5.3 CONTRACT COSTING

Contract Costing or Terminal Costing as it is often termed, is a variant of the job costing system, which is applied in businesses engaged in building or other construction work. The jobs are usually the contracts entered into with the customers. As the number of such contracts handled at a time by a business may not be usually large, Contract Costing is comparatively simpler in operation than job costing system. The basic principles applied in Contract Costing are the same as those used in job costing except that these are modified to suit the particular requirements of the contracts.

Differences between Job costing and Contract costing

(a) While the number of jobs in hand at any time in a concern may be large, only a few contracts may be undertaken at a time.

(b) The accumulation, analysis, apportionment, allocation and control of costs is simplified in Contract Costing.

(c) Most of the expenses are chargeable direct to the Contract Account. Direct allocation to such an extent is not possible in job costing.

(d) As contracts may run for long periods, there arises the problem of assessment and crediting of profits on incomplete contracts at the end of the accounting period.

Contract Costing is a type of costing used in constructional activities such as construction of buildings, roads, bridges etc. The person who takes contract for a price is called the **Contractor** and the person from whom it is taken is called the **Contractee**. We are mainly concerned with the books of the contractor. To find out profit earned or loss incurred on the contract, the contractor prepares a nominal account in his books called 'Contract Account'. In this account, all the expenses incurred by the contractor are debited and the income i.e mainly work certified is credited; the difference represents profit or loss.

The items generally debited are materials, wages, establishment expenses & other expenses. Depreciation of assets used in the contract will also be debited, but unlike in other types of accounts it is customary in Contract Accounts to debit the opening balance of the assets and credit the closing balance of the same instead of depreciation, wherever it is convenient to do so. Amounts credited are work-in-progress, which consists of work certified and cost of work uncertified and any scrap of materials etc. Further some special items which are discussed here under will also be taken care of.

The contracts run for or number of years; however it is necessary to find out the profit or loss at the end of every year. The profit earned on a Contract Account is primarily called **Notional Profit** and a portion of which would be kept on reserve against contingencies. The profit to be transferred to Profit & Loss Account out of notional profit is ascertained by taking into consideration the degree of completion of the work, cash received etc.

Some special items under contract accounting are explained below:

(i) Sub-Contract

Sub-contracting, usually of a part of the work, is another essential feature which we frequently come across in contract work. Sub-contracting may be necessary under the following circumstances:

(a) Work of a specialized nature for which facilities are not internally available within the concern is offered to a sub-contractor.

(b) It may be advantageous to get a part or component from outside, if it is costlier to manufacture it.

(c) Consideration of opportunity cost; the management may not like to invest capital which may be utilized for other more profitable lines.

(d) The capacity of the firm may be limited and in order to keep time schedule, work may be speeded by offering it to sub-contractors.

The payments made to sub-contractors are charged in totals to the concerned Contract Account as direct expense and no detailed records or break-up of the sub-contract amount is necessary for cost purposes.

(ii) Surveyor's Certificate and Retention Money

In the case of contracts running for long periods of time, it is customary for the contractor's firm to get 'on account' payments against the portion of contract completed. The amount received depends upon the extent of work certified by the technical assessor i.e. on the surveyor's certificates, as these are called. Normally such payments are not received to the full extent of the work completed but a small percentage is held back as retention money, payable on completion of the contract. The retention money is a sort of safeguard available to the contractee in case the contractor is not able to fulfill one or more of the conditions laid down in the contract.

(iii) Defective Work

Defective work will not evidently be paid for by the contractee but the cost of such defective work should be charged to the Contract Account. Sometimes, rectification of the defective work is required to be made at the contractor's cost; the cost of such rectification should also be charged to the Contract Account but shown separately.

(iv) Escalation Clause

Escalation clauses are often provided in contracts as safeguards against any likely changes in price or utilisation of material and labour. Such a clause in a contract would provide that in the event of a specified contingency happening, the contract price would be suitably enhanced. This clause is particularly necessary where the price of certain raw materials are likely to rise, where labour rates are anticipated to increase, or where the quantity of material or labour time cannot be properly assessed or estimated unless the work has sufficiently advanced. There may also be **'De-escalation or Reserve Clause'** to provide for any future decrease in price etc. so that the benefit may be passed on to the contractee.

(v) Work-in-progress

In Contract Accounts, the value of the work-in-progress consists of:-

(a) the cost of work completed, both certified and uncertified,

(b) the cost of work not yet complete, and

(c) the amount of profit taken as credit.

In the Balance Sheet, the work-in-progress is usually shown under two heads, viz. certified and uncertified. The cost of work completed and certified and the profit credited will appear under the head 'certified' work-in-progress, while the completed work not yet certified and the cost of labour, material and expenses of work which has not reached the stage of completion are shown under the head 'uncertified' work-in-progress.

(vi) Profit on incomplete contracts

For the purpose of finding out the portion of the profit out of notional profit to be transferred to Profit and Loss Account, the contracts are divided in the following manner:-

(A) Contracts which have just commenced

In this case no portion of the notional profit shall be transferred to Profit and Loss Account and the entire amount is kept as reserve. There are no hard and fast rules to determine that a particular contract is just commenced or reasonably advanced or almost complete. However, as per general norms, the contracts in which less than $1/4^{th}$ work is done are regarded as the contracts which have just commenced.

(B) Contracts which have reasonably advanced

In this case the profit to be transferred to Profit and Loss Account out of notional profit is based on the degree of completion of the contract. The degree of completion of the contract can be found out by comparing work certified and the contract price.

(a) If the degree of the completion of the contract is less than or equal to 1/4th no portion of the notional profit shall be transferred to Profit and Loss Account and the entire amount would be kept as reserve.

(b) If the degree of completion of work is (> 1/4 and < 1/2), 1/3 of the notional profit shall be transferred to Profit and Loss Account and the remaining amount would be kept as reserve.

(c) If the degree of completion of work is more than or equal to 1/2, $2/3^{rd}$ of the notional profit shall be transferred to Profit and Loss Account and the remaining amount would be kept as reserve.

The profit so arrived in the above manner shall further be reduced in the ratio of cash received to work certified. Thus, the formula is as follows:

$$(\text{Notional Profit} \times \frac{2}{3} \text{ or } \frac{1}{3} \text{ (as the case may be)} \times \frac{(\text{Cash received})}{(\text{Work certified})}$$

(C) Contracts which are almost complete

In this case the portion of the profit to be transferred to Profit and Loss Account is calculated by using the estimated total profit which is ascertained by subtracting the total cost to date and the additional cost to complete the contract from the contract price. The different formulas for such computations of profit are as follows:-

(i) $\text{Estimated Profit} \times \frac{(\text{Work certified})}{(\text{Contract price})}$

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

(iii) $\text{Estimated Profit} \times \frac{(\text{Total cost to date})}{(\text{Total cost})}$

(iv) $\text{Estimated Profit} \times \frac{(\text{Total cost to date})}{(\text{Total cost})} \times \frac{(\text{Cash received})}{(\text{Work certified})}$

B. Contract Costs

Contract costs may comprise of the following:

(a) Costs that relate directly to the specific contract.

(b) Costs that are attributable to contract activity in general and can be assigned to the different contracts; and

(c) Such other costs as are specifically chargeable to the customer under the terms of the contract.

B1a. Accounting Treatment of Materials Cost

(i) **Direct materials :** Most of the materials like bricks, cement, steel, etc. are sent to the site. Their costs are hence identified and debited to the contract account.

(ii) **Stores materials :** Stores materials are received through material requisitions from the central store. The cost of the same should also be debited to the respective contract account.

(iii) **Materials on site :** At the end of an accounting year, the cost of materials on site is estimated and credited to the contract account. It is carried forward to the next year by debiting to the contract account as an opening balance.

sale of surplus material

(iv) **Materials returned to the stores :** The materials which are no more required at the contract site are returned to the stores. The cost of materials so returned should either be deducted from materials issued or credited to the contract account.

(v) **Normal loss of materials :** Some materials on the contract site is normally lost. It is either because of nature of the material or the work. There is no separate accounting treatment of such loss. Only the cost of materials at site is calculated at the end of accounting period. In this way, cost of normal loss gets included in the cost of contract.

(vi) **Abnormal loss of materials :** The cost of materials stolen or destroyed by fire, etc. on contract site is treated as abnormal loss. It should be transferred to the profit and loss account and credited to the contract account.

B2. Accounting Treatment of Labour Cost

(i) All costs incurred on labour employed at the contract site should be treated as direct labour cost and is directly charged to the contract account. Total wages on accrual basis should be debited to the contract account. Adjustment for outstanding or advance payment of wages should be made.

(ii) A separate wage sheet should be prepared for each contract.

(iii) Salaries of the staff employed at head office and central stores are considered as indirect labour cost. Hence, these should be assigned to all contracts on some equitable basis as indirect expenses or overhead costs.

B3. Treatment of Direct Expenses

All expenses other than material and wages which are exclusively incurred for the contract are debited to the contract account. Examples of direct expenses are cost of special tools, cost of special designs, cost of hiring of plants and machineries for the contract, etc.

such as

B4 **Treatment of Overhead Costs**

(i) **Direct allocation:** Most of the expenses incurred in connection with a contract can be directly identified with each contract, e.g., supervisory salaries, staff amenities, repairs and maintenance of machinery, etc. These are directly allocated and debited to the contract concerned.

(ii) **Apportionment :** It is only the head office expenses which will require an apportionment to various contracts on some equitable basis. & central stores

B5. **Treatment of Plant and Machinery**

1 The plant and machinery to be used on a contract may be taken on lease, purchased specifically for a contract or sent from the central store. 2 When it is taken on lease or hire, the leasing charges or the hire will be charged to the contract account. 3 If the plant or equipment has been specially purchased or sent from central store for a particular contract, there are two ways of treatment in the contract account :

(i) Contract account may be debited with the cost of plant sent to the site and then credited with its depreciated value at the end of accounting period on incomplete contract or when it is moved back to store or to other site after its use or completion of the contract. The difference between the cost and the depreciated value represents the depreciation charge.

(ii) Alternatively, depreciation may be calculated based on the period for which the plant has been used at the contract site during the accounting year and debited to the contract account. Other plant costs such as maintenance, insurance, fuel, oil, etc. should also be debited to the contract account.

Proforma Contract A/C
(in case of an incomplete contract)

Dr.		Cr.	
To Direct Material:		By Materials returned	—
direct to site	—	By Materials sold	—
from store	—	By P&L A/C (loss on sale of material)*	—
To P&L A/C (profit on sale of material)*	—	By P&L A/C (abnormal loss of material)	—
To Direct wages	—	By Material at site	—
(+) O/S		By Plant returned **	
(−) Prepaid		By Plant sold **	
To Direct expenses	—	By P&L A/C (loss on sale of plant) **** **	
To Overheads (indirect material, labour & expenses)	—	By Plant at site	—
To Plant (cost) ***	—	By income for extras	—
To P&L A/C **** (profit on sale of plant)	—	By WIP	
To Provision for expected losses	—	– work certified (at value)	
To Notional Profit (in case of profit on contract)		– work uncertified (at cost)	
– P&L A/C		By P&L A/C (in case of loss on contract)	
– Reserve (WIP)			

* either profit / loss on sale of material may arise

** to be computed after adjusting for depreciation

*** Contract a/c may be debited with cost of plant and credited with depreciated value at end or alternatively, depreciation may be computed and debited to the contract account.

**** either profit / loss on sale of plant may arise

Illustration 13

A contractor commenced the work on a particular contract on 1st April, 2016 he usually closes his books of accounts for the year on 31st December of each year. The following information is revealed from his costing records on 31st December, 2016.

	Amount (₹)
Materials sent to site	43,000
Jr. Engineer	12,620
Labour	1,00,220

A machine costing ₹ 30,000 remained in use on site for 1/5th of year. Its working life was estimated at 5 years and scrap value at ₹ 2,000

A supervisor is paid ₹ 2,000 per month and had devoted one half of his time on the contract.

All other expenses were ₹14,000 the materials on site were ₹ 2,500.

The contract price was ₹ 4,00,000. On 31st December, 2016 2/3rd of the contract was completed however, the architect gave certificate only for ₹ 2,00,000. On which 80% was paid. Prepare Contract Account.

Solution:

Contract Account

Dr. **Cr.**

Particulars	Amount (₹)	Particulars		Amount (₹)
To, Material A/c	43,000	By, W.I.P A/c		
To, Jr. Engineer A/c	12,620	Work certified	2,00,000	2,44,365
To, Labour A/c	1,00,220	Work uncertified	*44,365	
To, Dep. On plant A/c	1,120	By, Material at site		2,500
[(30,000-2,000)/5] x 1/5				
To, Supervisor (2,000 x 9 x 1/2)	9,000			
To, Other expenses A/c	14,000			
To, P & L A/c	35,683			
To, Reserve c/d	31,222			
	2,46,865			2,46,865

Working notes:

Work uncertified:

For 2/3rd - ₹1,77,460

For 1/6th - ? (2/3 – 1/2 = 1/6)

* [(1,77,460 ÷ 2/3) x 1/6] = ₹44,365

Illustration 14

The following figures are supplied to you by contractor for the year ending 31st December, 2016.

Particulars	Amount (₹)
Work-in-Progress on 31-12-2015 ₹ 85,000	
Less: Cash received from contractee ₹ 55,000	30,000
During the year:	
Wages	8,500
Materials bought	6,000
Working expenses	1,500
Materials issued from stores	10,500
Administrative expenses (₹250 are chargeable to Profit and Loss Account)	1,250
Plant	2,500
Material returned to supplier	450
Material returned to stores	550
Work certified	15,000
Contracts finished	22,500
Profits taken upon contracts	11,500
Advances from contractee	40,000

Prepare Contract Ledger Accounts, and the total contractee's and show the work-in-progress as it would appear in the Balance sheet.

Solution:

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

Particulars	Amount (₹)	Particulars		Amount (₹)
To, Work-in-Progress A/c	85,000	By, W.I.P A/c		
To, Wages A/c	8,500	Work certified	15,000	
To, Materials A/c	6,000	Work uncertified	88,000	1,03,000
To, Materials A/c	10,500	By, Material returned (supplier)		450
To, Working Expenses A/c	1,500	By, Material returned (stores)		550
To, Administration Expenses A/c	1,000	By, Contractee A/c		22,500
To, Plant	2,500			
To, P & L A/c	11,500			
	1,26,500			1,26,500

Dr. **Contractee Account** **Cr.**

Particulars	Amount (₹)	Particulars	Amount (₹)
To, Contract A/c	22,500	By, Balance b/d	55,000
To, Balance c/d	72,500	By, Cash A/c	40,000
	95,000		95,000

Balance Sheet as on ....

Liabilities	Amount (₹)	Assets		Amount (₹)
		W.I.P	1,03,000	
		(-) Cash received	72,500	30,500

Illustration 15

The information given under has been extracted from the books of a contractor relating to contract for ₹3,75,000.

	I YEAR	II YEAR	III YEAR
	Amount (₹)	Amount (₹)	Amount (₹)
Materials	45,000	55,000	31,500
Direct Expenses	1,750	6,250	2,250
Indirect expenses	750	1,000	---
Wages	42,500	57,500	42,500
Total work certified	87,500	2,82,500	3,75,000
Uncertified work	---	5,000	---
Plant	5,000	---	---

The value of plant at the end of I year was ₹4,000 at the end of II year ₹2,500 and at the end of III year it was ₹1,000. It is customary to pay 90% in cash of the amount of work certified. Prepare the contract Account and show how the figures would appear in the balance sheet.

Solution:

Dr. **Contract Account** Cr.

Particulars	Amount (₹)	Particulars		Amount (₹)
Ist Year				
To, Materials A/c	45,000	By, W.I.P A/c		
To, Direct Expenses A/c	1,750	Work certified	87,500	
To, Indirect Expenses A/c	750	Work uncertified	Nil	87,500
To, Wages A/c	42,500	By, Plant A/c		4,000
To, Plant A/c	5,000	By, P & L A/c		3,500
	95,000			95,000
IInd Year				
To, Work in progress A/c	87,500	By, W.I.P A/c		
To, Materials A/c	55,000	Work certified	2,82,500	
To, Direct Expenses A/c	6,250	Work uncertified	5,000	2,87,500
To, Plant A/c	4,000	By, Plant A/c		2,500
To, Wages A/c	57,500			
To, Indirect Expenses A/c	1,000			
To, P & L A/c	47,250			
To, Reserve c/d	31,500			
	2,90,000			2,90,000
IIIrd Year				
To, Work in progress A/c	2,87,500	By, Reserve b/d		31,500
To, Plant A/c	2,500	By, Contractee A/c		3,75,000
To, Materials A/c	31,500	By, Plant A/c		1,000
To, Direct expenses A/c	2,250			
To, Wages A/c	42,500			
To, P & L A/c	41,250			
	4,07,500			4,07,500

Balance Sheet as on ....

Liabilities	Amount (₹)	Assets		Amount (₹)
Ist Year		Work in progress	87,500	
	----	(-) Cash received (90%)	78,750	8,750
		Plant		4,000
IInd Year		Work in progress	2,87,500	
	----	(-) cash received (90%)	2,54,250	
			33,250	
		(-) Reserve	31,500	1,750
IIIrd Year	----	Plant		2,500

Illustration 16

A firm of engineers undertook three contracts beginning on 1st Jan, 1st May and 1st August 2015. Their accounts on 30th November, 2015 showed the following position:

Particulars	Contract I	Contract II	Contract III
	Amount (₹)	Amount (₹)	Amount (₹)
Contract price	80,000	54,000	60,000
Materials	14,400	11,600	4,000
Wages	22,000	22,500	2,800
General expenses	800	550	200
Cash received for work certified	30,000	24,000	5,400
Work certified	40,000	32,000	7,200
Work uncertified	1,200	1,600	400
Wages outstanding	700	750	350
General expenses outstanding	150	100	50
Plant installed	4,000	3,200	2,400
Materials on hand	800	800	400

On the respective dates of the contracts, the plant was installed depreciation thereon being taken at 15% p.a. You are required to prepare accounts in the Contract Ledger.

Solution:

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

Amount (₹)

	I	II	III		I	II	III
To, Materials A/c	14,400	11,600	4,000	By, W.I.P A/c			
To, Wages (incl. o/s) A/c	22,700	23,250	3,150	Work certified	40,000	32,000	7,200
To, Gen Expenses A/c	950	650	250	Work uncertified	1,200	1,600	400
To, Dep. On plant A/c	550	280	120	By, Material on hand A/c	800	800	400
(4,000 x 15% x 11/12)				By, P & L A/c	--	1,380	--
(3,200 x 15% x 7/12)							
(2,400 x 15% x 4/12)							
To, Notional profit	3,400	--	480				
	42,000	35,780	8,000		42,000	35,780	8,000
To, P & L A/c				By, Notional profit	3,400	--	480
(3,400 x 2/3 x 3/4)	1,700	--	--				
To, Reserve c/d	1,700	--	480				
	3,400	--	480		3,400	--	480

Illustration 17

The following is the Trial Balance of Premier Construction Company, engaged on the execution of contract No.747, for the year ended 31st December, 2015.

Contractee's Account	Amount (₹)	Amount (₹)
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	
	8,72,000	8,72,000

The work on Contract No.747 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 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, 2012.

The contract was for ₹ 6,00,000 and the contractee pays 75% of the work certified. Work certified was 80% of the total contract work at the end of 2012. Uncertified work was estimated at ₹ 15,000 on 31st December, 2015.

Expenses are charged to the contract at 25% of wages. Plant is to be depreciated at 10% for the entire year.

Solution:

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

Particulars	Amount (₹)	Particulars		Amount (₹)
To, Materials A/c	1,70,000	By, Costing P & L A/c		6,000
To, Wages A/c	1,80,000	By, Materials returned		4,000
To, Dep. on plant A/c	20,000	By, W.I.P A/c		4,95,000
[2,50,000 x 9/12 x 10/100]		Work certified	4,80,000	
[50,000 x 3/12 x 10/100]		Work uncertified	15,000	
To, Expenses (25%)	45,000			
To, P & L A/c	45,000			
To, Reserve c/d	45,000			
	5,05,000			5,05,000

Illustration 18

A company of builders took to a multi-storied structure for ₹ 40,00,000 estimating the cost to be ₹ 36,80,000. At the end of the year, the company had received ₹ 14,40,000 being 90% of the work certified; work done but not certified was ₹40,000. Following expenditure were incurred.

	₹
Materials	4,00,000
Labour	10,00,000
Plant	80,000

Materials costing ₹ 20,000 were damaged. Plant is considered as having depreciated at 25%.

Prepare Contract Account and show all the possible figures that can reasonably be credited to Profit and Loss Account.

Solution:

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

Particulars	Amount (₹)	Particulars		Amount (₹)
To, Material	4,00,000	By, Costing P & L A/c		20,000
To, Labour	10,00,000	By, W.I.P A/c		
To, Depreciation	20,000	Work certified	16,00,000	
To, Notional Profit	2,40,000	Work uncertified	40,000	16,40,000
	16,60,000			16,60,000

(i) 3,20,000 x (1,420/3,680) = 1,23,478

(ii) 3,20,000 x (1,420/3,680) x 90/100 = 1,11,130

(iii) 3,20,000 x 16/40 = 1,28,000

(iv) 3,20,000 x (16/40) x (90/100) = 1,15,200

25. Two contracts, commenced on 1st January and 1st July 2016 respectively, were undertaken by a contractor and their accounts on 31st December, 2016 showed the following position :

	Contract 1	Contract 2
	₹	₹
Contract price	4,00,000	2,70,000
Expenditure :		
Materials	72,000	58,000
Wages paid	1,10,000	1,12,000
General charges	4,000	2,800
Plant installed	20,000	16,000
Materials on hand	4,000	4,000
Wages accrued	4,000	4,000
Work certified	2,00,000	1,60,000
Cash received in respect thereof	1,50,000	1,20,000
Work done but not certified (at cost)	6,000	8,000

The plant was installed on the date of commencement of each contract; depreciation thereon is to be taken at 10% per annum.

Prepare the Contract Accounts in the tabular form and ascertain the profit or loss to be taken to Profit and Loss Account.

[B.Com., (Hons.), Delhi 2011 Adapted]

Illustration 8.8 Compute a conservative estimate of profit on a contract (which has been 90% complete) from the following particulars. Illustrate 4 methods of computing the profit transferable to Profit & Loss Account.

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

[B.Com. (Hons.), Delhi, 2008]

27. A contractor, who prepares his account on 31st December each year, commenced a contract on 1st April, 2009. The costing records concerning the said contract reveal the following information as on 31st December, 2009 :

Materials charged to site	₹ 2,58,100
Labour engaged	5,60,500
Foreman's salary	79,300

Plants costing ₹ 2,60,000 had been on site for 146 days. Their working life is estimated at 7 years and their final scrap value at ₹ 15,000. A supervisor, who is paid ₹ 4,000 p.m., has devoted approximately three fourths of his time to this contract. The administrative and other expenses amount to ₹ 1,40,000. Materials in hand at site on 31st December, 2009 cost ₹ 25,400. Some of the materials costing ₹ 4,500 was found unsuitable and was sold for ₹ 4,000 and a part of the plant costing ₹ 5,500 (on 31.12.09) unsuited to the contract was sold at a profit of ₹ 1,000. The contract price was ₹ 22,00,000 but it was accepted by the contractor for ₹ 20,00,000. On 31st December, 2009, 2/3 of contract was completed. Architect's certificate had been issued covering 50% of contract price and ₹ 7,50,000 had so far been paid on account. Prepare contract account and state how much profit or loss should be included in the financial accounts to 31st December, 2009. Working should be clearly given. Depreciation is charged on time basis.

Also prepare the contractee's account and showing how these accounts would appear in the Balance Sheet as on 31st December, 2009. *[C.A., Inter, Nov., 1991; B.Com., (Hons.), Delhi 2006, adapted]*

[**Ans.** Profit taken to P. & L. A/c ₹ 1,06,625.]

30. The following Trial Balance was extracted on 31st December, 2011 from the Books of Swastik Co. Ltd. Contractors :

	₹	₹
Share Capital : Shares of ₹ 10 each		3,51,800
Profit & Loss A/c on 1st Jan. 2011		25,000
Provision for depreciation on machinery		63,000
Cash received on account : Contract 7		12,80,000
Creditors		81,200
Land and Building (Cost)	74,000	
Machinery (Cost)	52,000	
Bank	45,000	
Contract 7 :		
Materials	6,00,000	
Direct Labour	8,30,000	
Expenses	40,000	
Machinery on site (Cost)	1,60,000	
	18,01,000	18,01,000

Contract 7 was begun on 1st Jan., 2011. The contract price is ₹ 24,00,000 and the customer has so far paid ₹ 12,80,000 being 80% of the work certified.

The cost of the work done since certification is estimated at ₹ 16,000.

On 31st December 2011, after the above Trial Balance was extracted, machinery costing ₹ 42,000 was returned to stores, and materials then on site were valued at ₹ 27,000.

Provision is to be made for direct labour accrued ₹ 6,000 and for depreciation of all machinery at 12½% on cost.

You are required to prepare (*a*) the contract account (*b*) a statement of profit, if any, to be properly credited to Profit and Loss A/c for 2011 and (*c*) the Balance Sheet of Swastik Co. Ltd. as on 31st Dec., 2011.

[B.Com. (Hons.) Delhi 2012]

Contract Price

34. The contract price was ₹ 39,37,500. Actual expenditure for the period Nov. 1, 2003 to Oct. 31, 2004 and estimated for the period Nov. 1, 2004 to March 31, 2005 are given below :

		1 Nov. 2003 to 31 Oct. 2004 Actuals (₹)	1 Nov. 2004 to 31 March 2005 Estimated (₹)
Material issued		6,75,000	12,37,500
Labour :	Paid	4,50,000	5,62,500
	Prepaid	25,000	—
Outstanding		—	2,500
Plant purchased		3,75,000	—
Expenses :	Paid	2,00,000	3,50,000
	Outstanding	50,000	25,000
Plant Returned to store (cost) (on 31.3.04)		75,000	3,00,000 (to be returned on 31.3.05)
		On March 31, 2004	On March 31, 2005
Work certified		20,00,000	Full
Work uncertified		75,000	—
Cash received		17,50,000	—
Materials at site		75,000	37,500

The plant is subject to annual depreciation @ $33\frac{1}{3}$% on written down value method. The contract is likely to be completed on March 31, 2005. It was decided to estimate the total profit on the contract and to the credit of P & L A/c that portion of estimated profit on cash basis, which work completed before to the total contract. Prepare Contract A/c.

[B.Com. (Hons.) Delhi 2009]

Illustration 8.13. A company undertook a contract for construction of a large building complex. The construction work commenced on 1st April, 2010 and the following data are available for the year ended 31st March, 2011.

Particulars	₹ '000
Contract Price	35,000
Work Certified	20,000
Progress Payments Received	15,000
Materials Issued to Site	7,500
Planning and Estimating Costs	1,000
Direct Wages Paid	4,000
Materials Returned from Site	250
Plant Hire Charges	1,750
Wage Related Costs	500
Site Office Costs	678
Head Office Expenses Apportioned	375
Direct Expenses Incurred	902
Work Not Certified	149

The contractors own a plant which originally costed ₹ 20 lacs has been continuously in use in this contract throughout the year. The residual value of the plant after 5 years of life is expected to be ₹ 5 lacs. Straight Line Method of depreciation is in use.

As on 31st March, 2011 the direct wages due and payable amounted to ₹ 2,70,000 and the materials at site were estimated at ₹ 2,00,000.

(*i*) Prepare the contract account for the year ended 31st March, 2011.
(*ii*) Show the calculation of profit to be taken to the profit and loss account of the year.
(*iii*) Show the relevant balance sheet entries.

[C.A. Inter, B. Com. (Hons.) Delhi 2005 & 2014]

Illustration 8.16. A firm of contractors undertook a contract for ₹ 6,00,000 on October 1, 2007. The following expenses were incurred up to March 31, 2008.

	Amount (₹)
Materials issued from stores	7,500
Materials sent directly	52,500
Wages	30,000
Direct charges	3,000

The amount of work certified was ₹ 1,20,000 of which the contractor received 3/4th in cash. The transactions for the year 2008-09 were as follows :

	Amount (₹)
Materials issued from stores	1,35,000
Wages	60,000
Direct charges	6,000

The cost of special plant issued on April 1, 2008 for the contract was ₹ 1,20,000. Further work certified during the year amounted to ₹ 3,30,000 – 75% of which was received. Work done and not certified as on 31-3-09 was valued at ₹ 22,500. Special plant is to be depreciated at 25% p.a. on the original cost. Materials on site were valued at ₹ 15,000. The contract was completed on 31-7-09 up to which date the following further expenses were incurred :

	Amount (₹)
Materials issued from stores	10,500
Materials sent directly	60,000
Wages	22,500
Direct expenses	2,025

The general overheads are to be taken at 5% of the material consumed and wages paid during the year.

On 31-7-09, the plant was valued at ₹ 75,000. The materials at site were sold for ₹ 10,500 at cost and those returned to stores amounted to ₹ 19,500. Transfer 3/4th of profits received to *P&L* account during 2008-09.

You are to prepare contract account and contractee's account for 2007-08, 2008-09 and from April 1, 2009–till completion of contract. *[B.Com. (Hons.), Delhi 2013, adapted]*

Illustration 8.22. Prepare Contract Account and Contractee's Account assuming that the amount due from the contractee was duly received.

		₹
Direct Material		20,250
Direct Wages		15,500
Stores Issued		10,500
Loose Tools		2,400
Tractor Expenses		
Fuel, oil etc.	2,300	
Wages of Drivers	3,000	5,300
Other Direct Charges		2,650

The contract price was ₹ 90,000 and the contract took 13 weeks in its completion. The value of Loose Tools and Stores returned at the end of the period were ₹ 200 and ₹ 3,000 respectively. The plant was also returned at a value of ₹ 16,000 after charging depreciation at 20%. The value of tractor was ₹ 20,000 and the depreciation was to be charged to the contract @ 15% per annum. The administrative and office expenses are to be provided at 10% of works cost. *[B.Com. (Hons.), Delhi 2002, adapted]*

Illustration 8.23. The contract Ledger of M/s. Durlabhji & Sons showed the following expenditure on account of a contract on 31st December, 2016 :

	₹
Materials	2,10,000
Wages	2,93,000
Plant	70,000
Sundry Expenses	15,000
Establishment Charges	10,000

The contract was started on 1st Jan., 2016 and the contract price was ₹ 10,00,000. Cash received on account to date was ₹ 4,80,000 representing 80% of the work certified, the remaining 20% being retained until completion. The value of plant on 31st Dec., 2016 was ₹ 20,000 and the value of materials in hand was ₹ 6,000. The cost of work finished but not certified on the said data was ₹ 50,000.

Some of the materials costing ₹ 20,000 were found unsuitable and were sold for ₹ 16,000 and a part of the plant costing ₹ 5,000 unsuited to the contract, was sold at a profit of ₹ 1,000.

In order to calculate the profit made on the contract to 31st Dec., 2016, the contractor estimated further expenditure that would be incurred in completing the contract and took to the credit of Profit & Loss A/c for the year that proportion of the estimated net profit to be realised on the contract which the value of work certified bore to the contract price. The estimates of further expenditure were as follows :

(*a*) That the contract would be completed by 30th June, 2017.

(*b*) That a further sum of ₹ 30,000 would have to be spent on the plant, and the residual value of the plant on the completion of the contract would be ₹ 12,000.

(*c*) That materials in addition to those in hand on 31st Dec., 2016 would cost ₹ 1,00,000 and that further sundry expenses of ₹ 7,000 would be incurred.

(*d*) That the wages, for the completion of the contract, would amount to ₹ 1,69,900.

(*e*) That the establishment charges would cost the same amount per month as in the previous year.

(*f*) That ₹ 18,000 would be sufficient to provide for contingencies.

Prepare contract account for the year ended 31st Dec., 2016 and show the calculation of the amount to be credited to the Profit & Loss A/c for the year. Also show how the relevant figures would appear in the Balance Sheet as on that date. *[B.Com. (Hons.), Delhi, 2007, adapted]* profit has not been reduced on cash basis.]

11. Shiwalik Constructions Limited took a contract in 2016 for road construction. The contract price was ₹ 5,00,000 and its estimated cost of completion would be ₹ 4,60,000.

At the end of 2016, the Company has received ₹ 1,80,000 representing 90 per cent of work certified. Cost of work not yet certified was ₹ 5,000.

Expenditure incurred on the contract during 2016 were as follows :

Materials	₹ 25,000
Labour	₹ 1,50,000
Plant	₹ 10,000

Materials costing ₹ 2,500 were damaged and had to be disposed off for ₹ 500. Plant is considered as having depreciated by 25 per cent.

Prepare Contract Account for 2016 in the books of Shiwalik Construction Limited. Also show all possible figures that can be reasonably credited to Profit and Loss Account in respect of the contract.

[B.Com. (Hons.) Delhi]