD SM	Problem No.in OLD PM	RTP	MTP	Previous Exams	Remarks
CR 1	-	-	-	-	-	M-18(N)	
CR 2	-	-	-	-	-	M-19(N)	
CR 3	ILL-6	ILL-4	-		M-19	-	
CR 4	-	-	-	M-17	-	-	
CR 5	ILL-3	ILL-1	5	-	-	-	
CR 6	-	-	-	N19(N&O)	-	-	
CR 7	-	-	-	-	N-14	-	
CR 8	ILL-8	ILL-6	-	-	-	-	
ASG 1	ILL-4	ILL-2	-	-	-	-	
ASG 2	-	-	-	-	-	N-18(O)	
ASG 3	ILL-5	ILL-3	-	-	-	-	
ASG 4	-	-	-	-	-	-	
ASG 5	-	-	14	M-15,19(N&O)	-	-	
ASG 6	ILL-2	ILL-5	-	-	-	-	
ASG 7	-	-	9	-	-	N-10	
ASG 8	-	-	-	-	-	-	
ASG 9	-	-	5	-	M-19	-	

Contract costing is a form of specific order costing where job undertaken is relatively large and normally takes period longer than a year to be getting completed. Contract costing is usually adopted by the contractors engaged in the task of executing Civil Contracts.

A contract takes longer period to complete and the result of the contract can be known only after the completion of the contract. If the profit on such contracts is calculated only after their completion, then wide fluctuations may be noted in the profit figures of contractors from year to year. Hence profit is to be calculated for each year, for each contract separately. Contract costing have the following distinct features:

1. The major part of the work in connection with each contract is ordinarily carried out at the site of the contract.
2. The bulk of the expenses incurred by the contractor are considered as direct.
3. The indirect expenses mostly consist of office expenses of the yards, stores and works.
4. A separate account is usually maintained for each contract.
5. The number of contracts undertaken by a contractor at a time is usually few.
6. The cost unit in contract costing is the contract itself.

Estimated Profit = Contract Price - Estimated total cost

Estimated total cost = Cost to date + Estimated Further cost to be incurred to complete the contract

Notional profit = Work Certified + Work Uncertified - Cost Incurred Up-to-Date

Notional Profit = Work Certified - Cost of Work Certified

Cost work Certified = Cost incurred up-to-date - Work uncertified

Work Certified = Notional Profit + Cost of work Certified.

$$\% \text{ of Degree of completion} = \frac{\text{Work Certified}}{\text{Contract price}}$$

#### Journal Entry for escalation clause

Contractee A/c Dr xxx

To Contract a/c xxx

#### Journal Entry on completion of contract

Contractee A/c Dr xxx

To Contract a/c xxx

## PROBLEMS FOR CLASSROOM DISCUSSION

### MODEL 1: PREPARATION OF CONTRACT ACCOUNT

**PROBLEM 1:** XYZ Construction Company took a contract for construction of a stadium on 1<sup>st</sup> April, 2017 at a price of Rs. 160 lakhs. The relevant information for the year ended 31<sup>st</sup> March, 2018 are as under:

Amount (Rs. in '000)

Materials purchased for the contract	6,800
Direct wages paid	3,450
Salaries	200
Direct wages prepaid at the end of the year	50
Salaries outstanding at the end of the year	100
Material returned to store	150
Material at site as on 31 <sup>st</sup> March, 2018	175
Payment received from a contractee (80% of work certified)	9,440
Work done but not certified	500

A plant purchased for Rs.12,00,000 on 1<sup>st</sup> November, 2017 and was in use at the site up to 31<sup>st</sup> March, 2018. Depreciation is to be charged on plant @ 15% per annum on straight line basis. Material costing Rs. 50,000 was stolen from the site.

You are required to:

- Prepare contract account for the year ended 31<sup>st</sup> March, 2018 showing the profit to be taken to Profit & Loss Account.
- Prepare Balance Sheet showing the relevant items.

(A) (M 18(N) - 10M) (ANS.: AMOUNT TO BE TRANSFERRED TO COSTING P&L A/C (NOTIONAL PROFIT) = 2,100)

(B) (SOLVE PROBLEM NO 1 OF ASSIGNMENT PROBLEMS AS REWORK)

Note: \_\_\_\_\_

**PROBLEM 2: (PRINTED SOLUTION AVAILABLE)** A contractor prepares his accounts for the year ending 31st March each year. He commenced a contract on 1st September, 2018. The following information relates to contract as on 31st March, 2019:

Material sent to site	Rs. 18,75,000
Wages paid	Rs. 9,28,500
Wages outstanding at end	Rs. 84,800
Sundry expenses	Rs. 33,825
Material returned to supplier	Rs. 15,000
Plant purchased	Rs. 3,75,000
Salary of supervisor (Devotes 1/3rd of his time on contract)	Rs. 15,000 per month
Material at site as on 31-03-2019	Rs. 2,16,800

Some of material costing Rs. 10,000 was found unsuitable and was sold for Rs. 11,200. On 31-12-2018 plant which costs Rs. 25,000 was transferred to some other contract and on 31-01-2019 plant which costs Rs. 32,000 was returned to stores. The plant is subject to annual depreciation @ 15% on written down value method.

The contract price is Rs. 45,00,000. On 31st March, 2019 two-third of the contract was completed. The architect issued certificate covering 50% of the contract price.

Prepare Contract A/c and show the notional profit or loss as on 31st March, 2019.

(M 19(N) - 10M) (ANS.: NOTIONAL PROFIT = 1,90,200) (SOLVE PROBLEM NO 2,3 OF ASSIGNMENT PROBLEMS AS REWORK)

Note: \_\_\_\_\_

## MODEL 2: PROFIT / LOSS ON INCOMPLETE CONTRACTS

**PROBLEM 3: (PRINTED SOLUTION AVAILABLE)** M/s. Bansals Construction Company Ltd. took a contract for Rs. 60,00,000 expected to be completed in three years. The following particulars relating to the contract are available:

Particulars	2016 (Rs.)	2017 (Rs.)	2018 (Rs.)
Materials	6,75,000	10,50,000	9,00,000
Wages	6,20,000	9,00,000	7,50,000
Cartage	30,000	90,000	75,000
Other expenses	30,000	75,000	24,000
Cumulative work certified	13,50,000	45,00,000	60,00,000
Cumulative work uncertified	15,000	75,000	—

Plant costing Rs. 3,00,000 was bought at the commencement of the contract. Depreciation was to be charged at 25% per annum, on the written down value method. The contractee pays 75% of the value of work certified as and when certified, and makes the final payment on completion of the contract.

You are required to make a contract account and contractee account as they would appear in each of the three years. Also show how the work-in-progress and other items should appear in the balance sheet.

(C) (NEW SM, OLD SM, MTP-M19(SET-1(N))

(ANS.: 2016: LOSS TRANSFERRED TO COSTING P&L A/C: RS. 65,000; 2017: PROFIT TRANSFERRED TO COSTING P&L A/C: RS. 10,38,750; 2018- LOSS TRANSFERRED TO COSTING P&L A/C -3,66,187)  
(SOLVE PROBLEM NO 4 OF ASSIGNMENT PROBLEMS AS REWORK)

Note: \_\_\_\_\_

**PROBLEM 4: (PRINTED SOLUTION AVAILABLE)** The following details have been extracted from the books of DKG Construction LLP, which closes its books on 31st March every year.

Particulars	Contract 101	Contract 102
Date of commencement	1st April, 2015	1st December, 2015
Expected date completion	31 <sup>st</sup> September, 2016	31 <sup>st</sup> December, 2016
	Amount (Rs.000)	Amount (Rs.000)
Contract Price	4,000	1,100
Material issued to construction site	1,400	300
Material returned to store	160	60
Plant & Machinery sent to construction site	2,000	300
Inter-Contract material transfer	(80)	80
Materials at site on 31 <sup>st</sup> March, 2016	150	30
Plant hire charges	400	60
Wages paid to workers	600	540
Overhead apportioned	150	36
Other direct expenses	50	8
Value of work certified	3,000	750
Cost of work not certified	320	40
Progress payment received from contractees	2,880	700
Estimated cost of completion	270	220

Depreciation is charged on plant and machinery @ 15% p.a. using straight line method.

Required: Prepare contract account for each contract using columnar format, showing Cost of work certified and Notional profit / loss on each contract.

(C) (RTP M 17)

(ANS: COST OF WORK CERTIFIED: 2,190,909; NOTIONAL PROFIT/LOSS: 810, (159) FOR CONTRACT 101, 102 RESPECTIVELY)  
(SOLVE PROBLEM NO 5 OF ASSIGNMENT PROBLEMS AS REWORK)

Note: \_\_\_\_\_

### MODEL 3: CALCULATION OF ESTIMATED PROFIT

**PROBLEM 5:** Compute a Conservative estimate on a contract (which has been 90% complete) from the following particulars:

Particulars	Amount (Rs.)
Total Expenditure to date	22,50,000
Estimated further expenditure to complete the contract (including Contingencies)	2,50,000
Contract Price	32,50,000
Work Certified	27,50,000
Work Uncertified	1,75,000
Cash Received	21,25,000

(C) NEW SM (SOLVE PROBLEM NO 6 OF ASSIGNMENT PROBLEMS AS REWORK) (ESTIMATED PROFIT: 7,50,000)

**PROBLEM 6:** GVL Ltd. commenced a contract on April 1, 2018. The total contract was for Rs. 1,08,50,000. It was decided to estimate the total profit and to take to the credit of Costing P & L A/c the proportion of estimated profit on cash basis which work completed bear to the total contract. Actual expenditure in 2018-19 and estimated expenditure in 2019-20 are given below:

	2018-19	2019-20
	Actual (Rs.)	Estimated (Rs.)
Material issued	18,24,000	32,56,000
Labour : Paid	12,20,000	15,20,000
: Outstanding at end	96,000	1,50,000
Plant purchased	9,00,000	-
Expenses : Paid	4,00,000	7,00,000
: Outstanding at the end	-	1,00,000
: Prepaid at the end	90,000	-
Plant returned to stores (a historical stores)	3,00,000	6,00,000 (on Sep. 30, 2019)
Material at site	1,20,000	3,00,000
Work-in progress certified	51,00,000	Full
Work-in-progress uncertified	1,60,000	----
Cash received	40,00,000	Full

The plant is subject to annual depreciation @ 20% of WDV cost. The contract is likely to be completed on September 30, 2019.

**Required:**

- Prepare the Contract A/c for the year 2018-19.
- Estimate the profit for the contract.

(RTP N19(N&O))(ANS.: NOTIONAL PROFIT (PROFIT FOR THE YEAR) = RS. 17,50,000, ESTIMATED PROFIT 17,52,000)

(SOLVE PROBLEM NO 7 OF ASSIGNMENT PROBLEMS AS REWORK)

**Note:** \_\_\_\_\_

#### **MODEL 4: CONTRACT WITH ESCALATION CLAUSE**

**PROBLEM 7:** PG Ltd., undertook a contract for Rs. 5,00,000 on 1st April 2013. On 31st March 2014 when the accounts were closed, the following details about the contract were gathered:

Particulars	Rs.
Materials purchased	1,25,000
Wages paid	45,000
General expenses	12,000
Plant purchased	1,25,000
Material in hand 31.3.2014	25,000
Wages accrued 31.3.2014	15,000
Work certified	2,50,000
Cash received	2,00,000
Work uncertified	15,000
Depreciation of plant	12,500

The contract contained an escalation clause, which read as follows:

"In the event of increase(s) of prices of materials and rates of wages by more than 5%, the contract price would be increased accordingly by 25% of the rise of the cost of materials and wages beyond 5% in each case."

It was found that since the date of signing the agreement, the prices of materials and wage rates increased by 25%. The value of the work certified does not take into account the effect of the above clause.

Prepare the contract account. The workings should form part of your answer.

(B) (MTPN14) (ANS.: NOTIONAL PROFIT (PROFIT FORTHEYEAR): RS. 86,900)  
(SOLVE PROBLEM NO 8 OF ASSIGNMENT PROBLEMS AS REWORK)

Note: \_\_\_\_\_

**PROBLEM 8: (PRINTED SOLUTION AVAILABLE)** A contractor has entered into a long term contract at an agreed price of Rs.17,50,000 subject to an escalation clause for materials and wages as spelt out in the contract and corresponding actual are as follows:

Materials	Standard		Actual	
	Qty (tonnes)	Rate (Rs.)	Qty (tonnes)	Rate (Rs.)
A	5,000	50	5,050	48.00
B	3,500	80	3,450	79.00
C	2,500	60	2,600	66.00
Labour	Hours	Hourly Rate (Rs.)	Hours	Hourly Rate (Rs.)
X	2,000	70.00	2,100	72.00
Y	2,500	75.00	2,450	75.00
Z	3,000	65.00	3,100	66.00

Reckoning the full actual consumption of material and wages the company has claimed a final price of Rs. 17,73,600. Give your analysis of admissible escalation claim and indicate the final price payable.

(C) (OLD SM, NEW SM) (ANS.: FINAL PRICE PAYABLE-17,58,500)  
(SOLVE PROBLEM NO 9 OF ASSIGNMENT PROBLEMS AS REWORK)

Note: \_\_\_\_\_

## PRINTED SOLUTIONS TO SOME SELECTIVE PROBLEMS

**PROBLEM NUMBERS TO WHICH SOLUTIONS ARE PROVIDED: 2, 3, 4, 8**

### PROBLEM NO.2

Contract Account as on 31-03-2019

Particulars	(Rs.)	Particulars	(Rs.)
To Materials sent to site	18,75,000	By Material returned to Supplier	15,000
To Wages paid	9,28,500	By Material sold	11,200
Add: Outstanding	84,800	By Plant transferred to other contract	23,750
To Plant purchased	3,75,000	By Plant returned to stores	30,000
To Sundry Expenses	33,825	By Plant at site c/d	2,90,175
To Salary of Supervisor {1/3 <sup>rd</sup> (Rs.15,000 × 7 month)}	35,000	By Material at site c/d	2,16,800
To Costing P & L A/c (11,200-10,000)	1,200	By Works Cost	27,46,400
	33,33,325		33,33,325

To Works Cost	27,46,400	By Work-in-progress c/d Work certified	22,50,000
		By Work uncertified	6,86,600
To Notional profit (Profit for the year)	1,90,200		
	29,36,600		29,36,600

**Working Notes:**

1. Value of plant transferred to other contract:  
Rs.25,000 less Depreciation for 4 months  
 $=\text{Rs.25,000} - (\text{Rs.25,000} \times 15\% \times 4/12) = \text{Rs.23,750}$
2. Value of plant transferred to other contract:  
Rs. 25,000 less Depreciation for 4 months  
 $= \text{Rs.25,000} - (\text{Rs.25,000} \times 15\% \times 4/12) = \text{Rs.23,750}$
3. Value for work uncertified:  
The cost of 2/3<sup>rd</sup> of the contract is Rs.27,46,400

$$\text{Cost of 100\% of the contract is } \frac{27,46,400}{2} \times 3 = 41,19,600$$

Cost of 50% of the contract which has been certified by the architect is Rs.41,19,600 /2= Rs.20,59,800. Also, the cost of 1/3<sup>rd</sup> of the contract, which has been completed but not certified by the architect is  $(27,46,400 - 20,59,800) = \text{Rs.6,86,600/-}$

**PROBLEM NO.3****Contract Account (For the year ended 20X6)**

Particulars	(Rs.)	Particulars	(Rs.)
To Materials	6,75,000	By Plant at site c/d (75% of Rs.3,00,000)	2,25,000
To Wages	6,20,000	By Work-in-progress c/d:	
To Transportation cost	30,000	- Work certified	13,50,000
To Other expenses	30,000	- Work uncertified	15,000
To Plant	3,00,000	By Costing P&L A/c (Loss for the year)	65,000
	16,55,000		16,55,000

**Contract Account (For the year ended 20X7)**

Particulars	Rs.	Particulars	Rs.
To Plant at site b/d	2,25,000	By Plant at site c/d (75% of Rs. 2,25,000)	1,68,750
To Work-in-progress b/d:		By Work-in-progress c/d:	
- Work certified 13,50,000		- Work certified 45,00,000	
- Work uncertified 15,000	13,65,000	- Work uncertified 75,000	45,75,000
To Materials	10,50,000		
To Wages	9,00,000		
To Transportation cost	90,000		
To Other expenses	75,000		
To Costing P&L A/c (Notional Profit for the year)	10,38,750		
	47,43,750		47,43,750

## Contract Account (For the year ended 20X8)

Particulars	(Rs.)	Particulars	(Rs.)
To Plant at site b/d	1,68,750	By Plant at site c/d (75% of Rs.1,68,750)	1,26,563
To Work-in-progress b/d:		By Contractee A/c	60,00,000
- Work certified 45,00,000		By Costing P&L A/c (Notional Loss for the year)	3,66,187
- Work uncertified 75,000	45,75,000		
To Materials	9,00,000		
To Wages	7,50,000		
To Transportation cost	75,000		
To Other expenses	24,000		
	<b>64,92,750</b>		<b>64,92,750</b>

## Costing Profit &amp; Loss A/c

Particulars	(Rs.)	Particulars	(Rs.)
<b>20X6</b>			
To Contract A/c (Notional Loss)	65,000		
		<b>20X7</b>	
		By Contact A/c (Notional Profit)	10,38,750
<b>20X8</b>			
To Contract A/c (Notional Loss)	3,66,187		
To Estimated Profit from the Contract	6,07,563		
	<b>10,38,750</b>		<b>10,38,750</b>

**PROBLEM NO.4**

Dr. Contract Accounts of M/s DKG LLP for the year ended 31st March, 2016 Cr.

Particulars	Contract 101	Contract 102	Particulars	Contract 101	Contract 102
To Stores	1,400	300	By Stores return	160	60
To Plant & Machinery	2,000	300	By Transfer to 102	80	-
To Transfer from 101	-	80	By Materials at site	150	30
To Plant hire charges	400	60	By Plant at site	1,700	285
To Wages	600	540	By Cost of work not certified	320	40
To Overheads	150	36	By Cost of work certified (bal. fig) c/d	2,190	909
To Other direct expenses	50	8			
	<b>4,600</b>	<b>1,324</b>		<b>4,600</b>	<b>1,324</b>
To Cost of work certified b/d	2,190	909	By value of work certified	3,000	750
To Costing P&L(Notional profit)	810	-	By Costing P&L(Notional loss)	-	159
	<b>3,000</b>	<b>909</b>		<b>3,000</b>	<b>909</b>

**PROBLEM NO.8**

## Statement showing final claim

	Standard Qty/Hrs.	Standard Rate (Rs)	Actual Rate (Rs)	Variation in Rate (Rs)	Escalation Claim (Rs)
	(a)	(b)	(c)	(d) = (c)-(b)	(e) = (a) × (d)
Materials					
A	5,000	50.00	48.00	(-) 2.00	(10,000)

B	3,500	80.00	79.00	(-) 1.00	(3,500)
C	2,500	60.00	66.00	(+) 6.00	15,000
<b>Materials escalation claim: (A)</b>					<b>1,500</b>
<b>Wages</b>					
X	2,000	70.00	72.00	(+) 2.00	4,000
Y	2,500	75.00	75.00	—	—
Z	3,000	65.00	66.00	(+) 1.00	3,000
<b>Wages escalation claim: (B)</b>					<b>7,000</b>
<b>Final claim: (A + B)</b>					<b>8,500</b>

**Statement showing final price payable**

Agreed price		Rs. 17,50,000
Agreed escalation:		
Material cost	Rs. 1,500	
Labour cost	Rs. 7,000	Rs. 8,500
<b>Final price payable</b>		<b>Rs. 17,58,500</b>

The claim of Rs 17,73,600 is based on the total increase in cost. This can be verified as shown below:

**Statement showing total increase in cost**

Particulars	Standard Cost			Actual Cost			Increase/ (Decrease)
	Qty/ hrs	Rate (Rs.)	Amount (Rs.)		Rate (Rs.)	Amount (Rs.)	
	(a)	(b)	(c) = (a) × (b)	(d)	(e)	(f) = (d) × (e)	
<b>I. Materials</b>							
A	5,000	50.00	2,50,000	3,050	48.00	2,42,400	(7,600)
B	3,500	80.00	2,80,000	3,450	79.00	2,72,550	(7,450)
C	2,500	60.00	150,000	2,600	66.00	1,71,600	21,600
			680,000			6,86,550	6,550
<b>II. Wages</b>							
X	2,000	70.00	1,40,000	2,100	72.00	1,51,200	
Y	2,500	75.00	1,87,500	2,450	75.00	1,83,750	
Z	3,000	65.00	1,95,000	3,100	66.00	2,04,600	
			5,22,500			5,39,550	17,050
							23,600

Contract price Rs. 17,50,000

Add: Increase in cost Rs. 23,600

The final price claimed by the company Rs. 17,73,600

This claim is not admissible because escalation clause covers only that part of increase in cost, which has been caused by inflation.

**Note:** It is fundamental principle that the contract would compensate the contractor for the increase in costs which are caused by factors beyond the control of contract and not for increase in costs which are caused due to inefficiency or wrong estimation.

## ASSIGNMENT PROBLEMS

### MODEL 1: PREPARATION OF CONTRACT ACCOUNT

**PROBLEM 1:** The following expenses were incurred on a contract:

Particulars	Amount (Rs.)
Material purchased	6,00,000
Material drawn from stores	1,00,000
Wages	2,25,000
Plant issued	75,000
Chargeable expenses	75,000
Apportioned indirect expenses	25,000

The contract was for Rs. 20,00,000 and it commenced on 1<sup>st</sup> January, 2011. The value of the work completed and certified upto 30<sup>th</sup> November, 2011 was Rs. 13,00,000 of which Rs. 10,40,000 was received in cash, the balance being held back as retention money by the contractor. The value of work completed subsequent to the architect's certificate but before 31<sup>st</sup> December, 2011 was Rs. 60,000. There were also lying on the site materials of the value of Rs. 40,000. It was estimated that the value of plant as at 31<sup>st</sup> December, 2011 was Rs. 30,000.

(OLD SM, NEW SM)

(B) (ANS.: AMOUNT TO BE TRANSFERRED TO COSTING P&L A/C (NOTIONAL PROFIT) = 3,30,000)

**PROBLEM 2:** MKS Ltd. is engaged in construction sector. It took a contract to build a house for Rs. 45 lakhs. The contract commenced on 1<sup>st</sup> April, 2018. Following information, relating to contract, for the year ending as on 31<sup>st</sup> March, 2019 are as under:

Particulars	Amount (Rs.)
Materials purchased	8,52,000
Wages	10,48,000
Indirect Expenses	92,000
Administrative charges	1,18,000
Materials at site at the end of the year	38,000

A plant was purchased for the contract on 1<sup>st</sup> April, 2018 which, after charging depreciation @ 15% p.a. on the cost, appeared at Rs. 6,12,000 at the end of the year.

A supervisor who is paid Rs. 10,000 per month has devoted two-third of his time to this contract.

Two-third of the contract was completed. The architect issued certificate covering 50% of the contract price and contractor has been paid 90% of the work certified on account. The books of accounts are closed on 31<sup>st</sup> March every year.

Prepare contract account showing following:

- i) Works cost of the contract
- ii) Value of works uncertified
- iii) Notional profit and

(A) (N18(O) - 8M) (ANS.: AMOUNT TO BE TRANSFERRED TO COSTING P&L A/C (NOTIONAL PROFIT) = 5,55,000)

**PROBLEM 3:** A contractor prepares his accounts for the year ending 31st December each year. He commenced a contract on 1<sup>st</sup> April, 2011.

The following information relates to the contract as on 31st December, 2011:

Particulars	Amount (Rs.)
Material issued	2,51,000
Labour charges	5,65,600
Salary to Foreman	81,300

A machine costing Rs. 2,60,000 has been on the site for 146 days, its working life is estimated at 7 years and its final scrap value at Rs. 15,000.

A supervisor, who is paid Rs. 8,000 p.m. has devoted one-half of his time to this contract.

All other expenses and administration charges amount to Rs. 1,36,500.

Material in hand at site costs Rs. 35,400 on 31<sup>st</sup> December, 2011.

The contract price is Rs. 20,00,000. On 31<sup>st</sup> December, 2011 two-third of the contract was completed. The architect issued certificates covering 50% of the contract price, and the contractor had been paid Rs. 7,50,000 on account.

Prepare Contract A/c and show how much profit or loss should be included in financial accounts to 31<sup>st</sup> December, 2011.

(A) (NEW SM, OLD SM) (ANS.: AMOUNT TO BE TRANSFERRED TO COSTING P & L A/C (NOTIONAL PROFIT) = RS. 2,13,250)

### **MODEL 2: PROFIT / LOSS ON INCOMPLETE CONTRACTS**

**PROBLEM 4:** Mr. Bhagwandas undertook a contact for Rs. 15,00,000 on an arrangement that 80% of the value of the work done as certified by the architect of the contract should be paid immediately and that the remaining 20% be retained until the contract was completed. In 2005-'06-'07 amounts expended were:

Particulars	2005	2006	2007
Materials	1,80,000	2,20,000	1,26,000
Wages	1,70,000	2,30,000	1,70,000
Carriage	6,000	23,000	---
Cartage	1,000	2,000	6,000
Sundry Exp.	1,000	4,000	3,000

**Other information:**

2005: Work certified for Rs. 3,75,000 & 80% cash received.

2006: 3/4th of contract was certified and 80% of cash received. Uncertified work -20,000.

2007: on 30th June, the work completed.

Shown how the contract account and also contractee's account would appear each of these years in the books of the contractor assuming that the balance due to him was paid on completion of the contract.

(C) (ANS: AMOUNT TO BE TRANSFERRED TO COSTING P & L A/C : 2005-15,000, 2006-2,91,000, 2007-50,000)

**PROBLEM 5:** Dream house (P) Ltd. is engaged in building two residential housing projects in the city. Particulars related to two housing projects are as below:

Particulars	HP-1 (Rs.)	HP-2 (Rs.)
Work in Progress on 1st April 2013	7,80,000	2,80,000
Materials Purchased	6,20,000	8,10,000
Land purchased near to the site to open an office	-	12,00,000
Brokerage and registration fee paid on the above purchase	-	60,000
Wages paid	85,000	62,000
Wages outstanding as on 31st March, 2014	12,000	8,400
Donation paid to local clubs	5,000	2,500
Plant hire charges paid for three years effecting from 1st April 2013	72,000	57,000
Value of materials at site as on 31st March, 2014	47,000	52,000
Contract price of the projects	48,00,000	36,00,000
Value of work certified	20,50,000	16,10,000
Work not certified	1,90,000	1,40,000

A concrete mixture machine was bought on 1st April 2013 for Rs. 8,20,000 and used for 180 days in HP-1 and for 100 days in HP-2. Depreciation is provided @ 15% p.a. (this machine can be used for any other projects)

As per the contract agreement contractee shall retain 20% of work certified as retention money.

Prepare contract account for the two housing projects showing the profit or loss on each project for the year ended 31st March, 2014. (B) (OLD PM, RTP - M 15, M 19 (N&O))

(ANS: AMOUNT TO BE TRANSFERRED TO COSTING P&L A/C (NOTIONAL PROFIT) = HP1-7,00,342, HP2-5,86,401)

### **MODEL 3: CALCULATION OF ESTIMATED PROFIT**

**PROBLEM 6:** Compute estimate of profit on a contract (which has been 90% complete) from the following particulars.

Particulars	(Rs.)
Total expenditure to date	4,50,000
Estimated further expenditure to complete the contract (including contingencies)	25,000
Contract price	6,12,000
Work certified	5,50,800
Work uncertified	34,000
Cash received	4,40,640

(C) (OLD SM, OLD PM) (ANS.: ESTIMATED PROFIT: 1,37,000)

**PROBLEM 7:** PQR Construction Ltd. commenced a contract on April 1, 2009. The total contract was for Rs.27,12,500. It was decided to estimate the total profit and to take to the credit of P/L A/c the proportion of estimated profit on cash basis which work completed bear to the total contract. Actual expenditure in 2009-10 and estimated expenditure in 2010-11 are given below:

Particulars	2009 - 10	2010 - 11
	Actual (Rs.)	Estimated (Rs.)
Material issued	4,56,000	8,14,000
Labour: Paid	3,05,000	3,80,000
: Outstanding at end	24,000	37,500
Plant purchased	2,25,000	-
Expenses: Paid	1,00,000	1,75,000
: Outstanding at the end	-	25,000
: Prepaid at the end	22,500	-
Plant returned to stores (a historical stores)	75,000	1,50,000 (on Dec 31 2010)
Material at site	30,000	75,000
Work-in-Progress certified	12,75,000	Full
Work-in-progress uncertified	40,000	-----
Cash received	10,00,000	Full

The plant is subject to annual depreciation @ 20% of WDV cost. The contract is likely to be completed on December 31, 2010.

**Required:**

- Prepare the Contract A/c for the year 2009-10.
- Estimate the profit on the contract for the year 2009-10 on prudent basis which has to be credited to P/L A/c (A) (OLD PM, N10 - 8M)

(ANS.: NOTIONAL PROFIT (PROFIT FOR THE YEAR) = RS. 4,37,500, ESTIMATED PROFIT = 4,32,000)

### **MODEL 4: CONTRACT WITH ESCALATION CLAUSE**

**PROBLEM 8:** Deluxe Limited undertook a contract for Rs. 5,00,000 on 1st July 1986. On 30th June 1987, when the accounts were closed, the following details about the contract were gathered:

Particulars	Amount (Rs.)	Particulars	Amount (Rs.)
Materials purchased	1,00,000	Wages accrued 30.6.1987	5,000
Wages paid	45,000	Work certified	2,00,000
General Expenses	10,000	Cash received	1,50,000
Plant purchased	50,000	Work Uncertified	15,000
Materials on hand 30.6.87	25,000	Depreciation of Plant	5,000

The above contract contained an escalation clause which reads as following: "In the event of price of materials and rates of wages increase by more than 5% the contract price will be increased accordingly by 25% of the rise in the cost of materials and wages beyond 5% in each case". It was found that since the date of signing the agreement the prices of materials and wage rates increased by 25%. The value of the work certified does not take into account the effect of the above clause. Prepare the contract account. Workings should form part of the answer.

(A) (ANS.: AMOUNT TO BE TRANSFERRED TO COSTING P & L A/C (NOTIONAL PROFIT) = 80,000)

**PROBLEM 9:** SB Constructions Limited has entered into a big contract at an agreed price of Rs. subject to an escalation clause for material and labour as spent out on the contract and corresponding actuals are as follows:

Material	Standard		Actual	
	Quantity (Tonnes)	Rate Per Tonne (Rs.)	Quantity (Tonnes)	Rate Per Tonne (Rs.)
A	3,000	1,000	3,400	1,100
B	2,400	800	2,300	700
C	500	4,000	600	3,900
D	100	300	90	31,500
Labour	Hours	Hourly Rate Rs.	Hours	Hourly Rate Rs.
L1	60,000	15	56,000	18
L2	40,000	30	38,000	35

You are required to:

- Give your analysis of admissible escalation claim and determine the final contract price payable.
- Prepare the contract account, if the all expenses other than material and labour related to the contract are Rs. 13,45,000.

(C) (OLD PM.MTP-M19(S-II)(N)) (ANS.: A) 5,40,000, 1,55,40,000, B) ESTIMATED PROFIT - 13,32,000)

### **ADDITIONAL PROBLEMS FOR STUDENTS SELF PRACTICE**

**PROBLEM 1:** AKP Builders Ltd. commenced a contract on April 1, 20X8. The total contract was for Rs. 5,00,000. Actual expenditure for the period April 1, 20X8 to March 31, 20X9 and estimated expenditure for April 1, 20X9 to December 31, 20X9 are given below:

Particulars	20X8-X9 (actual)	20X9-X0 (9 months) (estimated)
Materials issued	90,000	85,750
Wages: Paid	75,000	87,325

Outstanding at the end	6,250	8,300
Plant	25,000	-
Sundry expenses: Paid	7,250	6,875
Prepaid at the end	625	-
Establishment charges	14,625	-

A part of the material was unsuitable and was sold for Rs.18,125 (cost being Rs.15,000) and a part of plant was scrapped and disposed- off for Rs. 2,875. The value of plant at site on 31 March, 20X9 was Rs. 7,750 and the value of material at site was Rs. 4,250. Cash received on account to date was Rs. 1,75,000, representing 80% of the work certified. The cost of work uncertified was valued at Rs. 27,375.

The contractor estimated further expenditure that would be incurred in completion of the contract:

- i. The contract would be completed by 31st December, 20X9.
- ii. A further sum of Rs.31,250 would have to be spent on the plant and the residual value of the plant on the completion of the contract would be Rs.3,750.
- iii. Establishment charges would cost the same amount per month as in the previous year.
- iv. Rs. 10,800 would be sufficient to provide for contingencies.

**Required:**

Prepare a Contract Account for the year ended 31st March, 20X9, and

Calculate estimated total profit on this contract.

(NEW SM)(Ans: AMOUNT TO BE TRANSFERRED TO COSTING P&L A/C (NOTIONAL PROFIT):58,500)

**PROBLEM 2:** Giant Construction Ltd. has been constructing a flyover for 15 months and is under progress. The following information relating to the work on the contract has been prepared for the period ended 31st March, 2014.

Particulars	Amount (Rs.)
Contract price	65,00,000
Value of work certified at the end of the year	57,20,000
Cost of work not yet certified at the end of the year	1,20,000
Opening balances:	
Cost of work completed	8,00,000
Materials on site	80,000
Costs incurred during the year:	
Material delivered to site	15,90,000
Wages	14,95,000
Hire of plant	2,86,000
Other expenses	2,30,000
Closing balance: Material on site	40,000

As soon as materials are delivered to the site, they are charged to the contract account. A record is kept on actual use basis, periodically a stock verification is made and any discrepancy between book stock and physical stock is transferred to a general contract material discrepancy account. The stock verification at the yearend revealed a stock shortage of Rs. 15,000.

In addition to the direct charges listed above, general overheads are charged to contracts at 5% of the value of work certified. General overheads of Rs. 35,000 had been absorbed into the cost of work completed at the beginning of the year.

It has been estimated that further costs to complete the contract will be Rs. 5,72,000. This estimate includes the cost of materials on site at the end of the year (31.3.2014) and also a provision for rectification.

**You are required to compute:**

- i) Profitability of the above contract and recommend how much profit should be taken for the year just ended. (Provide a detailed schedule of costs).
- ii) State how your recommendation in (i) would be affected if the contract price was Rs. 80,00,000 (rather than Rs. 65,00,000) and if no estimate has been made of costs to completion.

(B) (MTP N15) (ANS.: I) AMOUNT TO BE TRANSFERRED TO P & L A/C: RS. 8,59,584; II) AMOUNT TO BE TRANSFERRED TO P & L A/C: RS. 6,04,267)

**THE END**

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To **MASTER MINDS**, Guntur

MASTER MINDS