Unit 6 □ Methods of Costing : Job, Contract, Process and Service Costing

Structure

6.1 Introduction

As discussed earlier (Unit 1), methods of costing indicate the methods of collecting, collating (gather together in proper order) and presenting cost data. These methods differ depending on the nature of the product, production process, etc. So, different methods are to be adopted for ascertaining costs for job-order type of works, construction contracts, production involving sequential processing operations or for a specific service and function. The methods of costing applicable in the above cases have accordingly been named, as the nature of the product and production process involved in individual case suggests, as Job Costing, Contract Costing, Process Costing and Service Costing respectively. These are essentially the subject matters of discussion in this unit.

6.2 Job Costing

Job Costing is applicable where goods are produced on the basis of the orders received from the customers. Since customers' specifications for desired goods differ, goods that are to be produced would not be all alike; naturally they involve different costs. So, costs and so also the profit/loss are to be ascertained for each such job separately. Industries where job costing can be applied include tailoring, printing, furniture manufacturing, machine tools manufacturing, etc.

6.2.1 Job Cost Collection

Usually the process of ascertaining costs for a job is exercised before the actual production starts. So, it is based on estimated cost. Such a pre-production estimation of cost for producing goods as per customers' specification is necessary because it is on the basis of this estimated cost a price is quoted and an agreement is entered into between the producer and the customer. The producer starts production thereafter when the job (for supplying the goods) is formally accepted.

The Production Order is, however, issued by the Planning Department of the manufacturing unit. Each job being dissimilar separate production orders are required to be issued for different jobs undertaken. For identification of the jobs each production order is alloted a number called Production Order Number.

Actual costs of production for the jobs are then collected by the Production Order Numbers. Costs as collected by the Production Order Number are recorded in a Job Cost Sheet. A job cost sheet thus accumulates the costs of each job in a systematic manner and in the proper format. Actual costs are compared with the estimated cost figures for control purposes.

For systematic collection of costs the following procedure is followed :

i) *Direct Materials* : If materials are purchased for a particular job, cost of materials is collected from the related Purchase Invoice. On the other hand, if materials are issued from stores, the related documents may be Stores Requisition, Bill of Materials, etc. The values of materials issued are obtained from Cost Department.

ii) *Direct Labour* : The related documents for booking labour cost to a job are Operation Schedule, Job Card or Wages Analysis Sheet or any other document used for time booking.

iii) *Direct Expenses* : Direct expenses like hire charge of any machine hired specifically for a job or the cost of sub-contracting, etc. must always be supported by the vouchers. These vouchers are used for collection of direct expenses of a job.

iv) *Overheads* : Actual overheads are collected by Standing Order Numbers or Cost Account Numbers. But, as stated earlier (unit 4), overheads are charged to the jobs on the basis of pre-determined rates. So, it may lead to under- or over-absorption attracting treatments as discussed in Unit 4.

6.2.2 Job Cost Accounting

So far as accounting aspect is concerned, the usual procedure as discussed earlier (Unit 5) under 'Cost Control Accounts' is followed when job costing is applied. For detailed job wise recording of costs incurred for each job, a separate subsidiary ledger called Job Cost Ledger is, however, maintained. Total amounts of costs incurred on different elements for all the jobs are entered in the Work-in-Progress Ledger Control A/C. When a job is finished, the total cost incurred for the job is ascertained from the individual job account maintained in Job Cost Ledger. The individual job account is then closed. The W.I.P. Ledger Control A/C is credited with the total cost of the job so completed by debit to Cost of Sales A/C. When the job is invoiced to customer, Cost of Sales A/C is credited with the amount of total cost for the job debiting Costing Profit & Loss A/C. Costing Profit & Loss A/C is credited with the amount of agreed price of the job debiting Sales A/c. Thus, W.I.P. Ledger Control A/c will leave a balance representing the value/cost of unfinished jobs and Costing Profit & Loss A/c will show the profit or loss on the jobs completed and sold.

6.2.3 Job Cost Sheet

The proforma of a Cost Sheet as given in Unit 3 is actually meant for use in jobbing type of operation. But if a job passes through a number of departments for its

completion drawing resources and services from such departments, the same proforma of a cost sheet can be used with certain minor modifications so as to make it suitable for application. Below is given a modified proforma of a Job Cost Sheet or alternatively called a Job Cost Card.

Job cost card

Job Order No.	**Quantity Ordered . . . . . .**
Description	**Date started . . . . . .**
Customer	**Date completed . . . . . .**

Date	**Particulars**	**Cost**					**Remarks**
		Dept. 1 Rs.	**Dept. 2 Rs.**	**Dept. 3 Rs.**	**Total Rs.**	**Per unit Rs.**	
	1. Direct Materials 2. Direct Wages 3. Direct Expenses 4. Overheads						
	Total (1+2+3+4)						

The proforma may be suitably redesigned by adding additional rows to show more detailed cost information like Prime Cost, Works Cost, Cost of Production, Cost of Sales, etc.

6.2.4 Problems and Solutions

Problem 1

Following figures are extracted from the cost records of a firm for the accounting year 2003-2004 :

	Rs.		Rs.
Direct Materials	90,000	Office and Administration	
Direct Wages	60,000	Overhead	39,200
Direct Expenses	10,000	Selling and Distribution	
Manufacturing Overhead	36,000	Overhead	49,000
		Profit	85,260

In 2004-2005, an article had been manufactured and sold on the basis of an order received from a customer. The following expenses were incurred for the article :

Direct Materials Rs. 5,000, Direct Wages Rs. 3,000, and Direct Expenses Rs. 2,000.

In 2004-2005, the prices of overhead expenses had undergone change as follows :

Manufacturing overhead increased by 10%, Office and Administration overhead increased by 20% and Selling and Distribution overhead decreased by 20%.

At what price the customer is to be billed for the supply of the article as per his order so as to earn the same rate of profit on cost as in 2003-2004 ?

Solution 1

Workings

Cost Sheet for 2003-2004

Particulars	Amount Rs.	Relations Worked Out for 2004-2005
Direct Materials	90,000	i) Manufacturing OH (% of Direct
Direct Wages	60,000	Wages) =
Direct Expenses	10,000	(36,000 + 10%) × 100/60,000 = 66%
Prime Cost	1,60,000	ii) Office and Administration OH
Manufacturing Overhead	36,000	(% of Works Cost) =
Works Cost	1,96,000	(39,200 + 20%) × 100/1,96,000
Office and Administration Overhead	39,200	= 24%
Cost of Production	2,35,200	iii) Selling and Distribution OH
Selling and Distribution Overhead	49,000	(% of Works Cost) = (49,000-
Cost of Sales	2,84,200	20%) × 100/1,96,000 = 20%
Profit	85,260	iv) Profit (% of Cost of Sales) =
Sales	3,69,460	85,260 × 100/2,84,200 = 30%

Job Cost Sheet
(Job No. . . . . in 2004-2005)

Particulars	Amount Rs.
Direct Materials	5,000
Direct Wages	3,000
Direct Expenses	2,000
Prime Cost	10,000
Manufacturing Overhead (66% of Direct Wages)	1,980
Works Cost	11,980
Office and Administration Overhead (24% of Works Cost)	2,875
Cost of Production	14,855
Selling and Distribution Overhead (20% of Works Cost)	2,396
Cost of Sales	17,251
Profit (30% of Cost of Sales)	5,175
Selling Price	22,426

Problem 2

A job has been priced at Rs. 350 calculated on the following basis :	Rs.	Rs.
Materials : Dept. A	60	
Dept. B	40	100
Wages : 30 hours @ Rs. 6 per hour		180
(Dept. A–15 hours, Dept. B–5 hours, Dept. C–10 hours)		
		280
Plus 25% on Prime Cost		70
		350

Previous year's Profit and Loss Account may be redesigned in the following manner to reveal relevant information :

	Rs.	Rs.		Rs.
Materials Consumed :			Sales	2,40,000
Dept. A	35,000			
Dept. B	30,000			
Dept. C	15,000	80,000		
Direct Wages :				
Dept. A	30,000			
Dept. B	12,000			
Dept. C	18,000	60,000		
Factory Overhead :				
Dept. A	40,000			
Dept. B	10,000			
Dept. C	18,000	68,000		
Gross Profit c/d		32,000		----------
		2,40,000		2,40,000
Administration Overhead		10,400	Gross Profit b/d	32,000
Selling and Distribution Overhead		5,200		
Net Profit		16,400		
		----------		----------
		32,000		32,000
		======		======

Your are required to prepare a job Cost Sheet to show the final selling price taking the following into account :

i) revised costs based on previous year's figures are to be adopted, and

ii) a profit margin of 10% on total job cost is to be added.

Solution 2

Job Cost Sheet

(Job No. . . . . Period . . . . . .)

		Rs.	Rs.
Materials :	Dept. A	60	
	Dept. B	40	100.00
Wages :	Dept. A (15 hours @ Rs. 6)	90	
	Dept. B (5 hours @ Rs. 6)	30	
	Dept. C (10 hours @ Rs. 6)	60	180.00
	Prime Cost		280.00
Factory Overhead[1] :			
	Dept. A (15 hours @ Rs. 8)	120	
	Dept. B (5 hours @ Rs. 5)	25	
	Dept. C (10 hours @ Rs. 6)	60	205.00
	Works Cost		485.00
Administrative Overhead (5% of Works Cost)[2]			24.25
Selling and Distribution Overhade (2.5% of Works Cost)[3]			12.13
	Cost of Sales		521.38
Profit (10% on Cost of Sales)			52.14
	Selling Price		573.52

Note 1

Factory overhead rates for different departments are computed on the basis of previous year's figures as follows :

Dept. A :

Direct Wages Rs. 30,000

Hourly rate Rs. 6 (assumed unchanged)

Direct Labour Hours = Rs. 30,000 / Rs. 6 per hour = 5000

Factory Overhead Rs. 40,000

Factory Overhead rate : Rs. 40,000 / 5000 hours = Rs. 8 per hour

Dept. B :

Direct Labour Hours = Rs. 12,000 / Rs. 6 per hour = 2,000

Factory Overhead rate : Rs. 10,000 / 2000 hours = Rs. 5 per hour

Dept. C :

Direct Labour Hours = Rs. 18,000 / Rs. 6 per hour = 3,000

Factory Overhead rate : Rs. 18,000 / 3000 hours = Rs. 6 per hour

Note 2

Administration overhead rate is computed as a % on works cost as follows :

Total administration overhead	Rs. 10,400
Work Cost [Rs. (80,000 + 60,000 + 68,000)]	Rs. 2,08,000

Administration overhead rate = (Rs. 10,400 × 100) / Rs. 2,08,000 = 5%

Note 3

Selling and Distribution overhead rate is also computed as a% on works cost :

Total selling and distribution overhead	Rs. 5,200
Works cost	Rs. 2,08,000

Selling and distribution overhead rate = (Rs. 5,200) / (Rs. 2,08,000) × 100 = 2.5%.

6.3 Contract Costing

6.3.1 Introduction

Contract costing is similar to job costing. Both are undertaken to satisfy customers' special requirements i.e., 'tailor-made'. Naturally, therefore, no two jobs or contracts are exactly similar. These are also terminal in nature in the sense that the terminal points i.e., beginning and end, of each job or contract are easily identifiable. It makes separate cost ascertainment for each terminated job or contract easier. That is why these are also called Terminal Costing.

In spite of the above similarities, contract costing is separated from job costing for the following peculiarities of contract costing :

i) Duration of a contract is usually longer involving more than one accounting period.

ii) Operations are usually constructional involving designing, erection or providing structures as in cases of building, dam, road, bridge, shipbuilding, etc.

iii) Operations are generally carried out at a place other than the contractor's own place.

iv) Not like job costing most of the costs incurred for a contract are identifiable and specific for the contract. There are rare cases of costs which may require apportionment.

Escalation Clause is a clause in the contract, which provides scope for revision of the contract price necessitated by the abnormal upward changes in usages or prices of inputs from those (usages or prices) estimated at the time of entering into the contract. The clause specifically aims at compensating the contractor for any unforeseen changes that may take place.

On the basis of its nature all contracts can be classified into two categories as follows :

a) **Fixed Price Contracts**–In such contracts a fixed price for the contract is agreed upon with or without having an 'escalation clause'.

b) **Cost plus contracts**–In such contract an agreement is entered into for (i) reimbursement of allowable or defined costs, and (ii) payment of a certain percentage of these costs or a fixed amount towards profit.

6.3.2 Collection of Costs for Contracts

Procedures : Similar to job costing, each contract undertaken by a contractor is given a Contract Account Number. It distinguishes one contract from the others. All costs relating to a particular contract are collected with reference to that number. It may also be used for purposes of cost estimation which is important for price quotations.

Principles :

i) Each contract is treated as a cost unit. So, cost is generally ascertained for the entire contract as a whole although in some cases it may be possible to ascertain costs for smaller component parts of a contract. Such ascertainment of costs for smaller parts of a contract leads to more effective cost analysis and cost control.

ii) For periodical finalization of accounts, the principle of matching costs with revenues is followed. That is, only that portion of the costs incurred in an accounting period is taken into account for which revenue has been recognized. So, costs for the *certified portion* of the work completed are to be matched against the corresponding part of the contract value.

iii) Another principle which assumes significance in Finalization of periodical accounts is principle of conservatism. Following this principle, only that portion of the profit on contract which is realized is taken into account. Anticipated profit does not find place in profit determination. Contrarily, all losses – both the actual and anticipated – are given effect to.

Accounting : All costs which are specifically identified with a contract are debited to the related Contract Account. There may be some general costs which are incurred for all the contracts or for a group of contracts under a contractor but cannot be identified with any specific contract. These are treated as overhead. Treatments of different types of costs of a contract are discussed below :

i) *Materials*

Materials may be either directly purchased or issued form stores. In either case contract account is debited with the value of materials. In the former case, purchase

price including carriage inwards constitutes the value. In the latter case, value is ascertained following the method of pricing adopted, e.g., FIFO, LIFO, Average, Standard, etc.

The value of materials lying unused at the site of the contract at the end of an accounting period is credited to the contract account.

For normal loss or wastage of materials, nothing is done i.e., the cost of such normal loss is left to be absorbed within the cost of the contract.

For abnormal loss, if any, costing profit and loss account is debited with the value of such loss by credit to contract account.

Transfers (to other contracts) and returns (either to the store or to the supplier) are credited to the contract account.

ii) *Labour*

Cost of labour employed for a contract is direct and specific irrespective of the fact that some of the duties performed by them (e.g., supervisors' salaries) may be of indirect nature. However, if a supervisor or an engineer employed by a contractor has to look after a number of contracts under the same contractor, the salaries of such supervisor or engineer have to be apportioned amongst the contracts. Anyway, salaries and wages allocated or apportioned to a contract are to be debited to the contract account.

iii) *Direct Expenses*

All direct expenses i.e., the expenses which may be directly allocated to the contract but are neither direct materials nor direct wages, are to be debited to the contract account. Examples of direct expenses may be costs of design, special tools, hire charge of a mixer machine or a road-roller, etc.

iv) *Overheads*

As mentioned above, most of the expenses of a contract can be directly allocated to it; thus there may only be a few items of general nature like cost of administration or central supervision, which are treated as overheads. Some firms like to apportion the overhead expenses and an appropriately apportioned share is debited to the respective contract account. Most of the firms, however, prefer to charge the total amount of general overhead expenses to the costing profit and loss account.

v) *Plants and Equipments*

Hire charge (in case of hired plants and equipments) and depreciation (in case of owned plants and equipments) are debited to contract account. Sometimes, instead of charging depreciation, the book value of the plants issued is debited and depreciated

to the contract account. It will effectively result in charging the contract account with the use-value of the plants. This method is followed when valuation of plants appears to be easier than determining the rate of depreciation or when plants are issued to the contracts for regular use over a longer period of time.

Sometimes an 'Upkeep Account' is opened and the costs of repairs, maintenance, depreciation and obsolescence are debited to that account. At the end of an accounting period, contract account is charged with the amount of depreciation, repairs, etc. computed at a rate sufficient to cover the annual depreciation, repairs, etc. It is like 'Repair Provision Method' of charging depreciation.

vi) *Miscellaneous Expense*

All other expenses related to a contract are debited to contract account. The examples of other expenses may be surveyor's fees, fines, penalties, etc.

Apart from the issues relating to costs as discussed above, there are certain commonly used terms which are relevant in preparing a contract account and determining profit or loss in a contract. These are discussed below :

a) Contract Price : It is the agreed amount payable to a contractor. It may be a fixed amount (as in case of fixed price contract) or a conditioned amount (as in case of cost plus contract).

b) Work Certified and Progress Payment : Contracts are usually of longer duration involving more than one accounting period and a huge amount. Contract price is, therefore, paid in installments on the basis of the progress of the work. An independent surveyor is appointed who occasionally visits the site of the work and inspects the work done. He finally certifies the portion of work completed as on the day of his visit and its corresponding value.

c) Retention Money : The contract entered into between the contractor and the contractee generally contains a *retention clause* which provides for keeping withheld payment of a portion (certain percentage) of the certified value till the entire contract is completed or even beyond that period. The amount of money so retained temporatily by the contractee is called 'Retention Money'. This is just a security measure in the hands of the contractee to keep pressure on the contractor to complete the work in time, prevent him from leaving the contract before completion or to rectify the mistakes that may be discovered within a short period after completion of the contract.

d) Profit on Incomplete Contracts : Determination of actual profit is possible only on the completion of a contract which generally involves more than one accounting period. But it poses a number of problems. Firstly, it may lead to heavy fluctuations in profits – higher in the years in which contracts are completed and lower in other

years when contracts are in progress; more likely is the fact that the result may show a loss for a year in which no contract is completed even though operationally the year may be a successful one. Secondly, it may attract higher tax rate when the entire profit on a contract is shown in a year putting it in a higher slab. Thirdly, from the point of view of rational accounting practice, it appears to be irrational in the sense that profit does not accrue suddenly on completion of the contract; it rather accrues gradually over the years during which works have been carried out.

The other alternative to ascertain profit is to anticipate profit in the years during which works are in progress. This practice, however, goes against the accounting doctrine of conservatism. According to the doctrine, profits are to be taken into account only when these are realized but provisions should be made in accounting for all anticipated losses.

The popular practice in contract costing, however, goes in favour of anticipating profit and to take a portion of such anticipated profit into Profit & Loss Account because it appears to be more rational. But there is no uniformity as to how much profit of the incomplete contract is to be credited to Profit & Loss Account. Practices vary widely depending on the nature of the work, policies of the management, portion completed, risk in completing the incomplete work, etc. With a view to having a general guiding principle in this regard, all the on-going contracts may be classified as follows on the basis of their degree of completion.

i) Contracts at the initial stage of completion,
ii) Contracts which are half-way to their completion,
iii) Contracts at the advanced stage of completion, and
iv) Contracts nearing completion.

Contracts which are at their initial stage (say, not more than 25% of the work has been completed) can hardly give any indication as to whether a particular contract will ultimately turn out as a profitable or loosing one. So, no profit on such contracts should be taken into account at their initial stages of completion.

Contracts which have taken pace in work-activities and are at their half-way of completion (say, 25% to 50% completed) should be assessed as to their profitability. Profit on such a contract is to be estimated on a notional basis by comparing the cost of the work certified against the certified value of the contract. As a safeguard against the possibility of a loss that may arise out of the remaining portion of the contract, only a small fraction of the notional profit, say one-third, is credited to profit and loss account and the balance is retained as provision against future loss, if any.

For contracts the works of which have sufficiently been progressed, say between 50% and 90%, two-thirds of the notional profit may be taken to profit and loss account.

A greater portion of such profit is taken to the profit and loss account since only a smaller part of the contract remains to be completed, which may qualify for a remote chance of turning the entire contract into a loosing one.

Contracts which are *almost completed* say, 90% or more complete, are treated a bit differently. Profits in such cases are estimated on a prospective basis considering the cost and the price for the contracts as a whole. The works of these contracts are at so advanced a stage that the costs for the insignificant incomplete portion can easily be estimated. Thus, the estimated total cost of a contract comprising *actual cost of* completed portion and *estimated cost of* incomplete portion is compared against the contract value (not the certified value) to arrive at *total estimated profit*. Provision for contingencies can still be made by recognizing only the following portion of estimated total profit i.e.,

(Estimated total profit × Actual Cost to data) / Estimated total cost,

and leaving the rest portion as profit provision.

To be overcautious about future contingencies the amount of profit recognition can be reduced further in each of the cases by taking credit of the *realized portion* of the profit only to the profit and loss account. This can be done by applying the following formula :

Realised notional profit = Notional profit × Cash received / (Work Certified).

On prospective basis, the denominator 'work certified' in the above proportion is replaced by 'contract value'.

Different formulae that are used to determine the amount of profit to be credited to profit and loss account in different cases of incomplete contracts are summarized below :

Let N = Notional profit,

E = Estimated total profit (prospective basis), and

P = Cash received / Work certified

Sl. No.	Types of incomplete Contracts	Degree of completion	Profit to be recognised
1.	Initial Stage	Not more than 25%	Nil
2.	Half-done	Between 25% and 50%	(1/3 × N) or (1/3 × N × P)
3.	Advanced Stage	Between 50% and 90%	(2/3 × N) or (2/3 × N × P)
4.	Nearing Completion (prospective basis)	90% and above	(E × Actual Cost to date / Est. total cost) = A (Say) or (A × Cash received) / (Contract value)

e) Loss on Incomplete Contracts : Loss on incomplete contracts arises if the value of the work certified is less than its cost. Such situation may arise due to inefficient cost management or unforeseen price rise of inputs specially when that is not duly guarded by escalation clause. Unlike profit on incomplete contracts, the entire loss is charged to profit and loss account irrespective of the degree of completion. Moreover, provision should also be made for any future anticipated loss although it is quite natural that the contractor would take appropriate measures to avoid or reduce the loss so anticipated.

f) Work-in-Progress : Alike the need for ascertaining profit / loss on incomplete contracts, need also arises for valuation of incomplete contract that is in progress. Basis of the valuation is the actual total cost incurred so far on contract *plus* the portion of profit recognized. Work-in-Progress is an asset and, therefore, is to be shown in the balance sheet; care should, however, be taken to deduct the amount realized, if any, from the contractee. The value of work-in-progress can thus be computed as shown below :

1.	Value of work certified :			
	2. Cost of work certified		* * *	
	3. Profit element in work certified :			
	4. Profit taken to P/L A/C	* * *		
	5. Profit provision	* * *	* * *	* * *
				* * *
6.	Cost of work not certified			* * *
7.	*Less :* Profit provision		* * *	
8.	*Less :* Cash received		* * *	* * *
9.	Work-in-Progress			* * *

Alternatively,

Work-in-Progress (9) = (2 + 4 + 5 + 6) – (7 + 8)

= (2 + 6 + 4) – (8) [as (5) = (7)]

It may be mentioned that (2 + 6) constitutes 'Total Cost to Date'.

6.3.3 Problems and Solutions

Problem 1

The following particulars have been supplied by M/s Sugathan Construction Co. Ltd. in respect of their three contracts namely, Contract Nos. 201, 202 and 203 for the year ended 31st March, 2005 :

Particulars	Contracts		
	No. 201	No. 202	No. 203
Date of Commencement	01.07.04	01.10.04	01.01.05
	Rs.	Rs.	Rs.
Contract Price	5,00,000	2,40,000	3,20,000
Materials purchased	1,05,000	80,000	1,20,000
Materials in hand on 31.03.05	20,000	16,000	22,000
Wages paid	70,000	54,000	48,000
Wages outstanding	3,000	2,000	1,000
Plant installed at the beginning	1,50,000	80,000	60,000
Establishment charges	5,000	2,000	3,000
Other expanses	12,000	8,000	10,000
Work certified	2,10,000	1,10,000	2,00,000
Cost of uncertified work	8,000	6,000	10,000
Cash received	1,68,000	80,000	1,80,000

Depreciation is charged @ 10%. Prepare Contract Accounts for the year ended 31st March, 2005. Show computation for the values of Work-in-progress and also the figures as they would appear in the Balance Sheet.

Solution

Dr. **Contract Account** **Cr.**

Particulars	N0. 201 Rs.	No. 202 Rs.	No. 203 Rs.	Particulars	N0. 201 Rs.	No. 202 Rs.	No. 203 Rs.
To Materials Purchased	1,05,000	80,000	1,20,000	By Materials c/d	20,000	16,000	22,000
To Wages Paid	70,000	54,000	48,000	By Plant c/d (Cost less Depn.)	1,38,750	76,000	57,000
To Wages Outstanding c/d	3,000	2,000	1,000	By Cost c/d	1,86,250	1,34,000	1,63,000
To Establishment Charges	5,000	2,000	3,000				
To Other Expenses	12,000	8,000	10,000				
To Plant	1,50,000	80,000	60,000				
	3,45,000	2,26,000	2,42,000		3,45,000	2,26,000	2,42,000

To Cost b/d	1,86,250	1,34,000	1,63,000				
				By Contractee's			
To Profit b/d	31,750	---	47,000	A/c			
				(Value of Work			
				Certified)	2,10,000	1,10,000	2,00,000
				By Cost of			
				Uncertified			
				work c/d	8,000	6,000	10,000
				By Profit &			
				Loss A/c			
				– Loss			
				transferred[1]	---	18,000	---
	2,18,000	1,34,000	2,10,000		2,18,000	1,34,000	2,10,000
To Profit &							
Loss A/c[1]	8,467	---	28,200	By Profit b/d	31,750	---	47,000
To Profit							
Provision c/d	23,283	----------	18,800				
	31,750	----------	47,000		31,750	---	47,000
To Materials	20,000	16,000	22,000	By Profit			
b/d				Provision b/d	23,283	---	18,800
To Plant b/d	1,38,750	76,000	57,000	By Wages			
To Cost of				Accrued b/d	3,000	2,000	2,000
Uncertified							
Work b/d	8,000	6,000	10,000				

Note 1 :

Profit to be taken to Profit & Loss Account

Contract Nos.	**201**	**202**	**203**
1. Contract Price (Rs.)	5,00,000	2,40,000	3,20,000
2. Value of Work Certified (Rs.)	2,10,000	1,10,000	2,00,000
3. (Work Certified / Contract Price) (%)	42	45.8	62.5
4. Profit / Loss (–) (Rs.)	31,750	(–) 18,000	47,000
5. Profit to be taken :			
[1/3 × 31,750 × (1,68,000 / 2,10,000)]	8,467	----	----
[2/3 × 47,000 × (1,80,000 / 2,00,000)]	----	----	28,200
6. Loss to be transferred (Rs.)	----	(–) 18,000	----
7. Profit Provision (Rs.)	23,283	NIL	18,800

Note 2 :

Computation of Work-in-progress

Particulars	Contract Nos.		
	201	202	203
1. Cost to date (Rs.)	1,86,250	1,34,000	1,63,000
2. Proportion of profit taken (Rs.)	8,467	----	28,200
3. Loss transferred (Rs.)	----	(–) 18,000	----
4. Cash received (Rs.)	1,68,000	80,000	1,80,000
5. Work-in-progress :			
[1 + 2 – 4] (Rs.)	26,717	----	11,200
[1 – 2 – 4] (Rs.)	----	36,000	----

(Extract from) Balance Sheet as at 31st March, 2005

Liabilities	Contract Nos.			Assets	Contract Nos.		
	201 Rs.	202 Rs.	203 Rs.		201 Rs.	202 Rs.	203 Rs.
Profit & Loss A/c (includes) :				Fixed Assets (includes) :			
Profit on Contracts	8,467	---	28,200	Plant (Cost			
Loss on Contract	---	(–) 18,000	---	Less depn.)	1,38,750	76,000	57,000
Sundry Creditors (include) :				Current Assets (include) :			
Wages Accrued	3,000	2,000	1,000	Materials	20,000	16,000	22,000
				Work-in-Progress	26,717	36,000	11,200

Problem 2

XYZ Ltd. undertook a contract for Rs. 10,00,000 on 1st April 2003. The following particulars about the costs and progress of the contract at the end of the year on 31st March 2004 were available.

	Rs.		Rs.
Materials Issued	3,70,000	Share of Head Office expenses	60,000
Direct Wages Paid	1,20,000	Materials in hand (31.03.04)	10,000
Wages Outstanding	30,000	Value of Plant (31.03.04)	3,80,000
Site Expenses	80,000	Work Certified	8,00,000
Plant Purchased	5,00,000	Work Uncertified	69,000
Plant installation cost	10,000	Cash received (80%)	6,40,000

The contract contained the following escalation clause :

"In the event of increase in the price of raw materials by more than 15% and the rates of wages by more than 10%, the contract price would be increased accordingly by 40% of such increase in cost of materials and rates of wages beyond the respective percentages".

It was found that since signing the agreement both the material prices and the rates of wages increased by 20%. The value of work certified did not take the escalation clause into account.

Prepare Contract Account.

Solution 2

Dr. Contract Account Cr.

		Rs.		Rs.
To Materials issued		3,70,000	By Materials c/d	10,000
" Direct Wages :	Rs.		" Plant c/d	3,80,000
Paid	1,20,000		" Cost c/d	7,80,000
Outstanding	30,000	1,50,000		
" Site expenses		80,000		
" Plant	5,00,000			
Installation	10,000	5,10,000		
" Share of H.O. expenses		60,000		
		11,70,000		11,70,000
To Cost b/d		7,80,000	By Value of work certified	8,00,000
" Profit c/d		1,00,000	" Cost of uncertified work	69,000
			" Cost escalation	11,000
		8,80,000		8,80,000
To Profit & Loss A/C [(2/3 × N × P) = 2/3 × 1,00,000 × (80/100)]		53,333	By Profit b/d	1,00,000
To Profit Provision c/d		46,667		
		1,00,000		1,00,000
To Materials b/d		10,000	By Wages outstanding b/d	30,000
" Plant b/d		3,80,000		