CONTRACT COSTING (TOPPERS INSTITUTE)

CHAPTER OVERVIEW

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1. Meaning & Features 2. Job vs Contract 3. Cost Plus Contract - Merits & Demerits 4. Fixed Price Contract - Merits **&** Demerits 5. Escalation Clause	**1. Income Related Terms -** Contract Price, Work Certified, Work Uncertified, Progress Payments and Retention Money 2. **Expenditure Items -** Materials, Labour, Direct Expenses, Indirect Expenses, Depreciation, Sub-Contract Work, Cost of Extra Work, etc.	**1.** Notional Profit and Transfer Rules 2. Estimated Total Profit (ETP) and Transfer Rules 3. Provisioning for Losses **-** Prudence Concept 4. Format of Contract Account 5. Display of WIP in Balance Sheet

8.1 Basics

8.1.1 Meaning of Contract Costing

1. **Contract:** Contract refers to a large job / assignment / work order, where the execution of work is spread over two or more financial years. Generally, a Contract commences in one financial year, but ends in a different year.

2. **Contract Costing:** Contract or Terminal Costing involves ascertainment of costs of contract. It is an extension of principles of job costing for long-term projects like Civil Construction, Ship Building, Interior Decoration, etc.

8.1.2 Features of Contract Costing

The following are the major features of Contract Costing -

1. **Parties Involved:** The parties to a contract are - (a) **Contractor** - One who undertakes and executes work under a contract, and (b) **Contractee** - One for whom the work is undertaken.

2. **Site Work:** Major part of the work in each contract is generally carried out at the site of the contract.

3. **Direct Expenses:** Most of the expenses incurred by the Contractor are directly relatable to the site.

4. **Indirect Expenses:** Indirect Expenses, e.g. Administrative Office Expenses and common expenses are apportioned to various contracts on appropriate basis. For example, depreciation of common equipment used on various contracts is apportioned on the basis of the number of days the equipment has been used on various contracts.

5. **Separate Accounts:** A separate account is maintained for each contract, to ascertain Profit or Loss.

6. **Cost Centre and Cost Unit:** The Cost Centre (place) and Cost Unit (output) in Contract Costing is the Contract itself, e.g. Building Construction.

7. **Recognition of Profit:** A contract usually takes long time periods for completion. In certain years, no contract might be completed, while in others, many contracts may be completed. Recognition of Profits after full completion of contract might lead to wide fluctuations in profit every year. To avoid these fluctuations, profits are generally recognised every year on the basis of percentage of completion and the amount of Notional Profit.

8.1.3 Job Costing vs Contract Costing

	Job Costing	Contract Costing
1.	Job refers to any specific assignment, contract or work order wherein work is executed as per customer's requirements.	Contract refers to a large job / assignment / work order. The execution of work is spread over two or more financial years.
2.	Job Costing is applied in Printing Press, Furniture works, Interior Decoration and other similar work.	Contract Costing is applied in activities like Civil Construction, Ship Building, etc.

8.1.4 Cost Plus Contract

1. Meaning: A Cost plus Contract is one where the Contract Price is ascertained by adding a percentage of profit to the total cost of the work. Such type of contracts is entered into when contract costs cannot be estimated with reasonable accuracy due to unstable conditions, e.g. material prices, labour, etc.

2. **Advantages and Disadvantages:**

Advantages	Disadvantages
(a) The Contractor is assured of a fixed percentage of profit. There is no risk of incurring any loss on the contract. (b) It is useful particularly when the work to be done is not definitely fixed at the time of making the estimate. (c) Contractee can ensure himself about the cost of the contract, as he is empowered to examine the books and documents of the Contractor, to ascertain the accuracy of the costs.	(a) There is no incentive to the Contractor to avoid wastages and achieve economy in production. (b) The Contractee may not know the actual cost of contract till its completion, unlike a Fixed Price Contract, where his outflow / cost is pre-determined.

Illustration:

M/s Builders & Co. is proposing to take a contract to build a Housing Project for a big client. The Firm is less confident about e price to be quoted for the contract. Suggest the appropriate pricing method to them. RTP

1. Since M/s Builders & Co. is not fully confident in quoting the price, Cost plus Contact Method is a better option to safeguard it from unexpected losses.

2. Cost-Plus-Contract provides for the payment by the Contractee, of the actual cost of construction, plus a stipulated profit, mutually decided between the two parties.

8.1.5 Fixed Price Contract

1. Meaning: A Fixed Price Contract is one where the Contract Price is fixed and determined in advance at the time of entering into the agreement. Such type of contracts is entered into when contract costs can be reasonably estimated with a degree of certainty.

2. **Advantages and Disadvantages:**

Advantages	Disadvantages
(a) The Contractee's outflow on the contract is known and determined in advance. (b) It is useful specially when the costs of work to be done can be determined with certainty.	(a) Contractor may resort to the use of materials of lesser quality / price to increase his profit margin. (b) Contractor may incur losses if he had not estimated the contract costs properly or if price levels increase due to abnormal reasons, after entering into the agreement. (c) Contractee cannot have any idea about the real costs since he cannot examine the books of the Contractor.

8.1.6 Escalation Clause

1. In Fixed Price Contracts, the Contract Price is fixed and pre-determined. If there is an increase in prices of materials, rates of labour, etc. during the period of execution of a contract, the Total Contract Costs may rise and the Contractor's profit may be reduced.

2. This increase in prices may induce the Contractor to use materials of lower quality and price in order to maintain his profit margin on the contract.

3. To overcome such a situation, the agreement generally contains a stipulation that the Contract Price will be increased by an agreed amount or percentage, if the prices of Materials, Wages, etc. rise beyond a particular limit. Such a stipulation / condition is called Escalation Clause.

4. **Accounting Treatment:** The amount of reimbursement due should be determined by reference to the Escalation Clause.

The amount due from the Contractee should be recorded by the following Journal Entry in the Contractor's Books, at the end of every each year-

Contractee's Account Dr.

To Contract Account

Note: Alternatively, the amount due under Escalation Clause can be added to the value of Work-in-Progress at the end of every year.

8.2 Income and Expenditure Items on a Contract

8.2.1 Meaning of Work Certified and Work Uncertified

Income on a Contract = **Value of Work Certified + Cost of Work Uncertified**

These two terms are explained below -

Value of Work Certified	Cost of Work Uncertified
(a) As per the prevailing business practices in contract activity, the Contractor raises periodical bills on the Contractee. Such bills are raised on the basis of Architect's or Surveyor's Certificates stating the extent and value of work completed. (b) Hence, that portion of the work which has been completed by the Contractor and certified by the Architect / Surveyor is called as **Work Certified.** (c) Value of Work Certified constitutes **Income** on the Contract, and is credited to the Contract A/c	(a) It represents the cost of work, which has been carried out by the Contractor but is not certified by the Architect / Surveyor. (b) It constitutes the work completed from the date of the earlier certification till the end of the accounting year. The **Cost** of Work Uncertified is also credited to Contract A/c under the head "Work in Progress".

and debited to Work-in-Progress A/c (if the contract is in progress) or to Contractee's A/c (if the contract is completed).	(c) Cost of Work Uncertified = Total Cost to date **Less** Cost of Work Certified **Less** Material in Hand **Less** Plant at Site (at WDV).

Total Work done during the period $\longrightarrow$

Date of commencement of contract work e.g. 12th May	**Work Certified** $\longrightarrow$	Date of last certificate by Architect/ e.g. 10th Dec.	**Work Uncertified** $\longrightarrow$	End of financial year e.g. 31st Dec

8.2.2 Work Certified vs Work Uncertified

	Work Certified	Work Uncertified
1.	It represents work done during the period, and **also** certified by the Architect / Surveyor.	It represents work done during the period but **not yet certified** by the Architect / Surveyor.
2.	The amount of Work Certified is based on **Architect's** Certificates.	Cost of Work Certified is based on the **Contractor's** own estimate.
3.	It includes **profit element,** since it is based on Contract Price.	It is a conservative **cost estimate** and does not include any profit element.
4.	It is **considered** for calculating percentage of completion.	It is **not considered** in calculation of percentage of completion.
5.	It provides the basis for claiming periodical Progress Payments) from the Contractee.	It arises due to **time gap** between the date of previous certificate to the close of the financial year.

Note: Value of Work Certified and Cost of Work Uncertified constitute **Income** on a Contract, and is credited to the Contract Account in the books of the Contractor.

8.2.3 Progress Payments and Retention Money

1. Progress Payments / Cash Received:

(a) Payments received by the Contractors when the contract is "in-progress" are called Progress Payments or Running Payments.

(b) Such payments are released by the Contractee on the basis of Architect's Certificates and as per the terms of the Contract.

(c) Generally, the entire amount of work certified is not fully paid. A percentage of the amount due (called Retention Money) is retained and only the balance is paid to the Contractor.

2. **Retention Money:**

(a) The amount withheld by the Contractee while making progress payments, is called Retention Money.

(b) Retention Money = Value of Work Certified **Less** Progress Payments.

(c) Retention Money is withheld for the following purposes -

• To ensure completion of entire contract and compliance with the terms of the Contract.

• To act as security for any defective work, which may be discovered later within guarantee period.

• To meet repair costs arising due to defective work in case contractor does not rectify it at his cost.

• To provide a safeguard against the risk of loss due to faulty workmanship.

Note:

Work Certified = Progress Payments + Retention Money.

8.2.4 Cost Items under Contracts

The broad heads under which contract costs are ascertained and debited to the Contract Account are -

1. Direct Materials,	5. Sub-Contract Costs,
2. Direct Labour,	6. Costs of Extra work,
3. Direct Expenses (if any),	7. Indirect Expenses and Common Contract Expenses, and
4. Depreciation,	8. Head Office Expenses.

8.2.5 Material Cost - Recognition Principles _

1. **Supply from Stores:** Cost of all materials supplied from Stores is debited to the Contract Account, based on the Material Requisition Slip.

2. **Direct Purchases:** Cost of materials purchased and directly received at site, i.e. without being routed through stores, is debited to Contract Account, based on the Purchase Invoice accompanied by Delivery Challan & Goods Received Note.

3. **Tool Making Materials:** If any Stores Items are used for manufacturing tools, the cost of such stores items are charged to the Works Expenses account.

4. **Supply by Contractee:** If the Contractee has supplied materials without affecting the Contract Price, no accounting entries will be made in the Contract Account, only a note may be given about it.

5. **Transfer of material:** When excess material is transferred from one contract to another, their costs would be adjusted on the basis of Material Transfer Note. The receiving Contract Account will be debited while the transferring Contract Account will be credited.

6. **Return of Excess Materials to Stores:** These are credited to Contract Account using appropriate documentary / procedural control.

7. **Sale of Surplus Materials:** When return of surplus material appears uneconomical on account of high cost of transportation, the same is sold as such. The concerned Contract Account is credited with the sale price. Any loss or profit arising therefrom is transferred to Profit and Loss Account.

8. **Abnormal Loss of Materials:** Any theft or destruction of material by fire or other abnormal causes represents a **loss.** Such amount is transferred to the Profit and Loss A/c, by crediting the Contract Account.

8.2.6 Labour Costs - Recognition Principles

1. **Nature of Costs:** Labour actually employed at the contract site is regarded as **direct,** irrespective of the nature of task performed.

2. **Debit to Contract Account:** Wages paid to workers exclusively engaged on a contract are charged to the concerned contract directly. If a number of contracts are carried on simultaneously, and labourers are required to devote their time on one or more contracts, the wages are apportioned to different contracts on the basis of a Wage Analysis Sheet.

8.2.7 Other Costs - Recognition Principles

1. **Direct Expenses:** Direct Expenses, if any, are identified and **charged in full** directly to the Contract A/c.

2. **Indirect Expenses:** Indirect and Common expenses (such as payment made to Engineers, Surveyors, Supervisors, etc.) may be distributed over several contracts on an appropriate basis. The commonly adopted bases of apportionment are -

(a) Percentage of Materials Cost, or	(f) Number of Employees (for Supervision Charges), or
(b) Percentage of Wages Paid, or	(g) Value of Project, (i.e. Contract Price) or
(c) Percentage of Prime Cost, or	(h) Value of work done during the period, (i.e. Work Certified) or
(d) Labour Hour Rate, or	(i) Number of Contracts, or
(e) Time / Period (of asset usage, etc.)	(j) Any other technical estimate.

3. **Depreciation:** Depreciation on contracts may be treated in any of the following ways -

(a) **Method 1:** The value of Plant in a contract may be either debited to Contract Account and the Written Down Value thereof at the end of the year posted on the credit side.

(b) **Method 2:** Only a charge (depreciation) for use of the Plant may be debited to the Contract Account.

Note: Method 1 is recommended if the equipments are used on a single contract throughout the year. But, Method 2 may be used if equipments are used on various contracts for different time periods during the year.

4. **Sub-Contract Costs:** When a portion of the contract is given to another sub-ordinate Contractor for completion, that portion is said to have been sub-contracted. Sub-Contract Costs are debited to the Contract Account as such.

5. **Cost of Extra Work:** The amount payable by the Contractee for extra work done by the Contractor should be added to the contract price. Where extra work is substantial, it is better to treat such extra work as a separate contract. When it is not substantial, expenses incurred should be debited to the Contract Account as "Cost of Extra work".

8.3 Profit Recognition and Accounting

8.3.1 Notional Profit

1. Actual Profit on a Contract can be ascertained only after it is entirely completed. However for recognition of profits during the course of contract, the concept of Notional Profit is used.

2. Notional Profit is the excess of Income till date over Expenditure till date on a contract. Notional Profit can be ascertained as under -

Notional Profit =	**Income till date** (i.e. Value of Work Certified + Cost of Work Uncertified)	**Less**	**Expenditure till date** (Total Costs on Contract, after adjusting Materials at Site, WDV of Plant at Site, Prepaid / Accrued Expenses, etc.)

8.3.2 Profit Recognition on Incomplete Contracts

[Note: Some general conventions in Profit Recognition for Management decision-making purposes are given below.]

Profit on Incomplete Contracts is recognised based on the Notional Profit and Percentage of Completion. The rules of recognition are -

Description	Percentage of Completion	Profit to be transferred to P & L A/c
1. Initial Staqes	≥ 25%	NIL
2. Work Performed but not substantial	26% to 50%	$\frac{1}{3} \times$ Notional Profit $\times \frac{\text{Cash Received}}{\text{Work Certified}}$
3. Substantially completed	51% to 90% **(See Note c)**	$\frac{2}{3} \times$ Notional Profit $\times \frac{\text{Cash Received}}{\text{Work Certified}}$
4. Almost complete	91% - 99% **(See Note c)**	Profit is recognised on the basis of Estimated Total Profit **(See Para 8.3.3)**
5. Fully complete	100%	Notional Profit $\times \frac{\text{Cash Received}}{\text{Work Certified}}$ **(See Note d)**

Notes:

(a) Percentage of Completion = $\frac{\text{Work Certified}}{\text{Contract Pr ice}}$

(b) If there is a loss at any stage, i.e. irrespective of percentage of completion, such Loss should be **fully** transferred to the Profit and Loss Account.

(c) Substantially completed can also be considered as **51% to 95%** completed. In such case, the next slab of Almost Complete Contracts will be taken as **95% to 99%** completed.

(d) For fully complete contracts, the balance portion of profit is recognised only upon receipt of Retention Money. If entire amount is fully received, the whole of profit can be recognised.

(e) The principle of prudence / conservatism is generally followed for recognizing profit. Hence, for exact 50% completion, I/3rd of Notional Profit will be recognised (and not 2/3rd).

8.3.3 Profits Recognition using Estimated Total Profits

[Note: Some general conventions in Profit Recognition for Management decision-making purposes are given below.]

Profits on almost complete contracts is recognised on the basis of Estimated Total Profits (ETP).

Suppose a contract (Value = Rs. 100 Lakhs) is 95% complete by the close of a financial year and gets completed on 18th May. The accounts for the period ending 31st March are finalized only in the month of May. By the time the accounts are finalized, the contract is fully complete and the costs thereof can be obtained. Thus, the following profits are calculated -

Close of Financial Year e.g. 31st March	Additional Costs → incurred on the contract	Date of Completion of Contract e.g. 18th May	→	Date of finalisation of accounts for last financial year e.g. 31st May
Cost till date Rs. 82 Lakhs	Rs. 9 Lakhs →	Estimated Total Costs 82 + 9 = Rs. 91 Lakhs		

• Notional Profit = Work Certified **Less** Cost incurred till date = (100 × 95%) - 82 = **Rs. 13 Lakhs.**

• Estimated Total Profit = Contract Price **Less** Estimated Total Contract Costs = 100 - 91 = **Rs. 9 Lakhs.**

Any of the following alternative formula may be used for recognition of profit -

(a) Estimated Total Profit × $\frac{\text{Work Certified}}{\text{Contract Price}}$ i.e. ETP × Percentage of Completion

(b) Estimated Total Profit × $\frac{\text{Work Certified}}{\text{Contract Price}} \times \frac{\text{Cash Received}}{\text{Work Certified}}$ i.e. ETP × Percentage of Completion × %age of Payment

(c) Estimated Total Profit × $\frac{\text{Cost till date}}{\text{Estimated Total Costs}}$ i.e. ETP × Percentage of Costs incurred

(d) Estimated Total Profit× $\frac{\text{Cost till date}}{\text{Estimated Total Costs}} \times \frac{\text{Cash Received}}{\text{Work Certified}}$ i.e. ETP × %age of Cost incurred × %age of Payment

(e) Notional Profit × $\frac{\text{Work Certified}}{\text{Contract Price}}$ i.e. Notional Profit × Percentage of Completion

(f) $\frac{2}{3}$ × Notional Profit × $\frac{\text{Cash Received}}{\text{Work Certified}}$ **(See Note 4)** i.e. Formula relating to Substantially Complete contracts.

Note:

1. ETP based formula can be applied -

(a) for almost complete contracts **(91% - 99%),** or

(b) for any other contract **above 25% complete,** if future costs can be reasonably estimated.

2. In the absence of any specific reguirement or other information, **Formula (b)** may be applied.

3. Even where the ETP related information is available, Notional Profit may also be used to recognize profit. Hence, Formula **(e)** & **(f)** may be applied for profit recognition.

4. Formula (f) shall be modified as $\frac{1}{3}$ × Notional Profit × $\frac{\text{Cash Received}}{\text{Work Certified}}$, in case of 26% to 50% complete contracts.

5. The Profit recognised / transferred to the P & L Account should be determined on **prudence / conservatism basis,** i.e. if all the formulae are applied, the **least** of the resulting profits should be considered.

6. If the amount of Notional Profit is less than the amount to be recognised by applying the above formula, then profit transferred to P & **L** A/c shall be the **least** of the two. (e.g. If Profit to be recognised based on ETP is Rs. 48,000, but Notional Profit is only Rs. 36,000, then the amount transferred to P&L A/c shall be Rs. 36,000 only).

8.3.4 Rules for Provisioning for Losses on Contracts

The rules in respect of Profits and Losses to be recognized on Contracts is summarized below -

Combination		**Treatment**
Current Year	**Estimated**	
Notional Profit	Estimated Total Profit	Profit should be recognized only if percentage of completion is > 25%. Any of the above 6 formula given may be applied, on prudence basis.
Notional Profit	Estimated Total Loss	**Estimated Total Loss** is **fully provided for** in the current year. Profit should not be recognized.
Loss	Estimated Total Profit	**Current Loss** is **fully provided** for. Profit is not recognised even though there may be a profit when the contract is finally completed.
Loss	Estimated Total Loss	Current Loss or Estimated Total Loss, **whichever is worse,** is fully provided for in the current year.

8.3.5 Format of Contract Account

CONTRACT ACCOUNT

Contract No for the year ended

Date of Commencement: Contract Value:

Particulars	Rs.	**Particulars**	Rs.
To Materials (Issued)		By Work in Progress:	
To Wages (Paid + Payable)		- Work Certified	
To Direct Expenses		- Work Uncertified	
To Indirect Expenses		By balances c/d:	
To Sub-Contract Costs		- Materials at Site	
To Cost of Extra Work		- Plant (WDV) at site	
To Plant (at Cost)			
To Notional Profit - balancing figure			

Total		**Total**	
To Profits recognised during the period (as per decision making conventions given above) To Reserve Profit - balancing figure		By Notional Profit b/d	
Total		**Total**	
To Work in Progress b/d To balances b/d - Materials at Site , - Plant at Site		By Reserve Profit b/d	 *

The Contract Account is generally prepared in three segments. They are -

1. **First Segment:** Initial Comparison of Incomes & Expenditures for the period, leading to Notional Profit.

2. **Second Segment:** Recognition and Transfer of a portion of Notional Profit to P & L Account and the balance carried forward as Reserve Profit. **[Note:** Such transfer is as per conventions given above, for decision-making purposes.]

3. **Third Segment:** Carry forward of balances from one financial period to another. Hence Third Segment of the previous period becomes the First Segment of the next financial period. **[Note:** The Third Segment is not totalled, it is only the carry forward of account balances from one period to the other.

8.3.6 Presentation of WIP in B/ Sheet till a Contract is completed

In the Balance Sheet prepared for Management, WIP is generally displayed as under - (only abstract is given here)

Liabilities	Rs.	Assets	Rs.
		CURRENT ASSETS: Contract Work-In-Progress Value of Work Certified **Add:** Cost of Work Uncertified **Add:** WDV of Plant at Site **Add:** Cost of Materials at Site	
		Sub-Total **Less:** Reserve Profit, if any, as per conventions above	
		Net Balance	

		Less: Balance in Contractee's Personal a/c	
		Net Value of Contract WIP	

ILLUSTRATIONS

[Note: Transfer of Recognised Profit to P&L, is for Management's decision making, as per conventions given above.]

1. Profit Recognition with Notional Profit, B/s Abstract

1. Computation of Work Certified and Contract Price – Basics M 09

A Contract is estimated to be 80% complete in its first year of construction as certified. The Contractee pays 75% of Value of Work Certified, as and when certified and makes the final payment on the completion of contract. The following information is available for the first year -

• Cost of Work -in-Progress Uncertified Rs. 8,000

• Profit transferred to Profit & Loss A/c at the end of Year 1 on incomplete contract Rs. 60,000

• Cost of work to date Rs. 88,000

Calculate the Value of Work-in-Progress Certified and the amount of Contract Price.

Solution:

1. Since contract is 80% complete, Profit transferred to P & L A/c = $\frac{2}{3}$ × Notional Profit × $\frac{\text{Cash Received}}{\text{Work Certified}}$

So, Rs. 60,000 = $\frac{2}{3}$ × Notional Profit × 75% (i.e. Percentage of Cash Received to Work Certified is 75% given)

On solving the above, we get **Notional Profit** = Rs. **1,20,000.**

2. Notional Profit = Work Certified + Work Uncertified **less** Cost of work done till date

Rs. 1,20,000 = Work Certified + Rs. 8,000 - Rs. 88,000

On solving the above, we get **Work Certified** = Rs. **2,00,000.**

3. Percentage of Completion = $\frac{\text{Work Certified}}{\text{Contract Price}} = \frac{\text{Rs.2,00,000}}{\text{Contract Price}}$ **= 80%.** So, Contract Price = $\frac{\text{Rs.2,00,000}}{80\%}$ **= Rs. 2,50,000.**

2. Contract Costing - Contract A/c, and Contractee's A/c M 08, N 14

Z Limited obtained a Contract No. 999 for Rs. 50 Lakhs. Details of this contract for the year ended 31st March are -

Particulars	Rs.	Particulars	Rs.
Materials Purchased	1,60,000	Electricity Charges	25,000
Materials issued from Stores	5,00,000	Plant Hire Expenses	60,000

Wages and Salaries Paid	7,00,000	Sub-Contract Cost	20,000
Drawing and Maps	60,000	Materials returned to Stores	30,000
Sundry Expenses	15,000	Materials returned to Suppliers	20,000

The following balances relating to the Contract No.999 for the year are available:

Particulars	As at Beginning of the Year	As at End of the Year
Work Certified	Rs. 12,00,000	Rs. 35,00,000
Work Uncertified	Rs. 20,000	Rs. 40,000
Materials at Site	Rs. 15,000	Rs. 30,000
Wages Outstanding	Rs. 10,000	Rs. 20,000

The Contractor receives 75% of Work Certified in cash. Prepare Contract Account and Contractee's Account.

Solution: **1. Contract No.999 Account for the year ended 31st March**

Particulars	Rs.	**Particulars**	Rs.
To balance b/d - Work Certified	12,00,000	By Work in Progress - Work Certified	35,00,000
- Work Uncertified	20,000	- Work Uncertified	40,000
To Material at Site b/d	15,000	By Materials Returns - Stores	30,000
To Material issued	5,00,000	- Supplier	20,000
To Materials directly purchased	1,60,000		
To Wages (7,00,000 + 20,000 - 10,000)	7,10,000	**Note:** It is assumed that Materials are returned	
To Drawings and Maps	60,000	to Supplier, directly from the Site itself.	
To Sundry Expenses	15,000	By balance c/d - Material at site	30,000
To Electricity Charges	25,000		
To Plant Hire Charges	60,000		
To Sub-Contract Cost	20,000		
To Notional Profit - balancing figure	**8,35,000**		
Total	**36,20,000**	**Total**	**36,20,000**
To Profit & Loss A/c - transfer	4,17,500	By Notional Profit b/d	8,35,000

(Note b) To Reserve Profit c/d - balancing figure	**4,17,500**		
Total	**8,35,000**	**Total**	**8,35,000**
To WIP b/d To Material at Site b/d	35,40,000 30,000	By Reserve Profit b/d	4,17,500

Note:

(a) Percentage of Completion = $\frac{\text{Work Certified}}{\text{Contract Price}} = \frac{35.00.000}{50.00.000}$ = **70%**

(b) So, Profit transferred to P&L A/c= $\frac{2}{3}$ × Notional Profit × $\frac{\text{Cash Received}}{\text{Work Certified}} = \frac{2}{3}$ × Rs. 8,35,000 × 75% = Rs. **4,17,500**

2. Contractee's A/c

Particulars	Rs.	**Particulars**	Rs.
To balance c/d **(bal. figure)**	**26,25,000**	By balance b/d (80% of Work Certified on Opening Date) By Bank [75% of (Rs. 35,00,000 - Rs. 12,00,000)]	9,00,000 17,25,000
Total	**26,25,000**	**Total**	**26,25,000**

3. Profit Recognition with Notional Profit, Balance Sheet Abstract M 09

The following details are available from a Contractor for a particular construction work for the year ended 31st March -

Particulars	Rs.	Particulars	Rs.
Contract Price	91,00,000	Material returned to Store	14,840
Cash Received from Contractee (90% of Work Certified)	71,91,000	Head Office Expenses apportioned	2,50,000
Material sent to site	35,82,600	Cost of Work Uncertified	3,17,000
Planning and Estimation Cost	3,50,000	On 31st March:	
Direct Wages paid	32,62,700	Material at site	85,400
Cost of Plant installed at site	7,00,000	Accrued Direct Wages	78,120
Direct Expenses	1,68,000	Accrued Direct Expenses	9,310
Establishment Expenses	2,03,000	Value of Plant (as revalued)	6,16,000

Required: (1) Prepare the Contract Account for the year ended 31st March. (2) Show the relevant Balance Sheet entries.

Solution: 1. Contract Account for the year ended 31st March

Particulars	Rs.	**Particulars**	Rs.
To Materials	35,82,600	By Work in Progress A/c	
To Direct Wages Paid 32,62,700		-Work Certified $\frac{\text{Rs.}71{,}91{,}000}{90\%}$	79,90,000
Add: Pavable 78.120	33,40,820		
To Direct Expenses Paid 1,68,000		-Work Uncertified	3,17,000
Add: Payable 9,310	1,77,310	By Materials - returned to Stores	14,840
To Planning and Estimation	3,50,000	By Materials at Site	85,400
To Cost of Plant installed at site	7,00,000	By WDV of Plant at site	6,16,000
To Establishment Expenses	2,03,000		
To HO expenses - apportioned	2,50,000		
To Notional Profit - balancing figure	**4,19,510**		
Total	**90,23,240**	**Total**	**90,23,240**
To P & L A/c - Profit transfer - **See Note b**	2,51,706	By Notional Profit b/d	4,19,510
To Reserve Profit c/d - balancing figure	**1,67,804**		
Total	**4,19,510**	**Total**	**4,19,510**
To Work-in- Progress b/d (WC+WUC)	83,07,000	By Reserve Profit b/d	1,67,804
To WDV of Plant at site b/d	6,16,000		
To Materials at Site b/d	85,400		

Notes:

(a) Percentage of Completion = $\frac{\text{Work Certified}}{\text{Contract Price}} = \frac{\text{Rs. }79{,}90{,}000}{\text{Rs. }91{,}00{,}000}$ **= 87.80%**

(b) So, Profit trfd to P&L A/c= $\frac{2}{3}$ × Notional Profit × $\frac{\text{Cash Received}}{\text{Work Certified}} = \frac{2}{3}$ × Rs. 4,19,510 × $\frac{\text{Rs.}71{,}91{,}800}{\text{Rs.}79{,}90{,}000}$ **= Rs. 2,51,706**

2. Balance Sheet as on 31st March (Abstract)

Liabilities	Rs.	**Assets**	Rs.

		Fixed Assets:	
Profit and Loss A/c	2,51,706	**Current Assets:** Contract Work-in-Progress	
(Note: Overall Net Profit of the Company		Work Certified	79,90,000
will be determined after debiting Period		Work Uncertified	3,17,000
Costs, Unallocated HO Costs, Interest, Tax,		Plant (WDV) at Site (See **Note a)**	6,16,000
etc. in the General P&L A/c.)		Materials at Site	85,400
		Sub-Total	90,08,400
Current Liabilities:		**Less:** Reserve Profit (or Profit-in-Reserve)	(1,67,804)
Wages Accrued	78,120	Net-Total	88,40,596
Direct Expenses Accrued	9,310	**Less:** Contractee's Account balance	(71,91,000)
		Net Value of Contract WIP	**16,49,596**
Total		**Total**	

Note:

(a) WDV of Plant at site can also be shown under the heading "Fixed Assets".

(b) The above is only an extract of the Balance Sheet. Hence, Totals are not drawn up.

4. Profit Recognition with Notional Profit, Balance Sheet Abstract - till contract completion

The following information relates to a contract for Rs. 75 Lakhs (Retention Money = 10% of Work Certified

Particulars (in Rs. 000's)	Year 1	Year II	Year III
Materials	9,00	11,00	6,30
Labour	8,50	11,50	8,50
Direct Expenses	35	1,25	45
Indirect Expenses	15	20	-
Work Certified to date	17,50	56,50	75,00
WIP Uncertified at year end	-	1,00	-
Plant issued	1,00	-	-
Value of Plant at year end	80	50	20

Prepare the Contract Accounts for all the three years and show the relevant figures in the Balance Sheet.

Solution: **1. Contract Account for Year I**

Particulars	Rs. 000s	Particulars	Rs. 000s
To Materials	9,00	By Work-In-Progress -Work Certified	17,50
To Labour	8,50	By balance c/d - Plant (WDV) at site	80
To Direct Expenses	35	By Loss c/d - balancing figure	**70**
To Indirect Expenses	15		
To Plant (Cost)	1,00		
Total	**19,00**	**Total**	**19,00**
To Loss b/d	70	By Profit and Loss Account - Loss Transfer	**70**

2. Contract Account for Year II

Particulars	Rs. 000s	Particulars	Rs. 000s
To Work-in-Progress b/d	17,50	By Work-in-Progress	
To balance b/d - Plant (WDV) at site	80	-Work Certified	56,50
To Materials	11,00	-Work Uncertified	1,00
To Labour	11,50	By balance c/d - Plant (WDV) at site	50
To Direct Expenses	1,25		
To Indirect Expenses	20		
To Notional Profit c/d - balancing figure	**15,75**		
Total	**58,00**	**Total**	**58,00**
To Profit and Loss A/c - Profit transfer	9,45	By Notional Profit b/d	15,75
To Reserve Profit c/d - balancing figure	**6,30**		
Total	**15,75**	**Total**	**15,75**

3. Contract Account for Year III

Particulars	Rs. 000s	Particulars	Rs. 000s
To Work-in-Progress b/d	57,50	By Reserve Profit b/d	6,30
To balance b/d Plant (WDV) at site	50	By Contractee's A/c - Contract Price	75,00
To Materials	6,30	By Plant A/c - return to Stores - transfer	20
To Direct Wages	8,50		
To Direct Expenses	45		
To Notional Profit - balancing figure	**8,25**		
Total	**81,50**	**Total**	**81,50**
To Profit and Loss A/c - Profit transfer	7,42.5	By Notional Profit b/d	8,25
To Reserve Profit - balancing figure	**82.5**		
Total	**8,25.0**	**Total**	**8,25**

4. Percentage of Completion and Profit Recognition

Year	I	II	III
(a) %age of Completion = $\frac{\text{Work Certified}}{\text{Contract Price}}$	$\frac{17,50}{75,00}$ **= 23.33%**	$\frac{56,50}{75,00}$ **= 75.33%**	$\frac{75.00}{75.00}$ **= 100.00%**
(b) Notional Profit for that period	Loss 70	15,75	8,25
(c) Profit to be recognized	**Nil** (Loss is to be written off in full)	$\frac{2}{3}$ × 15,75 × 90% = **9,45**	8,25 × 90% = **7,42.50**

5. Balance Sheet at the end of the year (Abstract)

Particulars - Contract Work in Progress	Year I	Year II
Work Certified	17,50	56,50
Work Uncertified	-	1,00
Plant (WDV) at Site	80	50
Materials at Site	-	-
Sub-Total	**18,30**	**58,00**

Less: Reserve Profit	-	6,30
Net Balance	18,30	51,70
Less: Contractee's Account = 90% of Work Certified	15,75	50,85
Net Value of Work in Progress	**2,55**	**85**

In **Year III,** when the Contract is fully complete, the following items will be shown in the Balance Sheet - Assets Side:

(a) Fixed Assets (Plant) = 20, (b) Current Assets (Receivables, i.e. Retention Money) = 7,50 (10% of 75,00).

5. Profit Recognition with Notional Profit - Reverse Working N 09

At the end of first year on 31st March, in the books of ABC Constructions Ltd, the Bridge Contract Account stands debited with the cost of Materials Issued, Labour, Overheads expended and Plant issued and its stands credited with Material at Site Rs. 25,000, Material Returned Rs. 15,000 and Plant at Site Rs. 4,76,000 after charging depreciation at 15%. The Material Issued, Labour, Overheads and Plant issued debited to the Contract Account, are in the ratio of 5 : 4 : 2 : 4. 75% of the Contract had been certified by the Contractee's Architect as completed at the end of the year and 90% of the certified work value had been received in cash Rs. 16,20,000. The Accounts Department informs that 2/3rd of the profit on cash basis credit to Profit and Loss account on the contract is Rs. 2,13,600.

From the above information, prepare -

(a) Bridge Contract A/c showing the cost of work done but uncertified, (b) Work-in-Progress A/c, & (c) Contractee's A/c.

Solution: 1. Contract Account for the year ended 31st March 2009

Particulars	Rs.	Particulars	Rs.
To Materials Issued **(WN 1)**	7,00,000	By Work in Progress A/c	
To Direct Labour **(WN 1)**	5,60,000	- Work Certified $\left(\frac{\text{Rs.}16{,}20{,}000}{90\%}\right)$	18,00,000
To Overheads **(WN 1)**	2,80,000	- Work Uncertified **(balancing figure)**	**1,40,000**
To Plant at Cost $\left(\frac{\text{Rs.}476000}{85\%}\right)$	5,60,000	By Materials at Site (given)	25,000
To Notional Profit **(WN 2)**	3,56,000	By Materials returned (given)	15,000
		By WDV of Plant (given) (after 15% deprn) (i.e. 100% - 15% = 85% of Cost of Plant)	4,76,000
Total	**24,56,000**	**Total**	**24,56,000**
To P & L A/c - transfer (given)	2,13,600	By Notional Profit b/d	3,56,000

To Reserve Profit c/d - balancing figure	**1,42,400**		
Total	**4,19,510**	**Total**	**4,19,510**
To Work-in- Progress b/d (WC+WUC)	19,40,000	By Reserve Profit b/d	1,42,400
To WDV of Plant at site b/d	4,76,000		
To Materials at site b/d	25,000		

WN 1:

Item	Material Issued	Labour	OH	Plant at Cost
Ratio	5	4	2	4
Amount	(Rs. 5,60,000 × 5/4) = Rs. 7,00,000	(Rs. 5,60,000 × 4/4) = Rs. 5,60,000	(Rs. 5,60,000 × 2/4) = Rs. 2,80,000	Rs. 5,60,000 Computed using Deprn Rate & WDV

WN 2: It is given that Profit recognized = $\frac{2}{3}$ × Notional Profit × $\frac{\text{Cash Received}}{\text{Work Certified}}$ = Rs. 2,13,600

So, $\frac{2}{3}$ × Notional Profit × $\frac{\text{Rs.16,20,000}}{\text{Rs.18,00,000}}$ = Rs. 2,13,600. On solving, we have, Notional Profit = Rs. **3,56,000.**

2. WIP Account

Particulars	Rs.	Particulars	Rs.
To Contract A/c - Work Certified	18,00,000		
To Contract A/c - Work Uncertified	1,40,000	By balance c/d	**19,40,000**
Total	**19,40,000**	**Total**	**19,40,000**

3. Contractee's Account

Particulars	Rs.	Particulars	Rs.
To balance c/d	**16,20,000**	By Bank (given)	16,20,000
Total	**16,20,000**	**Total**	**16,20,000**

6. Profit Recognition with Notional Profit - Computing Cost of Work Uncertified N 91, M 12

A Contractor commenced a Contract on 1st July. The Costing Records concerning the said contract reveal the following information as on 31st March (i.e. 9 months from the commencement date) -

Particulars	Rs.

Material sent to Site	7,74,300
Labour Paid	10,79,000
Labour Outstanding as on 31st March (period-end)	1,02,500
Salary to Engineer	20,500 per month
Cost of Plant sent to Site (on Commencement Date: 1st July)	7,71,000
Salary to Supervisor (3/4th time devoted to Contract)	9,000 per month
Administration and Other Expenses	4,60,600
Prepaid Administration Expenses	10,000
Material in Hand at Site as on 31st March (period-end)	75,800

Plant used for the contract has an estimated life of 7 years with residual value at the end of life Rs. 50,000. Some of material costing Rs. 13,500 was found unsuitable and sold for Rs. 10,000. Contract Price was Rs. 45,00,000. On 31st March (period-end), 2/3rd of the contract was completed. The Architect issued Certificate covering 50% of the Contract Price and Contractor has been paid Rs. 20,00,000 on account. Depreciation on Plant is charged on SLM basis. Prepare Contract A/c.

Solution: Note: In this Question, Cost of Work Uncertified is not given. However, Total Work Done is 2/3rd or 65.67%, while extent of certification is 50%. Hence, balance 16.67% constitutes Work Done but not certified. This should be computed on proportionate cost basis in the following manner.

Contract Account for the year ended 31st March

Particulars	Rs.	**Particulars**	Rs.
To Materials	7,74,300	By Cost of Contract c/d **(bal. fig.)**	**26,39,600**
To Labour Charges (Paid + P'ble)	11,81,500	By Materials A/c - Cost of Materials sold	13,500
(10,79,000 + 1,02,500)			
To Engineer's Salary (20,500 × 9)	1,84,500	By Materials c/d	75,800
To Supervisor's Salary (9,000 × ¾ **×** 9)	60,750		
To Administration & Other Expenses	4,50,600		
(4,60,600 - Prepaid 10,000)			
To Deprn (7,71,000 - 50,000) × $\frac{1}{7} \times \frac{9}{12}$)	77,250		*

Total	**27,28,900**	**Total**	**27,28,900**
To Cost of Contract b/d	26,39,600	By Work-in-Progress Account	
		Work Certified **[WN (a)]**	22,50,000
To Notional Profit c/d **(balancing figure)**	**2,70,300**	Work Uncertified **[WN (b)]**	6,59,900
Total	**29,09,900**	**Total**	**29,09,900**
To P & L Account - Profit transfer **[WN (c)]**	80,089	By Notional Profit b/d	2,70,300
To Reserve Profit **(balancing figure)**	**1,90,211**		
Total	**2,70,300**	**Total**	**2,70,300**
To Work-in-Progress b/d (22,50,000 + 6,59,900)	29,09,900	By Reserve Profit	1,90,211
To Materials b/d	75,800		

Note:

(a) Value of Work Certified = Rs. 45 Lakhs × 50% = Rs. 22.50 Lakhs.

(b) Cost of 66.67% work done = Rs. 26,39,600 (as per Contract A/c above)

So, Proportionate Cost of 16.67% work done (i.e. Uncertified Work) = Rs. 26,39,600×-$\frac{16.67\%}{66.67\%}$- = Rs. 6,59,900

(c) Percentage of Completion = $\frac{\text{Work Certified}}{\text{Contract Pr ice}}$ **= 50%** (given)

So, Profit tfrd to P & L A/c = $\frac{1}{3}$ × Notional Profit × $\frac{\text{Cash Received}}{\text{Work Certified}}$ = $\frac{1}{3}$ × 2,70,300 × $\frac{20,00,000}{22,50,000}$ = Rs. 80,089

(d) Loss on Sale of unsuitable material (Rs. 13,500 - Rs. 10,000 = Rs. 3,500) may be directly considered in General P & L A/c. Alternatively, Sale Value may be credited to Contract Account.

7. Contract Account and Final Accounts from Trial Balance

Contractors Ltd began operations on 1st January. During the year, the company was engaged on only one contract at a value of Rs. 4,00,000. Of the Plant and Materials charged to contract, Plant that cost Rs. 5,000 and Materials that cost Rs. 4,000 were lost in an accident.

On 31st December, Plant which cost Rs. 5,000 was returned to store, the cost of work done but uncertified was Rs. 2,000 and materials costing Rs. 4,000 were in hand on site. You are required to charge 10% depreciation on plant and compile Contract Account and Balance Sheet from the following Trial Balance on 31st December -

Particulars	Debit in Rs.	Credit in Rs.
Share Capital		1,20,000

Creditors		10,000
Cash received on Contract (80% of Work Certified)		2,00,000
Land and Building	43,000	
Bank Balance	25,000	
Expenses charged to Contract: Materials	90,000	
Plant	25,000	
Labour	1,40,000	
Expenses	7,000	
Total	3,30,000	3,30,000

Solution: 1. Contract Account for the year ended 31st December

Particulars	Rs.	**Particulars**	Rs.
To Materials Issued 90,000		By Work in Progress A/c	
Less: Lost 4,000	86,000	- Work Certified $\frac{\text{Rs.}2{,}00{,}000}{80\%}$	2,50,000
To Plant Issued 25,000			
Less: Lost 5,000	20,000	- Work Uncertified	2,000
To Labour	1,40,000	By Plant returned (WDV) **(WN a)**	4,500
To Expenses	7,000	By Materials at Site	4,000
To Notional Profit c/d - balancing figure	**21,000**	By Plant (WDV) at Site c/d **(WN a)**	13,500
Total	**2,74,000**	**Total**	**2,74,000**
To Profit & Loss a/c - transfer **(WN c)**	11,200	By Notional Profit b/d	21,000
To Reserve Profit c/d - balancing figure	**9,800**		
Total	**21,000**	**Total**	**21,000**

Notes:

(a) **Depreciation and WDV of Plant:**

• **Cost** of Plant at Site = Plant Issued 25,000 **Less:** Lost 5,000, **Less:** Returned 5,000. Hence = **Rs. 15,000.**

• **Depreciation:** on Plant Returned = 5,000 × 10% = Rs. **500,** on Plant at site = 15,000 × 10% = Rs. **1,500.**

• **WDV:** Plant Returned = 5,000 less 500 = Rs. **4,500,** Plant at Site = 15,000 less 1,500 = Rs. **13,500**

(b) Percentage of Completion = $\frac{\text{Work Certified}}{\text{Contract Price}} = \frac{\text{Rs.}2,50,000}{\text{Rs.}4,00,000}$ **= 62.5%**

(c) So, Profit transferred to P&L A/c= $\frac{2}{3}$ × Notional Profit × $\frac{\text{Cash Received}}{\text{Work Certified}} = \frac{2}{3}$ × Rs. 21,000 × $\frac{\text{Rs.}2,00,000}{\text{Rs.}2,50,000}$ = Rs. **11,200**

2. Profit and Loss Account

Particulars		Rs.	**Particulars**	Rs.
To Abnormal Loss - Plant	5,000		By Contract Account - Profit b/fd	11,200
- Materials	4.000	9,000		
To Net Profit c/d		2,200		
Total		**11,200**	**Total**	**11,200**

3. Computation of Value of Contract Work in Progress for B/s purposes

	Particulars	Rs.
	Work Certified	2,50,000
	Work Uncertified	2,000
	Particulars	Rs.
	Plant (WDV) at Site	13,500
	Materials at Site	4,000
	Sub-Total	**2,69,500**
Less:	Reserve Profit	(9,800)
	Net Balance	**2,59,700**
Less:	Contractee's Account balance	(2,00,000)
	Net Value of Work in Progress	**59,700**

4. Balance Sheet as at 31st December

Liabilities	Rs.	**Assets**	Rs.
Share Capital	1,20,000	Land and Building	43,000
Reserves and Surplus: P & L A/c	2,200	Plant (at Stores)	4,500

Current Liabilities: Sundry Creditors	10,000	Contract Work-in-Progress (as per WN above)	59,700
		Bank Balance	25,000
Total	**1,32,200**	**Total**	**1,32,200**

8. Profit Recognition, Columnar Accounts RTP

Dream House (P) Ltd is engaged in building two Residential Housing Projects in the city, with particulars as under-

Amount in Rs.	HP-1	HP-2
Work in Progress on 1st April (year beginning)	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 (year end)	12,000	8,400
Donation paid to Local Clubs	5,000	2,500
Plant Hire Charges paid for three years effecting from 1st April (year beginning)	72,000	57,000
Value of Materials at Site as on 31st March (year end)	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 (year beginning)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, the Contractee shall retain 20% of Work Certified as Retention Money.

Prepare Contract A/c for the two Housing Projects showing the Profit or Loss on each project for the year ended 31st March.

Solution: Contract Account for the year ended 31st March (Amounts in Rs.)

Particulars	**HP-1**	**HP-2**	**Particulars**	**HP-1**	**HP-2**
To WIP b/d	7,80,000	2,80,000	By WIP:		
To Material purchased	6,20,000	8,10,000	Value of Work Certified	20,50,000	16,10,000

To Wages: (Rs. 85,000 + Rs. 12,000)	97,000		Cost of Work Uncertified	1,90,000	1,40,000
(Rs. 62,000 + Rs. 8,400)		70,400	By Material at site c/d	47,000	52,000
To Donation to Local Club **(Note 1)**	5,000	2,500			
To Plant Hire Charges:					
(Rs. 72,000x1/3) and (Rs. 57,000×1/3)	24,000	19,000			
To Deprn on Concrete Mixture M/c:					
(Rs. 8,20,000 × 15% × 180/365)	60,658				
(Rs. 8,20,000 × 15% × 100/365)		33,699			
To Notional Profit (balancing figure)	**7,00,342**	**5,86,401**			
Total	**22,87,000**	**18,02,000**	**Total**	**22,87,000**	**18,02,000**
To P & L A/c **(Note 3)**	1,86,758	1,56,374	By Notional Profit b/d	7,00,342	5,86,401
To Reserve Profit c/d (bal. fig.)	**5,13,584**	**4,30,027**			
Total	**7,00,342**	**5,86,401**	**Total**	**7,00,342**	**5,86,401**

Note:

1. Donation paid to Local Club is assumed as exclusively for the above projects, hence included in the Contract Account.

2. Percentage of Completion = $\frac{\text{Work Certified}}{\text{Contract Price}}$: HP-1= $\frac{20,50,000}{48,00,000}$ **= 42.71%** HP-2 = $\frac{16,10,000}{36,00,000}$ **= 44.72%**

3. Profit to be recognized in P&L A/c = $\frac{1}{3}$ × Notional Profit × $\frac{\text{Cash Received}}{\text{Work Certified}}$

HP-1: $\frac{1}{3}$ × 7,00,342 × 80% = Rs. **1,86,758** HP-2: $\frac{1}{3}$ × 5,86,401 × 80% = Rs. **1,56,374**

2. Escalation Clause

9. Escalation Clause with multiple restrictions f ceiling limits A Contract contained an Escalation Clause for the following items of Cost as under -

• Material X: 40% of the Cost above 12.5% of Normal Price Levels.

• Material Y: 50% of the Cost above 15% of Normal Price Levels, restricted to an amount of Rs. 50,000.

• Material Z: 50% of the Cost above 10% of Normal Price Levels, restricted to an amount of Rs. 75,000.

• Labour: 20% of the Cost above 10% of Normal Wage Rate Levels.

It is to be noted that the Proviso to the above Escalation Clause stipulates that the any amount of Escalation Claim in excess of Rs. 1,50,000 shall be ignored.

The Contractor submits audited Statements towards the following Costs at Normal and Actual Price Levels. Compute the amount of Escalation Claim in this case.

Particulars	Cost at Normal Levels (Rs.)	Actual Cost Incurred (Rs.)
Material X	3,00,000	3,80,000
Material Y	4,00,000	5,80,000
Material Z	9,00,000	11,50,000
Labour	12,00,000	14,50,000

Solution: Escalation Claim is as under -

Particulars	**Computation**	**Escalation Claim**
Material X	40% × [Rs. 3,80,000 - (Rs. 3,00,000 × 112.5%)]	Rs. 17,000
Material Y	50% × [Rs. 5,80,000 - (Rs. 4,00,000 × 115.0%)]	Rs. 60,000 restricted to Rs. 50,000
Material Z	50% × [Rs. 11,50,000 - (Rs. 9,00,000 × 110.0%)]	Rs. 80,000 restricted to Rs. 75,000
Labour	20% × [Rs. 14,50,000 - (Rs. 12,00,000 × 110.0%)]	Rs. 26,000
	Total	Rs. 1,68,000 restricted to Rs. **1,50,000**

10. Columnar Contract Accounts - Notional Profit - Escalation Clause

British Contractors Ltd undertook three contracts in a year - the first on 1st January, second on 1st July and third on 1st October. On 31st December, when their accounts were made up, the position was as follows -

Contract		1	2	3
Contract Price		2,00,000	1,35,000	1,50,000
Expenditure:	Materials	39,400	29,000	10,000
	Wages	63,250	56,200	7,000
	General Expenses	2,000	1,400	500

Plant installed	10,000	8,000	6,000
Materials on hand	2,000	2,000	1,000
Wages accrued	1,725	1,800	800
General Expenses accrued	300	200	100
Work Certified	1,20,000	80,000	18,000
Cash Received in respect thereof	90,000	60,000	13,500
Work finished but uncertified	3,000	4,000	1,050

Contract 1 had been negotiated two years back with an escalation clause providing that should Material Prices and Wage Rates increase by more than 2.5%, the Contractee would increase the Contract Price by 20% of the rise in the cost of materials and 40% of the rise in the wage rates beyond 2.5% in each case.

It is agreed that since the signing of the agreement the Material Prices had gone up by 10% and Wage Rates by 15%, the value of Work Certified does not take into account the effect of the escalation clause.

The Plant was installed on the dates of the contracts and depreciation is taken at 10% per annum. Prepare the respective accounts in the Contract Ledger and give suitable entries in the Company's Balance Sheet.

Solution: 1. Computation of Escalation Claim (Note: Escalation Clause is applicable only for Contract No.1)

(a) Materials

	No claim		**Escalation Claim** = **20% of this difference**	
Level of Cost	**Normal Cost** = 100%	**Permissible Cost** = Normal +2.5%=102.5%		**Actual Cost** Given = 110%
Materials	Rs. 37,400 × $\frac{100}{110}$	Rs. 34,000 + 2.5% =	Escalation Claim = 20% of (37,400 - 34,850)	Materials Consumed = Purchases **less** Closing Stock = Rs. 39,400 - Rs. 2,000
	= Rs. **34,000**	**Rs. 34,850**	= **Rs.510**	= Rs. **37,400**

(b)Labour

		No claim	Escalation Claim = 40% of this difference	
Level of Cost	**Normal Cost** = 100%	**Permissible Cost** = Normal +2.5%= 102.5%		**Actual Cost** Given = 115%
	Rs. 64,975 $\times \frac{100}{115}$	Rs. 56,500 + 2.5% =	Escalation Claim = 40% of (64,975 - 57,912.50)	Wages incurred= Paid + P'ble = Rs. 63,250 + Rs. 1,725
Labour	= Rs. **56,500**	**Rs. 57,912.50**	= Rs. **2,825**	= Rs. **64,975**

2. Computation of Depreciation on Plant used

Contract Number	1	2	3
(a) Value of Plant (Rs.)	Rs. 10,000	Rs. 8,000	Rs. 6,000
(b) Period of use	1st Jan to 31st Dec = 12 mths	1st July to 31st Dec. = 6 mths	1st Oct to 31st Dec. = 3 mths
(c) Depreciation at 10% p.a	**Rs. 1,000**	**Rs. 400**	**Rs. 150**

3. Contract Account for the year ended 31st December

Particulars	1	2	3	Total	Particulars	1	2	3	Total
To Materials	39400	29000	10000	78400	By WIP a/c				
To Wages					-Work Certified	120000	80000	18000	218000
- Paid	63250	56200	7000	126450	-Work Uncertified	3000	4000	1050	8050
- Payable	1725	1800	800	4325	By Contractee's	3335	-	-	3335
To Gen Exps					a/c - Escalation	**(Note)**			
- Paid	2000	1400	500	3900	By balance				

					c/d				
- Payable	300	200	100	600	Materials	2000	2000	1000	5000
To Depreciation	1000	400	150	1550	By Loss c/d	-	3000	-	3000
To Notional Pft	20660	-	1500	22160					
Total	**128335**	**89000**	**20050**	**237385**	**Total**	**128335**	**89000**	**20050**	**237385**
To Loss b/d	-	3000	-	3000	By Notional Pft b/d	20660	-	1500	22160
To P&L - tfr	10330	-	-	10330	By P & L- tfr	-	3000	-	3000
To Reserve Pft	10330	Nil	1500	11830					
Total	**20660**	**3000**	**1500**	**25160**	**Total**	**20660**	**3000**	**1500**	**25160**
To WIP b/d	123000	84000	19050	22050	By Reserve	10330	Nil	1500	11830
To Matls b/d	2000	2000	1000	5000	Profit b/d				

Journal Entry for recording the Escalation Claim of Rs. 510 + Rs. 2,825 = Rs. **3,335 (See Workings above)**

Contractee's Account Dr. 3,335

To Contract Account 3,335

4. Profit Recognition

Contract Number	1	2	3
(a) Notional Profit [as per Contract A/c]	20,660	(3,000)	1,500
(b) % of completion = $\frac{\text{Work Certified}}{\text{Contract Price}}$	60%	59%	12%
(c) Profit Recognised	$\frac{2}{3} \times$ 20,660 × 75% = 10,330	(3,000) Loss fully written off	Less than 25% complete, so ignored.

5. WIP to be displayed in Balance Sheet

Contract Number	1	2	3
Work Certified	1,20,000	80,000	18,000
Work Uncertified	3,000	4,000	1,050

	Materials at Site	2,000	2,000	1,000
Less:	Reserve Profit	(10,330)	Nil	(1,500)
Less:	Contractee's A/c (90,000 - Esc. Claim 3,335)	(86,665)	(60,000)	(13,500)
	Net Value of WIP	**28,005**	**26,000**	**5,050**

Note: Cash received on account should not be merely subtracted to arrive at the net WIP value. Where Escalation Claim

is recorded by a Journal Entry, the net balance in the Contractee's A/c should be considered.

3. Profit Recognition using Notional Profit & ETP

11. Profit Recognition - Conservatism M 98, N 07, N 12, RTP

The following particulars relate to a contract which is 80% complete -

Particulars	Rs.	Particulars	Rs.
Total Expenditure to date	8.50.000	Work Certified	10,00,000
Estimate further expenditure to complete the Contract	1.70.000	Work not certified	85,000
Contract Price	15,30,000	Cash received	8,16,000

1. Compute a Conservative Estimate of Profit to be recognised, using appropriate methods.

2. What would be the Estimated Profit from the Contract, if the Contractor has come to know that the Contractee has liquidity crunch and it is not able to pay further payments?

3. What is the amount of loss to be provided for, if the total expenditure till date were Rs. 11,30,000 and the estimated further expenditure is Rs. 7,00,000? All other data in Part (1) remains unchanged.

Solution: **1.Profit Recognition with given data**

1. Percentage of Completion	$= \frac{\text{Work Certified}}{\text{Contract Price}} = \frac{\text{Rs.10,00,000}}{\text{Rs.15,30,000}}$	**65.36%**
2. Current Year Profit	= Income till date (i.e. WC + WUC) less Expenditure till date = (Rs. 10,00,000 + Rs. 85,000) - Rs. 8,50,000	**Rs. 2,35,000**
3. Estimated Total Profit (ETP)	= Contract Price less Estimated Total Costs = Rs. 15,30,000 - (Rs. 8,50,000 Rs. 1,70,000)	= **Rs. 5,10,000**
4. Profit to be transferred to P&L	= Least of the following (a) to (f)	**Rs. 1,27,840**

(a) Estimated Total Profit × $\frac{\text{Work Certified}}{\text{Contract Price}}$ = Rs. 5,10,000 × $\frac{\text{Rs.10,00,000}}{\text{Rs.15,30,000}}$ **= Rs. 3,33,333**

(b) Estimated Total Profit × $\frac{\text{Work Certified}}{\text{Contract Price}}$ × $\frac{\text{Cash Received}}{\text{Work Certified}}$ = Rs. 5,10,000 × $\frac{\text{Rs.10,00,000}}{\text{Rs.15,30,000}}$ × $\frac{\text{Rs.8,16,000}}{\text{Rs.10,00,000}}$ **= Rs. 2,72,000**

(c) Estimated Total Profit × $\frac{\text{Cost till date}}{\text{Estimated Total Costs}}$ = Rs. 5,10,000 × $\frac{\text{Rs.8,50,000}}{\text{Rs.10,20,000}}$ **= Rs. 4,25,000**

(d) Estimated Total Profit× $\frac{\text{Cost till date}}{\text{Estimated Total Costs}}$ × $\frac{\text{Cash Received}}{\text{Work Certified}}$ =Rs. 5,10,000× $\frac{\text{Rs.8,50,000}}{\text{Rs.10,20,000}}$ × $\frac{\text{Rs.8,16,000}}{\text{Rs.10,00,000}}$ **= Rs. 3,46,800**

(e) Notional Profit × $\frac{\text{Work Certified}}{\text{Contract Price}}$ = Rs. 2,35,000 × $\frac{\text{Rs.10,00,000}}{\text{Rs.15,30,000}}$ **= Rs. 1,53,595**

(f) $\frac{2}{3}$ × Notional Profit × $\frac{\text{Cash Received}}{\text{Work Certified}}$ = $\frac{2}{3}$ × Rs. 2,35,000 × $\frac{\text{Rs.8,16,000}}{\text{Rs.10,00,000}}$ **= Rs.1,27,840**

2.Effect of Liquidity Crunch of Contractee

When the Contractor comes to know that the Contractee is having liquidity crunch and may not be able to pay further cash payment, using Conservatism / Prudence, the Loss should be recognized immediately.

Loss = Income till date (Cash received) **less** Expenditure till date = Rs. 8,16,000 - Rs. 8,50,000 = **Loss** (Rs. **34,000)**

3.Effect of Change in Future Costs

1. Percentage of Completion	(as above)	**65.36%**
2. Current Year Profit	= Income till date (i.e. WC + WUC) **less** Expenditure till date = (Rs. 10,00,000 + Rs. 85,000) - Rs. 11,30,000	**Loss** (Rs. **45,000)**
3. Estimated Total Profit (ETP)	= Contract Price **less** Estimated Total Costs = Rs. 15,30,000 - (Rs. 11,30,000 + Rs. 7,00,000)	**Loss** (Rs. **3,00,000)**
4. Loss to be transferred to P&L	= Current Loss or Estimated Total Loss, whichever is **worse**	**Loss** (Rs. **3,00,000)**

12. Notional Profit and Estimated Total Profits - Profit Recognition N 08

A Contract expected to be completed in Year 4, exhibits the following information - (information in Rs.)

End of Year	Value of Work Certified	Cost of work to date	Cost of work not yet certified	Cash received
1	0	50,000	50,000	0
2	3,00,000	2,30,000	10,000	2,75,000
3	8,00,000	6,60,000	20,000	7,50,000

The Contract Price is Rs. 10,00,000 and the estimated profit is 20%. You are required to calculate, how much profit should have been credited to the Profit and Loss A/c by the end of years 1,2 and 3.

Solution:

Particulars	**Year 1**	**Year 2**	**Year 3**
1. Income: (a) Work Certified (b) Work Uncertified	Nil 50,000	3,00,000 10,000	8,00,000 20,000
Total Income	**50,000**	**3,10,000**	**8,20,000**
2. Cost of work till date	50,000	2,30,000	6,60,000
3. Notional Profit (1-2)	**Nil**	**80,000**	**1,60,000**
„ ∩/ . .. Work Certified 4. % of Completion = Contract Price	Nil	$\frac{\text{Rs.3,00,000}}{\text{Rs.10,00,000}}$ **= 30%**	Rs. 8,00,000 Rs. 10,00,000 = 80%
5. Transfer to P&L A/c (based on Notional Profit formula) **(Note:** Since question specifies Estimated Total Profit=20%, i.e. Rs.2,00,000, ETP can also be used for Profit Recognition.)	Nil	$\frac{1}{3}$ × Notional Pft× $\frac{\text{Cash Received}}{\text{Work Certified}}$ $=\frac{1}{3}$× Rs. 80,000 ×$\frac{\text{Rs.2,75,000}}{\text{Rs.3,00,000}}$ = Rs. **24,444**	$\frac{2}{3}$ ×Notional Pft× $\frac{\text{Cash Received}}{\text{Work Certified}}$ $=\frac{2}{3}$× 1,60,000×$\frac{\text{Rs.7,50,000}}{\text{Rs.8,00,000}}$ = Rs. **1,00,000**

Profit Recognition based on alternative formulae will be as under - (ETP and Notional Profit in Rs. Lakhs)

Formula	**Year 2**	**Year 3**
(a) ETP × $\frac{\text{Work Certified}}{\text{Contract Price}}$	$= 2.00 \times \frac{3.00}{10.00} =$ Rs. **60,000**	$= 2.00 \times \frac{8.00}{10.00} =$ Rs. **1,60,000**
(b) ETP × $\frac{\text{Work Certified}}{\text{Contract Price}} \times \frac{\text{Cash Received}}{\text{Work Certified}}$	$= 2.00 \times \frac{3.00}{10.00} \times \frac{2.75}{3.00}$ = Rs. **55,000**	$= 2.00 \times \frac{8.00}{10.00} \times \frac{7.50}{8.00}$ = Rs. **1,50,000**
(c) ETP × $\frac{\text{Cost till date}}{\text{Estimated Total Costs}}$	$= 2.00 \times \frac{2.30}{8.00} =$ Rs. **57,500**	$= 2.00 \times \frac{6.60}{8.00} =$ Rs. **1,65,500**
(d) ETP × $\frac{\text{Cost till date}}{\text{Estimated Total Costs}} \times \frac{\text{Cash Received}}{\text{Work Certified}}$	$= 2.00 \times \frac{2.30}{8.00} \times \frac{2.75}{3.00}$ = Rs. **52,708**	$= 2.00 \times \frac{6.60}{8.00} \times \frac{2.75}{3.00}$ = Rs. **1,51,250**

(e)	National Profit × $\frac{\text{Work Certified}}{\text{Contract Price}}$	= 0.80 ×$\frac{3.00}{10.00}$ = Rs. **24,000**	= 1.60 × $\frac{8.00}{10.00}$ = Rs. **1,28,000**

The least amount of Profits may be transferred to P&L A/c based on Notional Profits, on prudence / conservatism basis.

13. Notional Profit and Estimated Total Profits - Profit Recognition RTP, M 01, M 02

Paramount Engineers are engaged in construction and erection of a bridge under a long-term contract. The cost incurred upto 31st March was as under:

Fabrication Costs:	Direct Materials	Rs. 280 Lakhs
	Direct Labour	Rs. 100 Lakhs
	Overheads	Rs. 60 Lakhs
	Total Fabrication Costs	Rs. 440 Lakhs
Add:	Erection Costs	Rs. 110 Lakhs
	Total Costs to date	Rs. 550 Lakhs

The Contract Price is Rs. 11 Crores and the cash received on account till 31st March was Rs. 6 Crores. Work Certified till 31st March was however Rs. 6.80 Crores.

A technical estimate of the contract indicate the following degree of completion of work - Fabrication: Direct Material - 70%, Direct Labour and Overheads - 60%. Erection - 40%.

Estimate the profit that could be taken to Profit & Loss A/c against this partly completed contract as at 31st March.

Solution: **1. Statement of Current &. Total Profits (in Rs. Lakhs)**

Particulars	Till Date	Total
A. Income	(Work Certified) **680.00**	(Contract Price) = **1,100.00**
B. Expenditure Fabrication: Materials	280.00	$\frac{280.00}{70\%}$ = 400.00
Labour	100.00	$\frac{100.00}{60\%}$ = 166.67
Overheads	60.00	$\frac{60.00}{60\%}$ = 100.00
Erection	110.00	$\frac{110.00}{40\%}$ = 275.00
Sub-Total	**550.00**	**941.67**
C. Profit (A - B)	Notional Profit = **130.00**	Estimated Total Profit = **158.33**

2. Computation of Profit to be transferred to P&L A/c

A. Percentage of Completion	$= \frac{\text{Work Certified}}{\text{Contract Price}} = \frac{680.00}{1{,}100.00}$	**= 61.82 %**
B. Profit to be transferred to P&L	**= Least** of the following (a) to (f)	**Rs. 76.47 Lakhs**

(a) Estimated Total Profit × $\frac{\text{Work Certified}}{\text{Contract Price}}$ = 158.33 × $\frac{680.00}{1{,}100.00}$ **= 97.88**

(b) Estimated Total Profit × $\frac{\text{Work Certified}}{\text{Contract Price}} \times \frac{\text{Cash Received}}{\text{Work Certified}}$ = 158.33 × $\frac{680.00}{1{,}100.00} \times \frac{600.00}{680.00}$ **= 86.37**

(c) Estimated Total Profit × $\frac{\text{Cost till date}}{\text{Estimated Total Costs}}$ = 158.33 × $\frac{550.00}{941.67}$ **= 92.48**

(d) Estimated Total Profit × $\frac{\text{Cost till date}}{\text{Estimated Total Costs}} \times \frac{\text{Cash Received}}{\text{Work Certified}}$ = 158.33 × $\frac{550.00}{941.67} \times \frac{600.00}{680.00}$ **= 81.60**

(e) Notional Profit × $\frac{\text{Work Certified}}{\text{Contract Price}}$ = 130.00 × $\frac{680.00}{1{,}100.00}$ **= 80.36**

(f) $\frac{2}{3}$ × Notional Profit × $\frac{\text{Cash Received}}{\text{Work Certified}} = \frac{2}{3}$ **×** 130.00 × 3 $\frac{600.00}{680.00}$ **= 76.47**

Observation: Least of the above is Rs. 76.47 Lakhs (6^{th} formula listed above). Hence, **Profit recognised** on prudence basis is Rs. **76.47 Lakhs.** The balance Reserve Profit is (Rs. 130.00 - Rs. 76.47) = Rs. **53.53 Lakhs.**

14. Estimation of Total Profit and Profit Recognition N 95

Supreme Constructions are engaged in building contracts. One of their contracts commenced 15 months ago remains unfinished. The following information relating to the contract has been prepared for the year just ended -

Particulars		Rs. 000s
Contract Price		2,500
Value of Work Certified at the end of the year		2,200
Cost of work not yet certified at the end of year		40
Opening Balances:	Cost of work completed	300
	Materials on Site (Physical Stock)	10
During the year:	Materials delivered to site	610
	Wages	580
	Hire of Plant	110
	Other Expenses	90
Closing Balance:	Materials on Site (Physical Stock)	20

As soon as materials are delivered to the site, they are charged to the Contract Account. A record is also kept of materials as they are actually used on the contract. Periodically a stock check is made and any discrepancy between Book Stock and Physical Stock is transferred to a general "Contract Material Discrepancy" Account. This is absorbed back to each Contract, currently at the rate of 0.5% of Materials booked. The stock check at the year-end revealed a Stock Shortage of Rs. 5,000.

In addition to Direct Charges listed above, general OH are charged to contracts at 5% of value of Work Certified. General OH of Rs. 15,000 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. 2,20,000. This estimate included the cost of materials on site at the end of the year just finished and also a provision for rectification.

Required:

1. Determine the profitability of the above contract and recommend how much profit (to the nearest Rs. 000s) should be taken for the year just ended.

2. State how your recommendation in (1) would be affected if the Contract Price was Rs. 40 Lakhs (rather than Rs. 25 Lakhs) and if no estimate has been made of costs to completion. Assume Retention Money = 20%.

Solution: 1**. Contract Account**

Particulars	**Rs. 000s**	**Particulars**	**Rs. 000s**
To Work-in-Progress b/d	3,00	By Work-in-Progress A/c	
To Materials b/d	10	- Work Certified	22,00
To Materials Issued	6,10	- Work Uncertified	40
To Wages	5,80	By Contract Material Discrepancy A/c -	5
To Plant Hire Charges	1,10	- Shortage Transfer	
To Other Expenses	90	By balance c/d - Materials	20
To Contract Material Discrepancy A/c -	3		
absorbed at 0.5% of (10 + 610 - 20)			
To General OH (5% of 2,200 less 15)	95		
To Notional Profit c/d - balancing figure	**4,67**		
Total	**22,65**	**Total**	**22,65**
To P&L A/c - Profit transfer **(See Note 2)**	4,11	By Notional Profit b/d	4,67
To Reserve c/d - balancing figure	**56**		
Total	**4,67**	**Total**	**4,67**
To Work-in-Progress b/d	22,40	By Reserve Profit b/d	56
To Materials b/d	20		

2. Recognition of Profit on Prudence basis (in Rs. 000s)

A. Percentage of Completion	$\frac{\text{Work Certified}}{\text{Contract Price}} = \frac{22{,}00}{25{,}00}$	**= 88%**
B. Current Year Profit	= as per Contract A/c above	4,67
C. Cost till date	= as per Contract A/c above = WC + WUC - Notional Profit = 22,00 + 40 - 4,67	17,73
D. Estimated Total Profit (ETP)	Contract Price 25,00 **Less:** Estimated Total Costs (a) Cost till date (17,73) (b) Further Costs given (2,00)	5,07
E. Profit to be transferred to P&L	**= Least** of the following (a) to (c)	**4,11**

(a) Estimated Total Profit × $\frac{\text{Work Certified}}{\text{Contract Price}}$ = 5,07 × $\frac{22{,}00}{25{,}00}$ **= 4,46**

(b) Estimated Total Profit × $\frac{\text{Cost till date}}{\text{Estimated Total Costs}}$ = 5,07 × $\frac{17{,}73}{19{,}93}$ **= 4,51**

(c) Notional Profit × $\frac{\text{Work Certified}}{\text{Contract Price}}$ = 4,67 × $\frac{22{,}00}{25{,}00}$ **= 4,11**

Note: Only these formulae are used, since percentage of payment is not given for Part (1) of the question.

3. Answer to Part (2) of the Question

• If Contract Price were Rs. 40 Lakhs, Percentage of Completion = $\frac{\text{Work Certified}}{\text{Contract Price}}$ = $\frac{22{,}00}{40{,}00}$ **= 55%.**

• Here, Profit Recognition will be based on Notional Profit only, (since it is given that no estimate of the costs of completion has been made).

• Profit to be recognised = $\frac{2}{3}$ × Notional Profit × $\frac{\text{Cash Received}}{\text{Work Certified}}$

= $\frac{2}{3}$ × 4,67 × 80% **= 2,49.**

15. Estimation of Profit and Profit Recognition N 99

A Contractor had commenced a Building Contract on October 1 last year, for a value of Rs. 4.4 Lakhs. The following data pertaining to the contract for this year has been compiled from his books and is as under -

Beginning: 1st April	Work-in-Progress not certified	55,000
	Materials at Site	2,000
Expenses incurred during the year:	Materials issued	1,12,000
	Wages Paid	1,08,000
	Hire of Plant	20,000

	Other Expenses	34,000
End: 31st March	Materials at Site	4,000
	Work-in-Progress: Not Certified	8,000
	Work-in-Progress: Certified	4,05,000

The cash received represents 80% of work certified. It has been estimated that further costs to complete the contract will be Rs. 23,000 including the materials at site as on 31st March. From the above, you are required to determine the profit on the contract for the year on prudent basis, which has to be credited to PIL A/c.

Solution: **Contract Account for the year ending 31st March**

Particulars	Rs.	Particulars	Rs.
To Work-in-Progress not certified b/d	55,000		
To Materials at Site b/d	2,000		
To Materials Issued	1,12,000		
To Wages Paid	1,08,000	By Materials at Site (given)	4,000
To Hire of Plant	20,000		
To Other Expenses	34,000	By Cost of Contract till date c/d (bal. figure)	**3,27,000**
Total	**3,31,000**	**Total**	**3,31,000**
To Cost of Contract till date b/d	3,27,000	By Work-in-Progress A/c	
		- Work Certified	4,05,000
To Notional Profit c/d (balancing figure)	86,000	- Work Uncertified	8,000
Total	**4,13,000**	**Total**	**4,13,000**
To P & L A/c - Profit tfr (See **Note** below)	45,867	By Notional Profit b/d	86,000
To Reserve Profit c/d (balancing figure)	**40,133**		
Total	86,000	**Total**	86,000
To Work-in-Progress b/d (WC + WUC)	4,13,000	By Reserve Profit b/d	40,133
To Materials at Site b/d	4,000		

Note: Computation of Profit to be transferred to P&L

1. Percentage of Completion	$\frac{\text{Work Certified}}{\text{Contract Price}} = \frac{\text{Rs.4,05,000}}{\text{Rs.4,40,000}}$	**= 92.05%**
2. Current Year Profit	= as computed above in Contract A/c	**= Rs.** 86,000
3. Estimated Total Profit (ETP)	= Contract Price **less** Estimated Total Costs = Contract Price **less** (Cost till date + Costs to be incurred) = Rs. 4,40,000 - (Rs. 3,27,000 + Rs. 23,000)	= Rs. **90,000**
4. Profit to be transferred to P&L	= **Least** of the following (a) to (f)	**Rs. 25,568**

Least of the following is transferred to P&L A/c (on prudence / conservatism basis) -

(a) Estimated Total Profit × $\frac{\text{Work Certified}}{\text{Contract Price}}$ = Rs. 90,000 × $\frac{\text{Rs.4,05,000}}{\text{Rs.4,40,000}}$ **= Rs. 82,841**

(b) Estimated Total Profit × $\frac{\text{Work Certified}}{\text{Contract Price}} \times \frac{\text{Cash Received}}{\text{Work Certified}}$ = Rs. 90,000 × $\frac{\text{Rs.4,05,000}}{\text{Rs.4,40,000}} \times \frac{\text{Rs.3,24,000}}{\text{Rs.4,05,000}}$ **= Rs. 66,273**

(c) Estimated Total Profit × $\frac{\text{Cost till date}}{\text{Estimated Total Costs}}$ = Rs. 90,000 × $\frac{\text{Rs.3,27,000}}{\text{Rs.3,50,000}}$ **= Rs. 84,086**

(d) Estimated Total Profit× $\frac{\text{Cost till date}}{\text{Estimated Total Costs}} \times \frac{\text{Cash Received}}{\text{Work Certified}}$ = Rs. 90,000 × $\frac{\text{Rs.3,27,000}}{\text{Rs.3,50,000}} \times \frac{\text{Rs.3,24,000}}{\text{Rs.4,05,000}}$ **= Rs. 67,269**

(e) Notional Profit × $\frac{\text{Work Certified}}{\text{Contract Price}}$ = Rs. 86,000 × $\frac{\text{Rs.4,05,000}}{\text{Rs.4,40,000}}$ **= Rs. 79,159**

(f) $\frac{2}{3}$ × Notional Profit × $\frac{\text{Cash Received}}{\text{Work Certified}}$ = $\frac{2}{3}$ × Rs. 86,000 × $\frac{\text{Rs.3,24,000}}{\text{Rs.4,05,000}}$ **= Rs. 45,867**

16. Notional Profit and Estimated Total Profits - Profit Recognition RTP

The following details are available relating to a contract nearing completion on 31st March: in Rs.

Contract Price		1,20,00,000
Value of Work Certified	[Cash Received = 90% of Work Certified]	1,10,00,000
Work in Progress (Work Certified) 1st April (beginning)		67,00,000
Work in Progress (Profit in Reserve) 1st April (beginning)		11,50,000
Cost incurred during the year:	Materials	10,50,000
	Labour	9,75,000

	Other Expenses	7,75,000
Plant and Equipment:	Net Book Value 1st April (beginning)	7,00,000
	Net Book Value 31st March (end)	1,75,000
	Purchases during the year	1,25,000
Cost of work not yet certified		8,00,000

It is estimated that additional costs of Rs. 4,00,000 will be incurred to complete the contract, including contingencies. It is further considered that the Plant and Equipment on Site will be worthless by the time the contract is completed.

The Directors of the Company propose to recognize Rs. 24 Lakhs as Profit for the year just ended.

You are required to prepare a Contract Account and indicate whether you agree with the Directors' proposal.

Solution: **1. Contract Account for the year ended 31st March**

Particulars	Rs. 000s	Particulars	Rs. 000s
To Work-in-Progress b/d	67,00	By Reserve Profit b/d	11,50
To Plant b/d	7,00	By Work-in-Progress A/c	
To Materials	10,50	- Work Certified	1,10,00
To Labour	9,75	- Work Uncertified	8,00
To Other Expenses	7,75	By Plant c/d	1,75
To Plant Issued	1,25		
To Notional Profit c/d - balancing figure	28,00		
Total	**1,31,25**	**Total**	**1,31,25**
To P&L A/c - Profit transfer (See Note 2)	16,80	By Notional Profit b/d	28,00
To Reserve Profit c/d	11,20		
Total	**28,00**	**Total**	**28,00**
To Work-in-Progress b/d	1,18,00	By Reserve Profit b/d	11,20
To Plant b/d	1,75		

2. Recognition of Profit on Prudence basis (in Rs. 000s)

A. Percentage of Completion	$= \frac{\text{Work Certified}}{\text{Contract Price}} = \frac{1{,}10{,}00}{1{,}20{,}00}$	**= 91.67%**
B. Current Year Profit	= as per Contract A/c above	28,00
C. Cost till date	= as per Contract A/c above = WC + WUC - Notional Profit = 1,10,00 + 8,00 - 28,00	90,00
D. Estimated Total Profit (ETP)	Contract Price 1,20,00 **Less:** Estimated Total Costs (a) Cost till date (90,00) (b) Further Costs given (4,00) (c) Further Depreciation given (1,75)	24,25
E. Profit to be transferred to P&L	**= Least** of the following (a) to (f)	**16,80**

(a) Estimated Total Profit × $\frac{\text{Work Certified}}{\text{Contract Price}}$ = 24,25 × $\frac{1{,}10{,}00}{1{,}20{,}00}$ **= 22,23**

(b) Estimated Total Profit × $\frac{\text{Work Certified}}{\text{Contract Price}} \times \frac{\text{Cash Received}}{\text{Work Certified}}$ = 24,25 × $\frac{1{,}10{,}00}{1{,}20{,}00} \times \frac{99.00}{1.10.00}$ = 20,00

(c) Estimated Total Profit × $\frac{\text{Cost till date}}{\text{Estimated Total Costs}}$ 24,25 × $\frac{90{,}00}{95{,}75}$ **= 22,79**

(d) Estimated Total Profit × $\frac{\text{Cost till date}}{\text{Estimated Total Costs}} \times \frac{\text{Cash Received}}{\text{Work Certified}}$ = 24,25 × $\frac{90{,}00}{95{,}75} \times \frac{99.00}{1.10.00}$ **= 20,51**

(e) Notional Profit × $\frac{\text{Work Certified}}{\text{Contract Price}}$ = 28,00 × $\frac{1{,}10{,}00}{1{,}20{,}00}$ **= 25,67**

(f) $\frac{2}{3}$ × Notional Profit × $\frac{\text{Cash Received}}{\text{Work Certified}} = \frac{2}{3}$ × 28,00 × $\frac{99.00}{1.10.00}$ **= 16,80**

Observation: The Directors' decision to recognize Rs. 24 Lakhs is **incorrect.** Profit to be recognized in P&L Account, on prudence basis is Rs. 16.80 Lakhs.

17. Contract Costing - Estimation of Total Profit and Profit Recognition M 00, M 06, N 10

PQR Ltd commenced a contract on 1st April of Year 1. The Total Contract was for Rs. 27,12,500. It was decided to estimate the Total Profit on the contract and to take to the credit of P & L Account that proportion of estimated profit on cash basis, which the work completed bore to the total contract. Actual Expenditure in Year land estimated expenditure in Year 2 are as below -

Particulars	Year 1 (Actuals) (Rs.)	Year 2 (Estimated) (Rs.)
Materials 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 (Historical Cost)	75,000	(On 31st Dec of Year 2) 1,50,000
Materials 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	-

The Plant is subject to annual depreciation at 20% on WDV Cost. The Contract is likely to be completed on 31st Dec of Year 2.

Required: Prepare the Contract Account for Year 1. Estimate the Profit on the contract for Year 1 on prudent basis, which has to be credited to P & L Account.

Solution: **1. Statement of Current & Total Profits**

Particulars	Till date	Additional	Total
A. Income:			
Work Certified	Given = 12,75,000		Given = 27,12,500
Work Uncertified	Given = 40,000		
Total	**13,15,000**		**27,12,500**
B. Expenditure:			
Materials **(WN a)**	4,26,000	7,69,000	11,95,000
Labour **(WN b)**	3,29,000	3,93,500	7,22,500
Expenses **(WN c)**	77,500	2,22,500	3,00,000
Depreciation **(WN d)**	45,000	18,000	63,000
Total	**8,77,500**	**14,03,000**	**22,80,500**
C. Profit (A - B)	**4,37,500** Notional Profit	-	**4,32,000** Estimated Total Profit

D. Profit transfer to P&L A/c (based on formula specified in the question)

Estimated Total Profit$\times \frac{\text{Work Certified}}{\text{Contract Price}} \times \frac{\text{Cash Received}}{\text{Work Certified}}$ =Rs. 4,32,000 $\times \frac{\text{Rs.}12{,}75{,}000}{\text{Rs.}27{,}12{,}500} \times \frac{\text{Rs.}10{,}00{,}000}{\text{Rs.}12{,}75{,}000}$ **= Rs. 1,59,263**

Notes:

Particulars	**Year 1: 1st Apr to 31st Mar**	**Year 2:1st Apr to 31st Dec**
(a) Materials Consumed	Opening Stock+Issues - Closing Stock = Nil + 4,56,000 - 30,000 = 4,26,000	Opening Stock + Issues - Closing Stock = 30,000 + 8,14,000 - 75,000 = 7,69,000
(b) Labour Cost incurred	Paid during the year + O/S at end = 3,05,000 + 24,000 = 3,29,000	Paid during the year + O/S at end - O/s at Opg = 3,80,000 + 37,500 - 24,000 = 3,93,500
(c) Expenses	Paid + O/S at end - Prepaid at end = 1,00,000 + Nil - 22,500 = 77,500	Prepaid of previous period + Paid during the year + O/S at end - O/s at beginning = 22,500 + 1,75,000 + 25,000 - Nil = 2,22,500
(d) Depreciation	2,25,000 × 20% for 12 months = 45,000 **[See Note 1]**	1,20,000 × 20% for 9 months = 18,000 **[See Note 2]**

Note:

1. It is assumed that Plant costing Rs. 75,000 is returned to Store on last day of the financial year, i.e. 31st Mar of Year 1.

2. Closing WDV of Plant at site at year-end (after returns) = (2,25,000 Gross less 75,000 returned) less 20% Depreciation thereon = 1,20,000. Hence, Opening WDV for next period is 1,20,000.

2. Contract Account for the year ending 31st March of Year 1

Particulars	Rs.	**Particulars**	Rs.
To Material Issued	4,56,000	By Work in Progress	
To Labour (as per WN above)	3,29,000	- Work Certified	12,75,000
To Expenses (as per WN above)	77,500	- Work Uncertified	40,000
To Depreciation on Plant	45,000	By Materials at Site	30,000
To Notional Profit	**4,37,500**		
Total	**13,45,000**	**Total**	**13,45,000**
To P&L A/c - Profit transfer as per WN 1 above	1,59,263	By Notional Profit b/d	4,37,500
To Reserve Profit c/d	**2,78,237**		
Total	**4,37,500**	**Total**	**4,37,500**
To WIP b/d	13,15,000	By Reserve Profit b/d	2,78,237

To Materials at site b/d	30,000		