

As per the Revised Syllabus of Mumbai University  
for S.Y. BMS, Semester IV

# Advanced Costing and Auditing

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# ADVANCED COSTING AND AUDITING

*(As per the Revised Syllabus of Mumbai University  
for S.Y. BMS, Semester IV, 2015-16)*

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## **PREFACE**

It give us an immense pleasure to come up with a book on “Advanced Costing and Auditing” for the students and teachers of Bachelor of Management Studies (BMS) Semester IV.

The book provides simple language so to make understanding simple for the students or any new learner of costing and auditing.

We the authors will be more happy to receive any suggestions or recommendation for further betterment of contents written in the book.

We thank one and all who knowingly or unknowingly supported to make this book possible.

**Dr. M.N. Arora**  
**Prof. Rajiv Mishra**





## SYLLABUS

### UBMSFSIV.5: ADVANCED COSTING & AUDITING

**[60 lectures: 3 Credit]**

#### Learning Objectives:


1. The objective of this subject is to familiarize students with the various concepts and element of cost.
2. The course allows intends to develop auditing skills among learners

Units	Name of the Topic	No. of lectures
<b>Unit-1</b>	<b>PROCESS COSTING AND CONTRACT COSTING:</b>	<b>15</b>
	<p><b>Contract Costing:</b> Learning Objectives, features, Sub-contracting, Cost plus Contract, Profit on Incomplete Contract, Work Certified and Work Uncertified, Typical examples.</p> <p><b>Process Costing:</b> Objectives, Process Cost Accounting Procedure, Basic Steps for Solution of Problems in Process Costing, Normal Loss, Abnormal Loss, Abnormal Gain. Typical examples.</p>	
<b>Unit-2</b>	<b>STANDARD COSTING:</b>	<b>15</b>
	<p>Standard Cost, Standard Costing, Variance Analysis Material, Labour Variances.</p> <p><b>Material Variance:</b> Material Cost Variance, Material Price Variance, Material Usage Variance, Material Mix Variance, Material Yield Variance.</p> <p><b>Labour Variance:</b> Direct Wages Variance, Direct Rate Variance, Direct Efficiency Variance, Direct Time Variance, Direct Yield Variance.</p>	
<b>Unit 3</b>	<b>AUDIT CONCEPTS:</b>	<b>17</b>
	<p>Basic, Financial System, Users of Financial Information, Definition of Auditing, Objectives of Auditing — Primary and Secondary, Expression of Opinion, Detection of Frauds and Errors.</p> <p><b>Errors and Frauds:</b> Definition, Reasons and Circumstances, Types of Errors Commission, Omission, Principle and Compensating, Types of Frauds, Risk of Frauds and Error in Audit.</p> <p>Internet Limitations of Audit, Auditors Duties and Responsibilities in respect to Fraud.</p> <p><b>Principle of Audit:</b> Documentation, Planning, Audit Evidence Accounting System and Internal Control, Audit Conclusion and Reporting .</p> <p><b>Audit Concept:</b> Materiality, Going Concern, True and Fair Independence.</p>	
<b>Unit 4</b>	<b>VOUCHING AND VERIFICATION:</b>	<b>13</b>
	<p><b>Vouching:</b> Audit of Income and Audit of Expenditure</p> <p><b>Verification:</b> Audit of Asset and Audit of Liabilities.</p>	

<b>PAPER PATTERN</b>
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**Duration:** 21/2 Hrs.

**Maximum Marks:** 75

- |   |                   |
|---|-------------------|
| <b>Q.1. Unit 1 (Any 2 out of 3)</b>       | <b>(15 Marks)</b> |
| (a)                                       | (7.5 Marks)       |
| (b)                                       | (7.5 Marks)       |
| (c)                                       | (7.5 Marks)       |
| <b>Q.2. Unit 2 (Any 2 out of 3)</b>       | <b>(15 Marks)</b> |
| (a)                                       | (7.5 Marks)       |
| (b)                                       | (7.5 Marks)       |
| (c)                                       | (7.5 Marks)       |
| <b>Q.3. Unit 3 (Any 2 out of 3)</b>       | <b>(15 Marks)</b> |
| (a)                                       | (7.5 Marks)       |
| (b)                                       | (7.5 Marks)       |
| (c)                                       | (7.5 Marks)       |
| <b>Q.4. Unit 4 (Any 2 out of 3)</b>       | <b>(15 Marks)</b> |
| (a)                                       | (7.5 Marks)       |
| (b)                                       | (7.5 Marks)       |
| (c)                                       | (7.5 Marks)       |
| <b>Q.5. Practical Question/Case Study</b> | <b>(15 Marks)</b> |
- 

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# Chapter 1

## CONTRACT COSTING

### CHAPTER OUTLINE

Introduction, Contract and Job Costing — Distinction; Contract Costing Procedure, Special Points in Contract Costing, Profit on Incomplete Contracts, Escalation Clause, Cost-plus Contracts, Problems and Solutions, Examination Questions.

#### Introduction

Contract costing, also known as terminal costing, is a variant of job costing. Contract means a big job in which work is done at site and not in factory premises. The cost of each contract is ascertained. Thus in this method of costing, each contract is a cost unit and an account is opened for each contract in the books of contractor to ascertain profit/loss thereon.

Contract costing is applicable in:

- | Building construction
- | Road construction
- | Bridge construction
- | Ship building, etc.

#### Features of Contract Costing

Contract costing usually shows the following features: .

1. Contracts are generally of large size and, therefore, a contractor usually carries out a small number of contracts at a particular point of time.
2. A contract generally takes more than one year to complete,
3. Work on contracts is carried out at the site of contracts and not in factory premises.
4. Each contract undertaken is treated as a cost unit.
5. A separate contract account is prepared for each contract in the books of contractor to ascertain profit or loss on each contract.
6. Most of the materials are specially purchased for each contract. These will, therefore, be charged direct from the supplier's invoices. Any materials drawn from the store are charged to contract on the basis of material requisition notes.
7. Nearly all labour cost will be direct.

8. Most expenses (*e.g.*, electricity, telephone, insurance, etc.) are also direct.
9. Specialist subcontractors may be employed for say, electrical fittings, welding work, glass work, etc.
10. Plant and equipment may be purchased for the contract or may be hired for the duration of the contract.
11. Payments by the customer (contractee) are made at various stages of completion of the contract based on architect's certificate for the completed stage. An amount, known as retention money, is withheld by the contractee as per agreed terms.
12. Penalties may be incurred by the contractor for failing to complete the work within the agreed period.

### Contract Costing and Job Costing — Distinction

Main points of distinction between contract costing and job costing are as follows:

1. Contract is generally big while job is small. It is well said, "a job is a small contract and a contract is a big job."
2. The number of jobs undertaken at a time are usually large as compared to number of contracts because contracts are generally much bigger in size.
3. In contract costing most of the costs are chargeable direct to contract accounts. Under job costing, direct allocation to such an extent is not possible.
4. Allocation and apportionment of overhead costs is simpler in contract costing as compared to job costing.
5. Jobs are usually carried out in factory premises while contract work is done at site.

### Contract Costing Procedure

The basic procedure for costing of contracts is as follows:

**1. Contract account.** Each contract is allotted a distinct number and a separate account is opened for each contract.

**2. Direct costs.** Most of the costs of a contract can be allocated direct to the contract. All such direct costs are debited to the contract account. Direct costs for contracts include: (i) Materials, (ii) Labour and supervision, (iii) Direct expenses, (iv) Depreciation of plant and machinery, (v) Subcontract costs, etc.

**3. Indirect costs.** Contract account is also debited with overheads which tend to be small in relation to direct costs. Such costs are often absorbed on some arbitrary basis as a percentage on prime cost, or materials, or wages, etc. Overheads are normally restricted to head office and storage costs.

**4. Transfer of materials or plant.** When materials, plant or other items are transferred from the contract, the contract account is credited by that amount.

**5. Contract price.** The contract account is also credited with the contract price. However, when a contract is not complete at the end of the financial year, the contract account is credited with the value of work-in-progress as on that date.

**6. Profit or loss on contract.** The balance of contract account represents profit or loss which is transferred to Profit and Loss Account. However, when contract is not completed

within the financial year, only a part of the profit arrived is taken into account and the remaining profit is kept as reserve to meet any contingent loss on the incomplete portion of the contract. This is discussed in detail later in this chapter.

## SPECIAL POINTS IN CONTRACT COSTING

Some of the important points in contract costing are now discussed:

### Cost of Materials

Materials include (i) materials specifically purchased for the contract; (ii) materials issued from store against material requisition notes. The cost of both these types of materials is debited to the contract account.

**Materials returned to store.** Whenever materials are issued in excess of requirements, as for instance, cement, sand, pipes, bricks, etc., these are later returned to the store accompanied by a Material Return Note which gives the details of the material returned. Such returned materials are credited to contract account.

**Materials at site.** At the end of each accounting period, value of materials lying unused at site is credited to contract account and is carried forward for charging against the next period.

### Cost of Labour

All wages of workers engaged on a particular contract are charged direct to the contract irrespective of the type of work they perform. When several contracts are running at different locations, payroll is normally sectioned so as to have separate payroll for each contract. Difficulties in costing may be encountered when some workers may have to move from one site to another when a number of small contracts are undertaken. In such situation, it becomes necessary to provide time sheets from which allocations can be made. In order to control labour utilisation and prevent fraud in the payment of wages, surprise visits by head office personnel will be necessary.

### Plant Depreciation

There are two different methods of dealing with depreciation of plant in contract account:

(a) Contract account is debited with the cost of the plant installed. At the end of the year or when the plant is no longer required, the plant is revalued and contract account is credited with this revalued or depreciated figure. In case plant is sold on the completion of the contract, the contract account is credited with its sale proceeds. The net effect of the above debit and credit will be that the contract account will stand debited with the amount of depreciation which is the difference between the value of plant debited and value of plant credited. The method is generally used on long contracts which extend over more than one year because depreciated value of the plant is credited to the contract account and brought down as an opening balance in the next period.

(b) Alternatively, contract account is simply debited with the amount of depreciation. It is usual to use this method when plant is sent to contract only for a short period. For example, mobile crane or bulldozer used in a contract may be charged on this basis.

However, when a plant is hired for a contract, a charge for the hire of the plant is debited to the contract as a direct expense.

### Subcontract Costs

Work of specialised character, for which facilities are not internally available, is offered to a subcontractor. For example, steel work, glass work, painting, etc., is usually carried out by the subcontractors who are accountable to the main contractor. The cost of such work is charged to the contract account.

### Payment based on Architect's Certificate

In case the contract is small, full payment is usually made on the completion of the contract. But in case of large contracts, it may take more than one year to complete. In such a case, if no payment is received until the completion of the contract, the financial resources of the contractor could surely become strained. Therefore, a system of progress payments is agreed by parties. In this system, part payments of the contract amount are paid from time to time on the basis of certificate issued by the architects (acting for the contractee), certifying the value of the work satisfactorily completed. Such payments received by the contractor are usually credited to the personal account of the contractee. It should be noted that such payments are not entered in the Contract Account.

### Work-in-progress — Work Certified and Uncertified

When the contract is not completed till the end of the accounting year, the architect is required to value the work-in-progress. Such work-in-progress is classified into work certified and work uncertified.

**Work Certified.** This is that part of the work-in-progress which has been approved by the contractee's architect or engineer for payment. Work certified is valued at contract price (*i.e.*, selling price), and includes an element of profit.

**Work Uncertified.** This is that part of the work-in-progress which is not approved by the architect or engineer. This is valued at cost and thus does not include an element of profit.

Both work certified and uncertified appear on the credit side of the contract account and also on the assets side of the balance sheet.

### Retention Money and Cash Ratio

It is usual practice not to pay the full amount of work certified. The contractee may pay a fixed percentage, say 80% or 90% of the work certified, depending upon the terms of the contract. This is known as *Cash Ratio*. The balance amount not paid is known as *Retention Money*. For example, if cash ratio is 75%, the retention money will be remaining 25%. This retention money is a type of security for any defective work which may be found in the contract later on. This also works as a deterrent for the contractor to leave the contract incomplete, if he finds the contract unprofitable. The retention money may also be adjusted against penalties that become due if the contract is not completed within the stipulated time as per the terms of the agreement.

### Extra Work

Sometimes the contractor is required to do some extra work like additions or alterations in the work originally done as per agreement. The contractor will charge extra money for such extra work. The cost of such extra work is debited to the contract account and extra price realised is credited to the contract account.

## PROFIT ON INCOMPLETE CONTRACTS

Contracts which are started and finished during the same financial year create no accounting problems. But in case of those contracts which take more than one year to complete, a problem arises whether profit on such contracts should be worked out only on the completion of the contract or at the end of each financial year on the partly completed work. If profit is computed only on the completion of the contract, profit will be high in the year of completion of the contract, whereas in other years of working on contract, profit will be nil. This would result not only in distorted profit pattern but also higher tax liability because income tax at higher rates may have to be paid. Therefore, when contracts extend beyond a year, it becomes necessary to take into account the profit earned (or loss incurred) on the work performed during each year. This helps in avoiding distortion of the year-to-year profit trend of the business. There are two aspects of profit computation:

- (a) Computation of notional profit or estimated profit.
- (b) Computation of the portion of such profit to be transferred to Profit and Loss Account.

### Notional Profit

Notional profit is the difference between the value of work-in-progress certified and the cost of such work-in-progress certified. It is computed as follows (Figures are assumed):

Value of work certified	20,00,000
Add: Cost of work not yet certified	<u>1,50,000</u>
	21,50,000
Less: Cost of work to date	<u>19,00,000</u>
Notional Profit	<u>2,50,000</u>

If in any year, cost of work done exceeds the value of work certified and uncertified, the result will be a notional loss.

### Estimated Profit

Estimated profit represents the excess of the contract price over the estimated total cost of the contract. It is computed as follows (Figures are assumed):

Contract Price	30,00,000
Less: Total cost already incurred	<u>21,00,000</u>
	9,00,000
Less: Estimated additional costs to complete the contract	<u>3,50,000</u>
Estimated Profit	<u>5,50,000</u>

### Portion of Notional Profit or Estimated profit to be Transferred to Profit and Loss Account

The portion of the notional or estimated profit to be transferred to P&L Account depends upon the stage of completion of the contract *i.e.*, ratio of work-in-progress certified to total contract work. For this purpose work-in-progress uncertified is not considered. Prudence requires that the total notional profit should not be transferred to P&L Account but a portion of it should be withheld as a reserve to meet any unforeseen future expenses or contingencies.

**Rules.** There are no hard and fast rules in this regard. However, the following general rules may be followed :

1. When work-in-progress certified is less than 1/4 of the contract price, no profit is transferred to Profit and Loss Account. This is based on the principle that no profit should be taken into account unless the contract has reasonably advanced.

2. When work-in-progress certified is 1/4 or more but less than 1/2 of the contract price, then generally 1/3 of the profit is transferred to Profit and Loss Account. The balance amount is treated as reserve. Thus, profit to be transferred to Profit and Loss Account is computed by the following formula:

$$\text{Transfer to P\&L A/c} = \text{Notional profit} \times \frac{1}{3}$$

*Alternatively*, a more common practice is to further reduce this amount by the cash ratio.

$$\text{Transfer to P\&L A/c} = \text{Notional profit} \times \frac{1}{3} \times \frac{\text{Cash received}}{\text{Work certified}}$$

3. When work certified is 1/2 or more but less than 9/10 of the contract price, (*i.e.*, 50% to 90%), then the profit to be transferred to P & L Account is computed as follows:

$$\text{Transfer to P\&L A/c} = \text{Notional profit} \times \frac{2}{3}$$

Here also a more common practice is to further reduce this amount by cash ratio. This is shown below :

$$\text{Transfer to P\&L A/c} = \text{Notional profit} \times \frac{2}{3} \times \frac{\text{Cash received}}{\text{Work certified}}$$

4. When contract is near completion then the estimated profit should be calculated on the whole contract. The proportion of estimated profit to be transferred to Profit and Loss Account is computed by any one of the following formulas:

$$(a) \text{ Estimated profit} \times \frac{\text{Work certified}}{\text{Contract price}}$$

$$(b) \text{ Estimated profit} \times \frac{\text{Work certified}}{\text{Contract price}} \times \frac{\text{Cash received}}{\text{Work certified}}$$

$$(c) \text{ Estimated profit} \times \frac{\text{Cost of work to date}}{\text{Estimated total cost of work}}$$

$$(d) \text{ Estimated profit} \times \frac{\text{Cost of work to date}}{\text{Estimated total cost of work}} \times \frac{\text{Cash received}}{\text{Work certified}}$$

**5. Loss on Uncompleted Contracts.** In the event of a loss on uncompleted contracts, this should be transferred in full to the Profit and Loss Account, whatever be the stage of completion of the contract.

## ESCALATION CLAUSE

Contracts generally take long time to complete and in this period there may be changes in prices. Escalation clause is often provided in contracts to cover any likely changes in the price or utilisation of materials and labour. Thus, a contractor is entitled to suitably enhance the contract price if the cost rises beyond a given percentage. The object of this clause is to safeguard the interest of the contractor against unfavourable changes in cost. The escalation clause is of particular importance where prices of material and labour are anticipated to increase or where quantity of material and/or labour time cannot be accurately estimated.

Just as an escalation clause safeguards the interest of the contractor by upward revision of the contract price, a de-escalation clause may be inserted to look after the interest of the contractee by providing to downward revision of the contract price in the event of cost going down beyond an agreed level.

## COST-PLUS CONTRACTS

Cost-plus contract is a contract in which the contract price is ascertained by adding a specified amount or percentage of profit to the costs allowed in the contract. This type of contract terms are agreed upon in those cases where it is not possible to compute the cost in advance with a reasonable degree of accuracy due to unstable conditions of market prices, labour rates, etc. The contractee undertakes to reimburse the actual cost of contract plus a stipulated profit. The profit to be added to cost may be either a fixed amount or a specified percentage of cost. The items of cost to be included for the purpose of determining contract price are broadly agreed upon in advance. The accounts of the contractor are usually subject to audit by the contractee.

Cost-plus contracts are usually entered into for executing special type of work, like construction of dam, powerhouse, newly-designed ship, etc., where cost estimation is difficult. Government often prefers to give contracts on 'cost-plus' terms.

Cost-plus contracts offer the following advantages:

### To the Contractor:

1. There is no risk of loss on such contracts.
2. It protects him from the risk of fluctuations in market prices of material, labour, etc.
3. It simplifies the work of preparing tenders and quotations.

### To the Contractee:

The contractee can ensure a fair price of the contract by being entitled to audit the accounts of the contractor.

The disadvantages of cost-plus contracts are:

### To the Contractor:

1. The contractor is deprived of the advantages which would have accrued due to favourable market prices.
2. The contractor has to suffer for his own efficiency. This is because profit is usually based as a percentage of cost and efficient working resulting in lower cost also leads to lower profits.

**To the Contractee:**

1. The contractee has to pay more for the inefficiency of the contractor as a contractor has no incentive to reduce costs.
2. The price a contractee has to pay is unknown until after the completion of work.

**PROBLEMS AND SOLUTIONS****Problem 1.1:**

The following expenditure was incurred on a contract of ` 12,00,000 for the year ending 31-12-2015.

Materials	2,40,000
Wages	3,28,000
Plant	40,000
Overheads	17,200

Cash received on account of the contract to 31st Dec., 2015 was ` 4,80,000, being 80% of the work certified. The value of materials in hand was ` 20,000. The plant had undergone 20% depreciation.

Prepare Contract Account.

(B. Com., Madurai)

**Solution:****Contract Account for the year ending 31st December, 2015**

Particulars		Particulars	
To Materials	2,40,000	By Materials in hand	20,000
To Wages	3,28,000	By Plant in hand (40,000 less 20%)	32,000
To Plant	40,000	By Work-in-progress	
To Overheads	17,200	Work certified $4,80,000 \times \frac{100}{80}$	6,00,000
To Notional Profit c/d	26,800		6,52,000
	6,52,000		6,52,000
To Profit & Loss A/c (26,800 × 2/3 × 80%)	14,293	By Notional Profit b/d	26,800
To Reserve	12,507		
	26,800		26,800

**\*Note:** Profit transferred to Profit and Loss Account is computed by the following method:

Notional Profit × 2/3 × Cash ratio.



**Problem 1.2:**

The following expenses were incurred on an unfinished contract during the year 2015.

Materials	` 90,000
Wages	` 60,000
Other expenses	` 30,000

` 2,00,000 was received by the contractor, being 80% of the work certified. Work done but not certified was ` 5,000. Determine the profit to be credited to profit and loss account and profit kept reserve in all the three alternatives given below:

- (i) Contract price is ` 3,00,000
- (ii) Contract price is ` 5,50,000
- (iii) Contract price is ` 12,00,000

**Solution:**

**Contract Account for the year 2015**

<i>Particulars</i>	`	<i>Particulars</i>	`
To Materials	90,000	By Working Progress:	
To Wages	60,000	Work certified	2,50,000
To Other expenses	30,000	$2,00,000 \times \frac{100}{80}$	
To Notional profit	75,000	By Work uncertified	5,000
	2,55,000		2,55,000

Profit credited to profit and loss account:

(i) When contract price is ` 3,00,000, work certified is  $\frac{2,50,000}{3,00,000} \times 100 = 83.33\%$  of the contract price. As it is more than 50% of the contract price, profit credited to P&L A/c is

$$\begin{aligned} \text{Notional profit} &\times \frac{2}{3} \times 80\% \\ &= 75,000 \times \frac{2}{3} \times 80\% = ` 40,000 \\ \text{Profit in reserve} &= ` 75,000 - 40,000 = ` 35,000 \end{aligned}$$

(ii) When contract price is ` 5,50,000, work certified is  $\frac{2,50,000}{5,50,000} \times 100 = 45.55\%$  of the contract price. As it is less than 50%, profit to be credit to P&L A/c is

$$\begin{aligned} \text{Notional profit} &\times \frac{1}{3} \times 80\% \\ &= 75,000 \times \frac{1}{3} \times 80\% = ` 20,000 \\ \text{Profit in reserve} &= ` 75,000 - 20,000 = ` 55,000 \end{aligned}$$

- (iii) When contract price is ` 12,00,000, work certified is  $\frac{2,50,000}{12,00,000} \times 100 = 20.83\%$ . As it is less than 25% of the contract price, no profit is credited to P&L A/c and the entire amount of notional profit is to be kept in reserve.

**Problem 1.3:**

How much of profit, if any, you would consider in the following case:

Contract price	` 20,00,000
Cost incurred	` 11,20,000
Cash received	` 10,80,000
Work not certified	` 1,20,000

Deduction from bills by way of security deposit is 10%.

(Adapted)

**Solution:**

Cash received is  $100 - 10\% = 90\%$  of the bills or work certified. Thus work certified:

$$= 10,80,000 \times \frac{100}{90} = ` 12,00,000$$

$$\begin{aligned} \text{Notional profit} &= (\text{Work certified} + \text{Uncertified}) - \text{Cost incurred} \\ &= (12,00,000 + 1,20,000) - 11,20,000 = ` 2,00,000. \end{aligned}$$

Work certified is  $\frac{12,00,000}{20,00,000} \times 100 = 60\%$  of the contract price, profit to be transferred

to P&L A/c is computed as follows:

$$\begin{aligned} &\text{Notional profit} \times \frac{2}{3} \times \text{cash ratio} \\ &= 2,00,000 \times \frac{2}{3} \times 90\% = ` 1,20,000. \end{aligned}$$

**Problem 1.4:**

The following were the expenses on a contract which commenced on 1st January 2015.

Materials purchased	1,10,000
Material at the end	1,250
Direct wages	15,000
Plant issued	5,000
Direct expenses	8,000

The contract price was ` 1,50,000. It was duly received when the contract was completed on 31-3-2015. Charge indirect expenses at 15% on wages and provide ` 1,000 for depreciation on plant. Prepare the contract account and contractee's account.

**Solution:****Contract Account for the year ending 31-12-2015**

<i>Particulars</i>	₹	<i>Particulars</i>	₹
To Materials	1,10,000	By Contractee's A/c (Contract price)	1,50,000
To Direct wages	15,000	By Materials at the end	1,250
To Direct expenses	8,000	By Plant at the end (5,000 – 1,000)	4,000
To Indirect expenses (15% on 15,000)	2,250		
To Plant issued	5,000		
To Profit and Loss A/c	15,000		
	1,55,250		1,55,250

**Contractee's Account for the year ending 31-12-2015**

<i>Particulars</i>	₹	<i>Particulars</i>	₹
To Contract A/c	1,50,000	By Bank	1,50,000
	1,50,000		1,50,000

*Note:* As the contract is fully complete, entire profit is transferred to profit and loss account.

**Problem 1.5:**

Thekedar accepted a contract for the construction of a building for ₹ 10,00,000, the contractee agreeing to pay 90% of work certified by the architect. During the first year, the amounts spent were:

<i>Particulars</i>	₹	<i>Particulars</i>	₹
Material	1,20,000	Machinery	30,000
Labour	1,50,000	Other expenses	90,000

At the end of the year, the machinery was valued at ₹ 20,000 and materials at site were of the value of ₹ 5,000. Work certified during the year totalled ₹ 4,00,000. In addition work-in-progress not certified at the end of the year had cost ₹ 15,000. Prepare Contract Account in the books of Thekedar. Also show the various figures of profit that can be reasonably transferred to the Profit and Loss Account. (B.Com., Delhi)

**Solution:****Contract Account for the year ending.....**

<i>Particulars</i>	₹	<i>Particulars</i>	₹
To Materials	1,20,000	By Work-in-progress:	
To Labour	1,50,000	Certified	4,00,000
To Machinery	30,000	Uncertified	15,000
To Other expenses	90,000	By Machinery at site	20,000
To Notional Profit c/d	50,000	By Materials at site	5,000
	4,40,000		4,40,000

To P&L A/c	15,000 *	By Notional Profit c/d	50,000
To Reserve	35,000		
	50,000		50,000

\* **Working Notes:** Transfer to P&L A/c =  $50,000 \times \frac{1}{3} \times 90\% = \text{` } 15,000$

Other figures that may alternatively be transferred to P&L A/c may be computed as follows:

1. Notional profit  $\times \frac{1}{3} = 50,000 \times \frac{1}{3} = \text{` } 16,667.$

2. Notional profit  $\times \frac{\text{Work certified}}{\text{Contract price}} \times \text{Cash ratio} = 50,000 \times \frac{4,00,000}{10,00,000} \times 90\% = \text{` } 18,000$

3. Notional profit  $\times \frac{\text{Work certified}}{\text{Contract price}} = 50,000 \times \frac{4,00,000}{10,00,000} = \text{` } 20,000$

### Problem 1.6:

The BBA Construction Company undertakes large contracts. The following particulars relate to contract No. 125 carried out during the year ended on 31st March, 2015.

<i>Particulars</i>	<i>`</i>	<i>Particulars</i>	<i>`</i>
Work certified by architect	1,43,000	Wages accrued on 31st March 2015	1,800
Cost of work not certified	3,400	Direct expenditure	2,400
Plant installed at site	11,300	Materials on hand on 31st March 2015	1,400
Value of plant on 31st March 2015	8,200	Materials returned to store	400
Materials sent to site	64,500	Direct expenditure accrued on	
Labour	54,800	31st March 2015	200
Establishment charge	3,250	Contract price	2,00,000
		Cash received from contractee	1,30,000

Prepare a Contract Account for the period ending 31st March 2015 and find out the profit. It was decided to transfer 2/3 of the profit on cash basis to Profit and Loss Account.

(B.B.A., B.I.S. Delhi)

### Solution:

#### Contract No. 125 Account for the year ending 31st March, 2015

<i>Particulars</i>	<i>`</i>	<i>Particulars</i>	<i>`</i>
To Materials sent to site	64,500	By Materials returned	400
To Labour	54,800	By Materials in hand	1,400
To Establishment charge	3,250	By Work-in-Progress:	
To Direct expenses	2,400	Certified	1,43,000
To Wages accrued	1,800	Uncertified	3,400
To Direct expenses accrued	200	By Plant at site	8,200
To Plant at site	11,300		
To Notional Profit c/d	18,150		
	1,56,400		1,56,400

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To P&L A/c	11,000	By Notional Profit b/d	18,150
$18,150 \times \frac{2}{3} \times \frac{1,30,000}{1,43,000}$			
To Reserve	7,150		
	18,150		18,150

**Problem 2.7:**

The Indian Construction Co. Ltd. has undertaken the construction of a bridge over the River Yamuna for a Corporation. The value of the contract is ₹ 15,00,000 subject to retention of 20% until one year after certified completion of the contract, and final approval of the Corporation's engineer. The following are the details as shown in the books on 30th June, 2015.

Labour on site	4,05,000	Materials on hand on June 30th, 2015	6,300
Materials direct to site	4,20,000	Wages accrued on June 30th, 2015	7,800
Materials from stores	81,200	Direct expenses accrued on June 30th 2015	1,600
Hire and use of plant	12,100	Works not yet certified at cost	16,500
Direct expenses	23,000	Amount certified by the Corporation's engineer	11,00,000
General overhead allocated to the contract	37,100	Cash received on account	8,80,000

Prepare (a) Contract Account, (b) Contractee's Account, and (c) show how it would appear in the Balance Sheet. (B.Com., Delhi)

**Solution:**

**Contract Account for the year ending 30th June, 2015**

<i>Particulars</i>		<i>Particulars</i>	
To Materials direct to site	4,20,000	By Materials on hand	6,300
To Materials from store	81,200	By Work-in-progress:	
To Labour on site	4,05,000	Certified	11,00,000
To Hire and use of plant	12,100	Uncertified	16,500
To General overhead	37,100		
To Wages accrued	7,800		
To Direct expenses	23,000		
To Direct expenses accrued	1,600		
To Notional profit c/d	1,35,000		
	11,202,800		11,202,800
To P&L A/c	72,000	By Notional Profit c/d	1,35,000
$\left( 1,35,000 \times \frac{2}{3} \times \frac{8,80,000}{11,00,000} \right)$			
To Reserve	63,000		
	1,35,000		1,35,000

**Contractee's Account**

<i>Particulars</i>	₹	<i>Particulars</i>	₹
To Contract A/c	8,80,000	By Cash	8,80,000
	8,80,000		8,80,000

**Balance Sheet as on 30th June, 2015**

<i>Liabilities</i>	₹	<i>Assets</i>	₹	₹
Wages accrued	7,80,000	Work certified	11,00,000	
Direct expenses accrued	1,600	Work uncertified	16,500	
			11,16,500	
		Less: Cash received	8,80,000	
			2,36,500	
		Less: Reserve	63,000	1,73,500

**Problem 1.8:**

Modern Contractors have undertaken the following two contracts on 1st January, 2015:

	<i>Contract A</i>	<i>Contract B</i>
Materials sent to sites	85,349	73,267
Labour engaged on sites	74,375	68,523
Plants installed at sites at cost	15,000	12,500
Direct expenditure	3,167	2,859
Establishment charges	4,126	3,852
Materials returned to store	549	632
Work certified	1,95,000	1,45,000
Cost of work not certified	4,500	3,000
Materials in hand 31st Dec., 2015	1,883	1,736
Wages accrued 31st Dec., 2015	2,400	2,100
Direct expenditure accrued 31st Dec., 2015	240	180
Value on plant 31st Dec., 2015	11,000	9,500

The contract prices have been agreed at ₹ 2,50,000 for contract A and ₹ 2,00,000 for contract B. Cash has been received from the contractees as follows: Contract A ₹ 1,80,000 and Contract B ₹ 1,40,000.

Prepare Contract Accounts, Contractees Accounts and show how the work-in-progress shall appear in the Balance Sheet of the contractor. (B.Com., Delhi; Bangalore)

**Solution:**

**Contract 'A' Account for the year ending 31st Dec., 2015**

<i>Particulars</i>	₹	<i>Particulars</i>	₹
To Materials sent to site	85,349	By Materials (returned to stores)	549
To Labour	74,375	By Materials in hand	1,883
To Plant	15,000	By Plant in hand	11,000
To Direct expenditure	3,167	By Work-in-progress:	
To Establishment charges	4,126	Work certified	1,95,000
To Wages accrued	2,400	Work uncertified	4,500
			<u>1,99,500</u>
To Direct expenses accrued	240		
To Notional Profit c/d	28,275		
	<u>2,12,932</u>		<u>2,12,932</u>
To Profit & Loss A/c	17,400 *	By Notional Profit b/d	28,275
To Balance c/d (Reserve)	10,875		
	<u>28,275</u>		<u>28,275</u>

\*Note: Proportion of profit transferred to Profit and Loss Account has been calculated by the following formula:

$$\text{Notional profit} \times \frac{2}{3} \times \frac{\text{Cash received}}{\text{Work certified}} = 28,275 \times \frac{2}{3} \times \frac{1,80,000}{1,95,000} = ₹ 17,400$$

**A Contractee's Account**

	<i>Particulars</i>	₹		<i>Particulars</i>	₹
2015 Dec.31	To Balance c/d	1,80,000	2015 Dec. 31	By Cash	1,80,000
		<u>1,80,000</u>			<u>1,80,000</u>
			2016 Jan. 1	By Balance b/d	1,80,000

**Contract 'B' Account for the year ending 31st Dec., 2015**

<i>Particulars</i>	₹	<i>Particulars</i>	₹
To Materials	73,267	By Materials returned to store	632
To Labour	68,523	By Materials in hand	1,736
To Plant	12,500	By Plant in hand	9,500
To Direct expenditure	2,859	By Work-in-progress:	
To Establishment charges	3,852	Work certified	1,45,000
To Wages accrued	2,100	Work uncertified	3,000
To Direct expenditure accrued	180	By Loss transfer to P&L A/c	<u>3,413</u>
	<u>1,63,281</u>		<u>1,63,281</u>

**B Contractee's Account**

	<i>Particulars</i>	·		<i>Particulars</i>	·
2015 Dec. 31	To Balance c/d	1,40,000	2015 Dec. 31	By Cash	1,40,000
		1,40,000			1,40,000
			2016 Jan. 1	By Balance b/d	1,40,000

**Balance Sheet as on Dec. 31, 2015**

<i>Liabilities</i>	·	<i>Assets</i>	·
Wages accrued (2,400 + 2,100)	4,500	Plant less Depreciation (27,500 – 7,000)	20,500
Direct expenses accrued (240 + 180)	420	Materials in hand	3,619
Profit on contract A	17,400	Work-in-progress:	
Less: Loss on contract B	<u>3,413</u>	<b>Contract A</b>	
	13,987	Work certified	1,95,000
		Work uncertified	4,500
			<u>1,99,500</u>
		Less: Profit in reserve	10,875
			<u>1,88,625</u>
		Less: Cash received	1,80,000
		<b>Contract B</b>	
		Work certified	1,45,000
		Work uncertified	3,000
			<u>1,48,000</u>
		Less: Cash received	1,40,000
			8,000

**Problem 1.9:**

T.K. Construction Ltd. is engaged on two contracts A and B during the year. The following particulars are obtained at the year end (Dec. 31):

	<i>Contract A</i>	<i>Contract B</i>
	<i>April 1</i>	<i>September 1</i>
Date of commencement		
Contract price	6,00,000	5,00,000
Materials issued	1,60,000	60,000
Materials returned	4,000	2,000
Materials on site (Dec. 31st)	22,000	8,000
Direct labour	1,50,000	42,000
Direct expenses	66,000	35,000
Establishment expenses	25,000	7,000
Plant installed at cost	80,000	70,000
Value of plant (Dec. 31st)	65,000	64,000
Cost of contract not yet certified	23,000	10,000
Value of contract certified	4,20,000	1,35,000
Cash received from contractess	3,78,000	1,25,000
Architect's fees	2,000	1,000



During the period, materials amounting to ₹ 9,000 have been transferred from contract A to contract B. You are required to show: (a) Contract Accounts, (b) Contractees' Accounts, and (c) Extracts from Balance Sheet as on December 31st, clearly showing the calculation of work-in-progress. (B.B.M., Bangalore)

**Solution:**

**Contract 'A' Account for the year ending 31st Dec.....**

<i>Particulars</i>	₹	<i>Particulars</i>	₹
To Materials used	1,60,000	By Materials returned	4,000
To Direct labour	1,50,000	By Materials transferred to B	9,000
To Direct expenses	66,000	By Stock of materials	22,000
To Establishment expenses	25,000	By Work-in-Progress:	
To Depreciation on plant	15,000	Work certified	4,20,000
To Architect's fees	2,000	Work uncertified	<u>23,000</u>
To Balance c/d (Notional Profit)	60,000		4,43,000
	<u>4,78,000</u>		<u>4,78,000</u>
To P&L A/c	36,000	By Balance b/d	60,000
$\left(1,35,000 \times \frac{2}{3} \times \frac{8,80,000}{1,10,000}\right)$			
To WIP A/c (Reserve)	24,000		
	<u>60,000</u>		<u>60,000</u>

**Contract 'B' Account for the year ending 31st Dec.....**

<i>Particulars</i>	₹	<i>Particulars</i>	₹
To Materials used	60,000	By Materials returned	2,000
To Materials from Contract A	9,000	By Stock materials	8,000
To Direct labour	42,000	By Work-in-progress:	
To Direct expenses	35,000	Work certified	1,35,000
To Establishment expenses	7,000	Work uncertified	<u>10,000</u>
To Depreciation on plant	6,000		1,45,000
To Architect's fees	1,000	By P&L A/c (Loss on contract)	5,000
	<u>1,60,000</u>		<u>1,60,000</u>

**A Contractee's Account**

<i>Particulars</i>	₹	<i>Particulars</i>	₹
To Balance c/d	3,78,000	By Cash	3,78,000
		By Balance b/d	<u>3,78,000</u>

**B Contractee's Account**

<i>Particulars</i>	✓	<i>Particulars</i>	✓
To Balance c/d	1,25,000	By Cash	1,25,000
		By Balance b/d	1,25,000

**Balance Sheet (Extracts) as on 31st December .....**

<i>Liabilities</i>	✓	<i>Assets</i>	✓
Profit on Contract A	36,000	Plant	1,50,000
Less: Loss on Contract B	<u>5,000</u>	Less: Depreciation	<u>21,000</u>
	31,000	Stock of materials	
		Contract A	22,000
		Contract B	<u>8,000</u>
			30,000
		<i>Work-in-progress:</i>	
		<b>Contract A</b>	
		Work certified	4,20,000
		Work uncertified	<u>23,000</u>
			4,43,000
		Less: Reserve	<u>24,000</u>
			4,19,000
		Less: Cash received	<u>3,78,000</u>
			41,000
		<i>Work-in-progress:</i>	
		<b>Contract B</b>	
		Work certified	1,35,000
		Work uncertified	<u>10,000</u>
			1,45,000
		Less: Cash received	<u>1,25,000</u>
			20,000

**Problem 1.10:**

A firm of contractors undertook three contracts on 1st April, 2014, 1st October, 2014 and 1st Jan., 2015. On 31st March, 2015, when their accounts were made up, the position was as follows:

	<i>I</i>	<i>II</i>	<i>III</i>
	✓	✓	✓
Contract price	4,00,000	1,35,000	1,50,000
Materials	72,000	29,000	10,000
Wages	1,10,000	56,200	7,000
General expenses	4,000	1,400	500
Plant	20,000	8,000	6,000
Materials on hand	4,000	2,000	1,000
Wages outstanding	3,400	1,800	800
Work certified	2,00,000	80,000	18,000
Cash received	1,50,000	60,000	13,500
Work uncertified	6,000	4,000	1,050
General expenses outstanding	600	200	100

The plants were installed on the respective dates of the contract and depreciation is taken at 10% p. a. Prepare contract accounts. (B.Com.)

**Solution:**

**Contract Accounts for the year ending 31st March 2016**

	Contract I ,	Contract II ,	Contract III ,		Contract I ,	Contract II ,	Contract III ,
To Material	72,000	29,000	10,000	By Work-in-progress:			
To Wages	1,10,000	56,200	7,000	Certified	2,00,000	80,000	18,000
To General expenses	4,000	1,400	500	Uncertified	6,000	4,000	1,050
To Plant	20,000	8,000	6,000	By Plant*	18,000	7,600	5,850
To Wages outstanding	3,400	1,800	800	By Materials in hand	4,000	2,000	1,000
To General expenses outstanding	600	200	100	By P&L A/c (loss)	—	3,000	—
To P&L A/c*	9,000	—	—				
To Reserve	9,000	—	1,500				
	2,28,000	96,600	25,900		2,28,000	96,600	25,900

**\*Working Notes:**

1. On Contract I, notional profit is ₹ 18,000. Transfer to P&L A/c is calculated as follows:

$$\text{Notional profit} \times \frac{2}{3} \text{ Cash ratio} = 18,000 \times \frac{2}{3} \times \frac{1,50,000}{2,00,000} = ₹ 9,000.$$

2. Depreciation is calculated from the respective dates of installation of plant.
3. On Contract II, loss is transferred to P&L A/c.
4. On Contract III, work certified is less than 1/4 of the contract price. Thus the entire amount of notional profit is kept as reserve.

**Problem 1.11:**

Compute a conservative estimate of profit on a contract (which is 80% complete) from the following particulars. Illustrate at least four methods of computing the profit transferable to P&L A/c.

Total expenditure	85,000
Estimated further expenditure to complete the contract (including contingencies)	17,000
Contract price	1,53,000
Work certified	1,00,000
Work not certified	8,500
Cash received	81,600

(B.Com. Hons., Delhi)

**Solution:**

<b>Calculation of Notional Profit</b>		<b>Calculation of Estimated Profit</b>	
Work certified	1,00,000	Contract price	1,53,000
Uncertified	8,500	Less: Expenditure incurred	85,000
	1,08,500	Estimated further expenditure	17,000
Less: Expenditure incurred	85,000		1,02,000
Notional profit	23,500	Estimated profit	51,000

**Methods of computing the profit to be transferred to P&L A/c**

1. Notional Profit  $\times \frac{2}{3} \times$  Cash ratio =  $23,500 \times \frac{2}{3} \times \frac{81,600}{1,00,000} = \text{` } 12,784$  (approx.)
2. Notional Profit  $\times \frac{2}{3} = 23,500 \times \frac{2}{3} = \text{` } 15,667$  (approx.)
3. Estimated Profit  $\times \frac{\text{Work certified}}{\text{Contract price}} \times$  Cash ratio =  $51,000 \times \frac{1,00,000}{1,53,000} \times \frac{81,600}{1,00,000} = \text{` } 27,200$
4. Estimated Profit  $\times \frac{\text{Total cost to date}}{\text{Estimated total cost}} \times$  Cash ratio =  $51,000 \times \frac{85,000}{1,02,000} \times \frac{81,600}{1,00,000} = \text{` } 34,680$

**Problem 1.12:**

An expenditure of ` 3,88,000 has been incurred on a contract upto the end of 31st December, 2015. The value of work certified is ` 4,40,000. The cost of work uncertified is ` 12,000. It is estimated that contract will be completed by 31st March, 2015 and an additional expenditure of ` 80,000 will have to be incurred to complete the contract. The total estimated expenditure on the contract is to include a provision of 2.5 per cent for contingencies. The contract price is ` 5,60,000 and ` 4,00,000 has been realised in cash upto 31st December, 2015. Calculate the proportion of profit to be taken to Profit and Loss Account as on 31st December, 2015 under different methods.  
(B.Com. Hons., Delhi; M.Com. Madras)

**Solution:**

<b>Calculation of Notional Profit</b>		<b>Estimated Profit on Full Contract</b>	
Value of work certified	4,40,000	Contract price	5,60,000
Add: Cost of work not certified	12,000	Less: Cost to date	3,88,000
	4,52,000	Further cost	80,000
		Contingencies	12,000 *
Less: Cost to date	3,88,000		4,80,000
Notional Profit	64,000	Estimated profit	80,000

$$* (3,88,000 + 80,000) \times \frac{2.5}{97.5} = \text{` } 12,000 \text{ for contingencies.}$$

**Profit to be transferred to Profit and Loss Account**

$$\text{Method (i)} \quad \frac{2}{3} \times \text{Notional profit} = \frac{2}{3} \times 64,000 = \text{` } 42,667$$

$$\text{Method (ii)} \quad \frac{2}{3} \times \text{Notional profit} \times \frac{\text{Cash received}}{\text{Work certified}} = \frac{2}{3} \times 64,000 \times \frac{4,00,000}{4,40,000} = \text{` } 38,788$$

$$\text{Method (iii)} \quad \text{Estimated profit} \times \frac{\text{Work certified}}{\text{Contract price}} = 80,000 \times \frac{4,40,000}{5,60,000} = \text{` } 62,857$$

$$\begin{aligned} \text{Method (iv)} \quad \text{Estimated profit} \times \frac{\text{Work certified}}{\text{Contract price}} \times \frac{\text{Cash received}}{\text{Work certified}} \\ = 80,000 \times \frac{4,40,000}{5,60,000} \times \frac{4,00,000}{4,40,000} = \text{` } 57,143 \end{aligned}$$

**Problem 1.13:**

The following information relates to a building contract for ` 10,00,000.

	Year 2014	Year 2015
Materials issued	3,00,000	84,000
Direct wages	2,30,000	1,05,000
Direct expenses	22,000	10,000
Indirect expenses	6,000	1,400
Work certified	7,50,000	10,00,000
Work uncertified	8,000	—
Materials at site	5,000	7,000
Plant issued	14,000	2,000
Cash received from contractee	6,00,000	10,00,000

The value of plant at the end of 2014 and 2015 was ` 7,000 and ` 5,000, respectively.

Prepare: (i) Contract Account, (ii) Contractee's Account for two years 2014 and 2015 taking into consideration such profit for transfer to Profit and Loss Account as you think proper. (B.Com.)

**Solution:**

**Contract Account for two years 2014 and 2015**

Particulars	`	Particulars	`
<i>Year 2014</i>			
To Materials	3,00,000	By Work-in-progress:	
To Direct wages	2,30,000	Work certified	7,50,000
To Direct expenses	22,000	Work uncertified	8,000
To Indirect expenses	6,000	By Materials at site	5,000
To Dep. on plant (14,000 – 7,000)	7,000		
To Balance c/d (Profit)	1,98,000		
	7,63,000		7,63,000

To P&L A/c		1,05,600	By Balance b/d	1,98,000
$\left\{ 1,98,000 \times \frac{2}{3} \times \frac{6,00,000}{7,50,000} \right\}$				
To Work-in-progress A/c (Reserve)		92,400		
		1,98,000		1,98,000
<i>Year 2006</i>				
To Work-in-progress:			By Contractee A/c	10,00,000
Certified	7,50,000		By Materials at site	7,000
Uncertified	8,000			
	7,58,000			
<i>Less: Profit in reserve</i>	<u>92,400</u>	6,65,600		
To Materials at site b/d		5,000		
To Materials issued		84,000		
To Direct wage		1,05,000		
To Direct expenses		10,000		
To Indirect expenses		1,400		
To Depreciation on plant		4,000		
(14,000 + 2,000 - 7,000 - 5,000)				
To P&L A/c		1,32,000		
		10,07,000		10,07,000

**Contractee's Account**

<i>Particulars</i>		<i>Particulars</i>	
2014			
To Balance c/d	6,00,000	By Cash	6,00,000
	6,00,000		6,00,000
2015			
To Contract A/c	10,00,000	By Balance b/d	6,00,000
		By Cash (balance)	4,00,000
	10,00,000		10,00,000

**Problem 1.14:**

XY Co. undertook a contract for ₹ 15,00,000 on an arrangement that 80% of the value of work done as certified by the architects of the contractee, should be paid immediately and the remaining 20% be retained until the contract is completed.

In 2013, the amounts expended were: Materials ₹ 1,80,000; Wages ₹ 1,70,000; Carriage ₹ 6,000; Cartage ₹ 1,000; Sundry expenses ₹ 3,000. The work was certified for ₹ 3,75,000 and 80% of this was paid as agreed.

In 2014, the amounts expended were: Materials ₹ 2,20,000, Wages ₹ 2,30,000, Carriage ₹ 23,000. Cartage ₹ 2,000 and Sundry expenses ₹ 4,000. Three-fourths of the contract was certified as done by 31st December, 2005 and 80% of this received accordingly. The value of unused and work-in-progress was ascertained at ₹ 20,000.

In 2015, the amounts expended were: Materials ` 1,26,000; Wages ` 1,70,000; Cartage ` 6,000; Sundry expenses ` 3,000, and on 30th June the whole contract was completed.

Show how the Contract Account as also the Contractee's Account would appear for each of these years in the books of the contractor, assuming that balance due to him was received on completion of the contract. *(B.Com., Bangalore)*

**Solution:**

**Contract Account**

<i>Particulars</i>	<i>`</i>	<i>Particulars</i>	<i>`</i>
2013			
To Materials	1,80,000	By Work-in-progress: Certified	3,75,000
To Wages	1,70,000		
To Carriage	6,000		
To Cartage	1,000		
To Sundry expenses	3,000		
To Notional Profit c/d	15,000		
	3,75,000		3,75,000
To P&L A/c (15,000 × 1/3 × 80%)	4,000	By Notional Profit b/d	15,000
To Reserve	11,000		
	15,000		15,000
2014			
To Work-in-progress: Certified	3,75,000	By Work-in-progress: Certified	11,25,000
Less: Reserve	11,000	Uncertified	20,000
	3,64,000		
To Materials	2,20,000		
To Wages	2,30,000		
To Carriage	23,000		
To Cartage	2,000		
To Sundry expenses	4,000		
To Notional Profit c/d	3,02,000		
	11,45,000		11,45,000
2015			
To P&L A/c (3,02,000 × 2/3 × 80%)	1,61,067	By Notional Profit b/d	3,02,000
To Reserve	1,40,933		
	3,02,000		3,02,000
2016			
To Work-in-Progress: Certified	11,25,000	By Contractee	15,00,000
Uncertified	20,000		
	11,45,000		
Less: Reserve	1,40,933		
	10,04,067		

To Materials	1,26,000		
To Wages	1,70,000		
To Cartage	6,000		
To Sundry expenses	3,000		
To Profit & Loss A/c	1,90,933		
	15,00,000		15,00,000

**Contractee's Account**

<i>Particulars</i>	₹	<i>Particulars</i>	₹
2013			
To Balance c/d	3,00,000	By Cash	3,00,000
2014			
To Balance c/d	9,00,000	By Balance b/d	3,00,000
		By Cash	6,00,000
	9,00,000		9,00,000
2015			
To Contract A/c	15,00,000	By Balance b/d	9,00,000
		By Cash	6,00,000
	15,00,000		15,00,000

**Problem 1.15:**

Elite Ltd. was engaged on one contract during the year 2015. The contract price was ₹ 2,00,000. The Trial Balance extracted from the books on 31st December, 2015 stood as follows:

Share capital	—	40,000
Sundry creditors	—	4,000
Building	17,000	—
Cash at bank	4,500	—
Contract account:		
Materials	37,500	—
Plant	10,000	—
Wages	52,500	—
Cash received from contractee (80% of certified work)	—	80,000
Expenses	2,500	—
	<u>1,24,000</u>	<u>1,24,000</u>

Of the plant and materials charged to the contract, plant costing ₹ 1,500 and materials costing ₹ 1,200 were destroyed by an accident.

On 31-12-2015, plant costing ₹ 2,000 was returned to stores and material at site was valued at ₹ 1,500. Cost of uncertified work was ₹ 1,000. Charge 10% depreciation on plant.

Prepare Contract Account for the year 2015 and Balance Sheet as on 31-12-2015.

(B.Com., Bangalore)



**Solution:**

**Contract Account for the year ending 31st Dec., 2015**

<i>Particulars</i>	₹	<i>Particulars</i>	₹
To Materials	37,500	By Plant returned to store	
To Wages	52,500	(2,000 less 10% Depreciation)	1,800
To Expenses	2,500	By Plant at site	5,850
To Plant installed	10,000	By Plant destroyed	1,500
To Notional profit c/d	10,350	By Materials lost	1,200
		By Materials at site	1,500
		By Work-in-progress:	
		Certified*	1,00,000
		Uncertified	1,000
	1,12,850		1,12,850
To P&L A/c	5,250	By Notional profit b/d	5,250
$\left(10,350 \times \frac{2}{3} \times \frac{80,000}{1,00,000}\right)$			
To Reserve	4,830	By Notional profit b/d	5,250
	10,350		10,350

**Balance Sheet as on 31st Dec., 2015**

<i>Liabilities</i>			<i>Assets</i>	
Share Capital	40,000	Building		17,000
Sundry Creditors	4,000	Bank		4,500
Profit and Loss A/c	5,520	Plant in store		
Less: Plant destroyed	<u>1,500</u>	Plant at site		
	4,020	Materials at site		
Less: Materials lost	<u>1,200</u>	Work-in-progress:		
	2,820	Certified	1,00,000	
		Uncertified	<u>1,000</u>	
			1,01,000	
		Less: Cash received	<u>80,000</u>	
			21,000	
		Less: Reserve	<u>4,830</u>	16,170
	46,820			46,820

**Problem 1.16:**

The following is the Trial Balance of Construction Company engaged on the execution of Contract No. 303, for the year ended 31st December, 2015.

	<i>Dr. ₹</i>	<i>Cr. ₹</i>
Contractee's account (amount received)	—	3,00,000
Buildings	1,60,000	—
Creditors	—	72,000
Bank balance	35,000	—

Capital account	—	5,00,000
Materials	2,00,000	—
Wages	1,80,000	—
Expenses	47,000	—
Plant	2,50,000	—
	<u>8,72,000</u>	<u>8,72,000</u>

The work on Contract No. 303 was commenced on 1st January, 2015. Materials costing ₹ 1,70,000 were sent to the site of the contract but those of ₹ 6,000 were destroyed in an accident. Wages of ₹ 1,80,000 were paid during the year. Plant costing ₹ 50,000 was used on the contract all through the year. Plant with a cost of ₹ 2 lakhs was used from 1st January to 30th September and was then returned to the stores. Materials of the cost of ₹ 4,000 were at site on 31st December, 2015.

The contract was for ₹ 6,00,000 and the contractee pay 75% of the work certified. Work certified was 80% of the total contract work at the end of 2015. Uncertified work was estimated at ₹ 15,000 on 31st December, 2005. Expenses are charged to the contract at 25% of wages. Plant is to be depreciated at 10% for the entire year.

Prepare Contract No. 303 Account for the year 2015 and make out the Balance Sheet as on 31st December, 2015 in the books of Construction Company. (BBM, Bangalore)

**Solution:**

**Contract No. 303 Account for the year ending 31-12-2015**

<i>Particulars</i>			<i>Particulars</i>		
To Materials	1,70,000	By Work certified		4,80,000	
To Wages	1,80,000	By Work uncertified		15,000	
To Expenses	45,000	By P&L A/c (Loss by accident)		6,000	
To Depreciation on plant (5,000 + 15,000)	20,000	By Materials at site		4,000	
To Notional profit c/d	90,000				
	<u>5,05,000</u>			<u>5,05,000</u>	
To P&L A/c (90,000 × 2/3 × 5/8*)	37,500	By Notional profit b/d		90,000	
To Balance (Reserve)	52,500				
	<u>90,000</u>			<u>90,000</u>	

**Balance Sheet as on 31st Dec., 2015**

<i>Liabilities</i>			<i>Assets</i>		
Capital		5,00,000	Building		1,60,000
P&L A/c	37,500		Plant in stores		1,80,000
Less: Loss	<u>6,000</u>		Materials in store		30,000
	31,500		Work-in-progress:		
Less: Unabsorbed expenses (47,000 – 45,000)	<u>2,000</u>		Certified	4,80,000	
	29,500		Uncertified	<u>15,000</u>	
				4,95,000	

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<i>Less:</i> Depreciation on Plant*	5,000	24,500	<i>Less:</i> Reserve	52,500	
				4,42,500	
Creditors		72,000	<i>Less:</i> Cash	3,00,000	1,42,500
			Materials at site		4,000
			Plant at site		45,000
			Bank		35,000
		5,96,500			5,96,500

\* **Notes:**

1. The cash ratio for computing the profit to be transferred to Profit and Loss Account has been taken as 5/8 i.e.,  $\frac{3,00,000}{4,80,000} \left( \frac{\text{Cash received}}{\text{Work certified}} \right)$ . It may also be taken as 75% as given in the question. In that case, profit to be transferred to P&L A/c will be ` 45,000.
2. Depreciation on plant of ` 2,00,000 has been charged to contract only for 9 months. For remaining three months it has been charged to profit in the balance sheet.

**Problem 1.17:**

The following figures are extracted from the books of a contractor, for the year ending 31st Dec., 2015:

Work-in-progress on 31st Dec., 2014	17,00,000	
<i>Less:</i> Advances from contractees	11,00,000	6,00,000
Materials supplied to contracts direct		1,20,000
Materials issued from store		2,10,000
Wages		1,70,000
Working expenses		30,000
Materials returned to store		11,000
Contracts finished		4,50,000
Work certified		3,00,000
Profit taken to Profit and Loss Account upon contracts completed		2,30,000
Administrative expenses (out of which ` 5,000 is chargeable to Profit and Loss Account)		25,000
Plant issued		50,000
Materials returned from contract to suppliers		9,000
Advances from contractees		8,00,000
Plant at site		40,000

Prepare the Contract Ledger Control Account in general ledger and total contractees account. Show also how the work-in-progress would appear in the Balance Sheet as on 31st December, 2015.  
(B.Com., Bangalore)

**Solution:****Contract Ledger Control Account**

<i>Particulars</i>	·	<i>Particulars</i>	·
To Work-in-progress b/d	17,00,000	By Contractees A/c (Contracts finished)	4,50,000
To Materials issued	2,10,000	By Materials returned to store	11,000
To Materials supplied direct	1,20,000	By Materials returned to suppliers	9,000
To Wages	1,70,000	By Plant at site	40,000
To Works expenses	30,000	By Work-in-progress: Certified	3,00,000
To Plant issued	50,000	Uncertified (Balancing figure)	17,20,000
To Administration expenses	20,000		
To Profit	2,30,000		
	25,30,000		25,30,000

**Total Contractees' Account**

<i>Particulars</i>	·	<i>Particulars</i>	·
To Contract Ledger Control A/c	4,50,000	By Balance b/d	11,00,000
To Balance c/d	14,50,000	By Bank	8,00,000
	19,00,000		19,00,000

**Balance Sheet as on 31-12-2015**

<i>Liabilities</i>	·	<i>Assets</i>	·
		Work-in-progress: Certified	3,00,000
		Uncertified	17,20,000
			<u>20,20,000</u>
		Less: Cash received	<u>14,50,000</u>
			5,70,000

**EXAMINATION QUESTIONS****Objective Type Questions****True or False Statements:**

1. A job is a small contract and a contract is a big job.
2. Profit on each contract is computed every year on incomplete portion of the contract.
3. When a contract is 50% complete, 50% of its profit on cash basis is generally transferred to Profit and Loss A/c at the end of the year.
4. There is no difference between notional profit and estimated profit in relation to contracts.
5. When there is a notional loss on an incomplete contract, transfer to P&L A/c depends upon the degree of completion of the contract.
6. Escalation clauses in contracts are often provided as safeguards against any likely changes in price of materials and labour rates.

Ans. 1. T

2. F

3. F

4. F

5. F

6. T

### Theoretical Questions

1. Distinguish between job costing and contract costing. State the special features of contract costing.  
*(B.Com., Madras)*
2. What is contract costing ? Explain briefly the principles involved in taking profit on incomplete contracts.  
*(B.B.M., Bangalore)*
3. Explain how the profits are determined in the case of uncompleted contracts.  
*(B.Com., Andhra)*
4. What is cost-plus contract ? Discuss this from the point of view of (a) the manufacturer, (b) the buyer.  
*(B.Com., Calicut)*
5. What is the relevance of escalation clause provided in contracts?
6. Discuss the methods of ascertaining profit on the following contracts:
  - (a) When contract is completed.
  - (b) When contract is not completed.
  - (c) When the contract is nearing completion.  
*(B.Com., Meerut)*
7. Write short notes on:
  - (i) Cost-plus contracts
  - (ii) Escalation clause.

### Practical Questions

1. Mrs. Smitha started work on a contract for ₹ 5,00,000 on 1.1. 2015. The following information relating to the contract is available.

Materials issued	1,60,000
Wages paid	1,01,200
Wages outstanding on 31.03.2015	37,520
New machines purchased and sent to site	1,48,000
Direct charges paid	7,500
Direct charges outstanding on 31.03.2015	600
Establishment charges apportioned to contract	6,400

On 31.03.2015 materials lying unused at site were valued at ₹ 21,620. Machines are to be depreciated at 20% p.a. Value of work certified by 31.3.2015 was ₹ 3,50,000 while the cost of work done but not yet certified as on that date was ₹ 18,000. Mrs. Smitha had received a total sum of ₹ 2,80,000 from the contractor till 31.3.2015.

Prepare contract account in Mrs. Smitha ledger.

*(B.Com., Bharathidasan)*

[**Ans.** Notional profit ₹ 69,000. Profit transferred to P&L A/c ₹ 36,800]

[**Hint.** Depreciation is to be provided only for 3 months]

2. The following particulars relate to a contract:

Materials issued	85,000
Wages	74,000
Plant at cost	15,000
Direct Expenses	13,000
Establishment charges	4,000
Materials returned to store	500
Cost of work certified	2,00,000
Cost of work uncertified	4,500
Materials on hand (31st December)	1,800
Wages outstanding	2,500
Value of Plant (31st December)	10,000

The contract price was agreed at ₹ 2,60,000. Cash received from the contractee was ₹ 1,95,000.

Prepare contract account and contractees account and also balance sheet abstract.

[Ans. Notional profit ₹ 23,300; Profit tr. to P&L A/c ₹ 15,145, Profit in reserve ₹ 8,155]

3. Mr. Reddy undertook several contracts. On 31st March 2015 Contract No. 900 showed the following particulars.

Materials purchased	1,80,000	Direct expenses	24,000
Materials issued from stores	50,000	Plant purchased	1,60,000
Wages	2,44,000	Proportionate establishment charges	54,000
		Depreciation on plant	16,000

The contract was for ₹ 15,00,000. ₹ 6,00,000 had been received by Reddy upto 31st March 2015 which represented the amount certified less 20% retention money. Unused materials at site were valued at ₹ 15,000. Prepare the contract account showing the amount of profit Mr. Reddy would be justified in taking to the credit of his profit and loss account.

(B.Com., Bharathidasan)

[Ans. Notional profit ₹ 1,97,000. Profit tr. to P&L A/c ₹ 1,05,067, Profit kept in reserve ₹ 91,933, work certified ₹ 7,50,000]

4. The following was the expenditure on a contract for ₹ 6,00,000. Work commenced in January 2015.

Materials	₹ 1,30,000
Wages	₹ 1,44,400
Plant	₹ 20,000
Business expenses	₹ 18,600

Cash received on account was ₹ 2,40,000, being 80 per cent of work certified. Value of materials on hand at 31.12.2015 was ₹ 10,000. Prepare the contract account for 2015 showing the profit to be credited to profit and loss account. Plant is to be depreciated at 10 per cent.

(B.Com. Adapted)

[Ans. Notional profit ₹ 15,000, Profit credited to P&L A/c ₹ 8,000, Reserve ₹ 7,000. Work certified ₹ 3,00,000]

5. M/s X and Co. obtained a contract for building a factory for ₹ 10,00,000. The building operation started on 1 April 2014 and at the end of March, 2015, they received from the party a sum of ₹ 3.9 lakhs, being 75% of the amount due on the surveyor's certificate. The following additional information is given from the books of the company:

Stores issued to contract	2,00,000	Direct expenses	25,000
Stores on hand 31st March, 2015	10,000	Overhead allocated to contract	12,000
Wages paid	1,80,000	Work uncertified at cost	12,000
Plant purchased for the contract	2,00,000	Plant to be depreciated at 10%	

Prepare Contract Account showing the profit or loss on the contract as on 31st March, 2015. (B.Com.)

[Ans. Tr. to P&L A/c ₹ 52,500; Reserve ₹ 52,500]

6. The following information relates to two contracts of K.P Contractors in 2015:

	Contract A	Contract B
Materials sent to site	1,70,698	1,46,534
Labour	1,48,750	1,37,046
Plant	30,000	25,000
Direct expenses	6,334	5,718
Establishment charges	8,252	7,704
Materials returned to store	1,098	1,264
Work certified	3,90,000	2,90,000
Work uncertified	9,000	6,000
Material at site (31-12-2015)	3,766	3,472
Wages accrued	4,800	4,200
Direct expenses accrued (31-12-2015)	480	360
Value of plant (31-12-2015)	22,000	19,000

Contract price 5,00,000 4,00,000

Cash received 80% of work certified.

Prepare: (i) Contract Accounts (ii) Contractee's Accounts.

(B.Com., Bangalore)

[Ans. A — Tr. to P&L A/c ` 30,160; Reserve ` 26,390; B — Loss ` 6,826]

7. Modi Constructions Ltd. has taken two contracts on 1st Oct., 2014. The position of the contracts on 30th Sept., 2015 is as follows:

	Contract I	Contract II
Contract price	27,00,000	60,00,000
Materials	5,80,000	10,80,000
Wages paid	11,24,000	16,50,000
Other expenses	28,000	60,000
Plant at site	1,60,000	3,00,000
Unused materials at site	40,000	60,000
Wages payable	36,000	4,000
Other expenses due	4,000	9,000
Work certified	16,00,000	30,00,000
Cash received	12,00,000	22,60,000
Work uncertified	80,000	90,000

The plant at site is to be depreciated at 10%. Prepare the Contract Account in respect of each work showing the notional profit and also profit to be transferred to Profit and Loss Account.

[Ans. I - Loss ` 68,000; II - Tr. to P&L A/c ` 1,33,500, Reserve ` 1,33,500]

9. Gupta Construction Ltd. took a contract in 2015 for road construction. The contract price was ` 10,00,000 and its estimated cost of completion would be ` 9,20,000. At the end of 2015, the company has received ` 3,60,000, representing 90% of the work certified. Work not yet certified has cost ` 10,000. Expenditure incurred on the contract during 2015 was as follows; Materials ` 50,000; Labour ` 3,00,000; Plant ` 20,000.

Materials costing ` 5,000 were damaged and had to be disposed of for ` 1,000. Plant is considered as having depreciated by 25 per cent.

Prepare Contract Account for 2015 in the books of Gupta Construction Ltd. Also show all possible figures that can be reasonably credited to Profit and Loss Account in respect of the contract. (B.Com., Delhi)

[Ans. Notional profit ` 60,000, Estimated profit ` 80,000]

10. Work out in a suitable cost accounts form the financial result in respect of a contract for construction of temporary buildings undertaken by a firm in a River Valley Project. Your answer should be based on the following figures extracted from the financial books of the firm.

The term of the contract is ` 10 per sq. ft. of the covered floor area as accepted and certified to be correct by the competent engineering authorities of the project.

(a) *Material*: Building materials in stock at the commencement of the work ` 10,000, purchases during the currency of the contract: (i) Cement 900 bags @ ` 50 per bag, (ii) Bricks 10,000 @ ` 500 per thousand, (iii) Sand 10,000 c.ft., @ ` 10 per 100 c.ft., (iv) Wood work 90 c.ft. @ ` 100 per c.ft. Value of balance of various materials in hand after completion of the work ` 8,000.

(b) *Labour*: 10 masons @ ` 25 per day for 40 days, 50 coolies @ ` 10 per day for 40 days.

(c) *Tools and Plants*: Two new concrete mixers were purchased at ` 10,000 each at the commencement of the contract. Residual value as assessed after completion of the contract @ ` 3,500 each concrete mixer.

(d) *Supervision*: 50% of four engineers' pay @ ` 500 per month for each engineer for 2 months. 50% of ten overseers pay at ` 200 per month for each overseer for 4 month.

(e) *Administration overhead*: 25% of the head office expenses for the period of the contract. The total head office expenses amount to ` 4,000.

(f) *Quantity of work done:* Quantity of work certified and accepted by the Engineering Authorities of Project 12,000 sq. ft. of covered floor area. (B.Com.)

[Ans. Profit tr. to P&L A/c ` 8,000 ]

11. Ranga undertook a contract for ` 75,00,000 on an arrangement that 80% of the value of the work done, as certified by the architects of the contractee, should be paid immediately and the remaining 20% be retained until the contract was completed. Ranga's record showed the following position:

Year	Materials	Wages	Carriage	Sundry expenses	Stock of work uncertified
2013	9,60,000	8,50,000	35,000	35,000	Nil
2014	11,00,000	11,50,000	1,25,000	20,000	1,00,000
2015	6,30,000	8,50,000	30,000	15,000	Nil

Architect's certificates were for ` 18,75,000 during 2013, for ` 37,50,000 during 2014 and for ` 18,75,000 during 2015.

Show the Contract Account and Contractee Account in Ranga's books. (B.Com., Bangalore)

[Ans. 2013 — Loss ` 5,000; 2014 —Tr. to P&L A/c ` 7,76,000; Reserve ` 6,79,000; 2015 — Profit ` 9,29,000]

12. The following information related to a building contract for ` 10,00,000 and for which 80% of the value of work-in-progress as certified by the architect is being paid by the contractee.

	I Year	II Year	III Year
Material issued	1,20,000	1,45,000	84,000
Direct wages	1,10,000	1,55,000	1,10,000
Direct expenses	5,000	17,000	6,000
Indirect expenses	2,000	2,600	500
Work certified	2,35,000	7,50,000	10,00,000
Uncertified work	3,000	8,000	—
Plant issued	14,000	—	—
Material on site	2,000	5,000	8,000

The value of the plant at the end of I, II and III year was ` 11,200, ` 7,000 and ` 3,000 respectively. Prepare Contract Account, for these three years taking into account such profit as you think proper on incomplete contract.

(B.Com.)

[Ans. I yr. Reserve ` 200, II yr. Profit ` 1,06,347; Reserve ` 93,053; III yr. Profit ` 1,33,553]

13. India Construction Limited engaged in contract work has the following Trial Balance on 31st December, 2015 :

	Dr.	Cr.
Share capital — Shares of ` 10 each	—	35,180
Profit and Loss A/c as on 1st Jan., 2015	—	2,500
Provision for depreciation on plant and tools	—	6,300
Contractee's A/c — Contract No. 707	—	1,28,000
Creditors	—	8,120
Land and building (at cost)	7,400	—
Plant and tools (at cost)	5,200	—
Bank balance	4,500	—
Contract No. 707:		
Materials issued	60,000	—
Direct labour	83,000	—



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Expenses	4,000	
Plant and tools at site (at cost)	16,000	
	1,80,100	1,80,100

Contract No. 707, having a contract price of ₹ 2,40,000 was begun in 1st January, 2015 and contractee pays 80% of the work completed and certified. The cost of work done since certification is estimated to be ₹ 1,600. After the above Trial Balance was extracted on 31st Dec., 2015. plant costing ₹ 3,200 was returned to the stores and materials at site on that date were valued at ₹ 3,000. Provision is to be made for sub-contract costs amounting to ₹ 600 incurred on Contract No. 707 and for depreciation of all Plant and Tools @ 12.5% on cost. Prepare Contract No. 707 Account showing the computation of profit, if any, for which credit, may properly be taken in 2015 and prepare the Balance Sheet of the construction company on 31st December, 2015. (B.Com.)

[Ans. Tr. to P&L A/c ₹ 8,000. Reserve ₹ 7,000, B/S Total ₹ 69,700]

14. Alcon Construction Company Ltd. commenced its business construction on 1-1-2015. The trial balance as on 31-12-2015 shows the following balances:

	<i>Dr.</i>	<i>Cr.</i>
Paid-up share capital	—	1,00,000
Cash received on account of contract (80% of work certified)	—	1,20,000
Land and Buildings	30,000	
Machinery at cost (75% at site)	40,000	
Bank	4,000	
Materials at site	40,000	
Direct Labour	55,000	
Expenses at site	2,000	
Lorries and vehicles	30,000	
Furniture	1,000	
Office equipment	10,000	
Postage and telegrams	500	
Office expenses	2,000	
Rates and taxes	3,000	
Fuel and power	2,500	
	2,20,000	2,20,000

The contract price is ₹ 3,00,000 and work certified is ₹ 1,50,000. The work completed since certification is estimated at ₹ 1,000 (at cost). Machinery costing ₹ 2,000 was returned to stores at the end of the year. Stock of material at site on 31-12-2015 was of the value of ₹ 5,000. Wages outstanding were ₹ 200. Depreciation on machinery at 10%. You are required to calculate the profit from the contract and show how the work-in-progress will appear in the Balance Sheet as on 31-12-2015. (B.B.M., Bangalore)

[Ans. Tr. to P&L A/c ₹ 28,427. Reserve ₹ 24,873]

[Hint. Office expenses, postage and telegrams, rent and rates, fuel and power and depreciation on machinery costing ₹ 10,000 are not charged to Contract Account. These are charged to P&L A/c of the company.]

15. A firm of building contractors began to trade on 1st January, 2015. During the year, the company was engaged on only one contract. The contract price was ₹ 5,00,000.

Of the plant and materials charged to the contract, the plant which cost ₹ 5,000 and material which cost ₹ 4,000 were lost in an accident.

On 31st December 2015. the plant which cost ₹ 5,000 was returned to the stores: the cost of work done but uncertified was ₹ 2,000 and the materials costing ₹ 4,000 were in hand on site.

Charge 10% depreciation of the plant and compile the Contract Account and the Balance Sheet from the following Trial Balance on 31st December, 2015.

Share capital	—	1,20,000
Creditors	—	10,000
Cash received on contract (80% of work certified)	—	2,00,000
Land, buildings, etc.	43,000	
Bank balance	25,000	
Charged to Contract:		
Materials	90,000	
Plant	25,000	
Wages	1,40,000	
Expenses	7,000	
	3,30,000	3,30,000

(B.Com., Calicut)

[Ans. Tr. to P&L A/c ` 11,200; Reserve ` 9,800; B/S total ` 1,32,200]

16. M/s Sewers Ltd. undertook a contract for erecting a sewerage treatment plant for municipality for a total value of ` 24 lakhs. It was expected that the contract would be completed by 31st March 2015. You are required to prepare a contract account for the year ending 31st March 2015 from the following particulars:

- (i) Wages ` 6,00,000
- (ii) Special plant ` 2,00,000
- (iii) Materials ` 3,00,000
- (iv) Overheads ` 1,20,000
- (v) Depreciation @ 10% to be provided on plant.
- (vi) Materials lying at the site on 31st March 2015 ` 40,000.
- (vii) Work certified was to the extent of ` 16,00,000 and 80% of same was received in cash.
- (viii) 5 per cent of the value of material issued and 6 per cent of wages may be taken to have been incurred for the portion of work completed but not yet certified.
- (ix) Overheads are charged as percentage of direct wages.
- (x) Ignore depreciation on plant for use on uncertified portion of the work.
- (xi) Ascertain the amount to be transferred to Profit and Loss Account on the basis of realised profit.

[Ans. Transfer to P&L A/c ` 3,51,040, Reserve ` 3,07,160]

[Hint. Work uncertified is calculated as under:

Material (5% of ` 3,00,000)	15,000
Labour (6% of ` 6,00,000)	36,000
Overhead (20% of ` 36,000)	7,200
Cost of work not certified	58,200

18. Philips Construction Company with a paid up share capital of ` 50 lakhs undertook a contract to construct LIG houses. The contract work commenced on 1-1-2015 and the contract price was ` 50 lakhs. Cash received on account of contract on 31-12-2015 was ` 18 lakhs (90% of the work certified). Work completed but not-certified was estimated at ` 1,00,000. As on 31-12-2015 material at site was estimated at ` 30,000 and machinery at site costing ` 2,00,000 was returned to stores. Plant and machinery at site is to be depreciated at 5%. Wages outstanding on 31-12-2015 were ` 5,000.

The following were ledger balances (Dr.) as per Trial Balance as on 31-12-2015:

Land and buildings	15,00,000
Plant and machinery at cost (60% at site)	25,00,000
Lorries and other vehicles	8,00,000

CONTRACT COSTING

35

Furniture	50,000
Office equipment	10,000
Materials sent to site	14,00,000
Fuel & Power	1,25,000
Site expenses	5,000
Postage & telegrams	4,000
Office expenses	8,000
Rates & taxes	15,000
Cash at bank	1,33,000
Wages	2,50,000

Prepare the Contract Account to ascertain the profit from the contract and show the WIP in the Balance Sheet.

[**Ans.** Notional profit ` 2,43,000: Tr. to P&L A/c  $2,43,000 \times \frac{1}{3} \times 90\% = ` 72,900$ ; Reserve ` 1,70,100:  
WIP in B/S =  $20,00,000 + 1,00,000 - 18,00,000 - 1,70,100 = ` 1,29,900$

**Hint.** Fuel and power, office expenses, rates and taxes and postage and telegrams have been assumed to be charged to the contract].

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