Study Unit 9: Contract Accounting

Definition of a Contract

The term contract refers to the agreement between two parties to carry out a certain work in a specified period of time. A contract is generally relate to a large size with amount of money and performed at a site. There are two parties involved in a contract namely the contractor and the contracted. The person or party executing the contract under certain terms and conditions is called the contractor. Similarly, the person or party to whom the work or job is executed is known as the contracted. The contractor and the contracted make an agreement to get the work done against a certain sum of money which is called the contract price. A contract is generally related to construction of buildings, bridges, roads, plants, etc.

Contract costing refers to the form of job costing in which a separate ledger i.e. contract ledger is maintained for each job. It is also known as terminal costing as the contract account is closed after the completion of the work or contract. The main objective of contract costing is to ascertain the total cost of the contract so as to know the profit or loss incurred from the contract.

Features of Contract Costing

The main features of contract costing are as follows;

- 1. Contracts are executed or performed at the site which is generally out of the contractors premises
- 2. Most of the contracts involve jobs having large size and amount
- 3. The duration of the completion of a contract may go beyond one accounting year
- 4. Each contract is treated as separate unit of cost for the purpose of cost ascertainment
- 5. The contracts are executed as per the agreed specifications provided by the contracted
- 6. Most of the items of costs incurred in a contracare direct in nature since a contract is carried out at the site.
- 7. The contractor carries out the work on behalf of the contracted against a certain amount
- 8. The contracted pays an amount to the contractor on the basis of the work certified out of the completed work by the contractor.

Difference between job order and contract costing

Difference	Job order costing	Contract costing
1. Size	The work performed under job order costing is relatively small size	The work performed under contract costing is larger in size than that in job order
2.place of work	The manufacturing of products is carried outside the factory premises	The production or construction work is carried out at the site
3. time	Takes comparatively less time to complete the work	Management takes a longer time to complete the contract, even more than one accounting period
4. payment of price	The price under job order is paid after the completion of the job	The price under a contract is gradually paid in different installment before the completion of the work
5. investment	Preliminary investment in assets is low	Preliminary investment in assets is comparatively high
6. nature of expense	The expenses are both direct and indirect in nature	Generally expenses are direct in nature
7. transfer of profit	The entire amount of profit earned is transferred to the profit and loss account	

Similarities between job order and contract costing

- 1. Both jobs and contracts are based on the specific requirements of customers. As a result, each job or contract is tailor made and there is no exact repetition of a job or a contract.
- 2. Both jobs and contracts are terminal. Each job or contract can be identified from start to finish and therefore, costs can be identified for each job or contract.
- 3. The basic principles of a contract costing are similar to those applied in job costing.

Types of contracts.

There are three types of contracts which are mentioned below

- **1. Fixed price contract.** This is the contract that is executed with the fixed price which is agreed by the contractor and the contracted. Under this contract, no modification is made in the agreed contract price irrespective of the changes in the price level of material and labor in future. In such type of contract, the contractor benefits when the price of materials and labor decreases. In the contrary, the contracted benefits if the price of material and labor increases.
- 2. Fixed price contract with escalation and de-escalation clause. Escalation clause is a clause in the agreement that aims to reduce risks caused due to the changes in the price of material and labor and other services. Under this, the contract price is adjusted in accordance with the changes in the price if material, labor and other services. The additional costs raised due to the increase in price are born by the contracted. Similarly, the contract price is reduced if the cost decreases to a certain percentage. This is called de-escalation clause or reverse clause. Escalation clause safe guards the interests the interests of both the contractor and the contracted against unfavorable price changes in the future. Such clause may also apply where material and labor utilization exceeds a particular limit. In this case, however, the contractor has to prove that excessive utilization is not because of decrease in efficiency. The contractor allows a debate in the bills presented by him to the extent of the decrease in price.
- **3.** Cost plus contract. This is the contract in which the price is determined by adding a certain percentage of profit on the cost. The cost plus contract is adopted to overcome the problem of fixing the contract price caused due to the nature of the contract, duration of completion of the

contract, uncertainty of material, change in the price level, new technology, etc. this type if contract is mostly followed by the government for production of special articles not usually manufactured, urgent repairs of vehicles, roads, bridges, etc. under this type of contract, the contractor starts the work and payment is made by the contracted gradually on the basis of the cost incurred in the work completed plus certain percentage of profit.

Preparation of contract account

Under contract costing, a separate account is opened for each contract so as to ascertain the position of profits and losses. Such an account is called a contract account. All expenses incurred in the contract like material, wages, direct expenses, plant and machinery etc. are debited whereas materials returned, and materials at the end, plant at end, work in progress or contract price in case of completion of the contract, etc. are credited in the contract account. The difference between the debit and the credit represents a profit or loss. The profit earned under the completion of the contract is regarded as the net profit or loss in case of loss. The profit earned from a contract which is in progress or not completed is called notional profit. When a loss takes place, in such a situation, it is called net loss. It is because, a loss can never be notional, and it is always real.

The specimen of a contract account is presented below;

a. When a contract is totally completed.

Some contracts are small and can be completed within a year. In such a case, total contract price is shown on the credit side of the contract account as contractures account. In this case, if credit is heavy then balancing figure on the debit side is called profit and if the debit side is heavy, then the balance figure on the credit side will be called a loss.

Contract account

For the year ended.

Dr Cr.

Particulars	\$	Particulars	\$
Material issued from store	Xxx	Material at site	Xxx
Material purchased	Xxx	Material sold	Xxx
Plant	Xxx	Plant sold	Xxx
Wages paid xxx		Plant in hand xxx	
Outstanding <u>xx</u>	XXX	Less: depreciation <u>xx</u>	Xxx
Other expenses	Xxx	Contractor's alc	Xxx
Profit/loss alc(profit)	Xxx	Profit/loss a/c(loss)	Xxx
(when the credit side is heavier)	xxxx	(When the debit side is heavier)	Xxx

b. When a contract is incomplete.

Large contracts take a number of years of completion. In this situation, amount of work certified and uncertified are found in the contract. Such amount of work certified and uncertified should be shown on the credit side of the contract account under the heading work in progress account

1. Work certified. This is the value of work completed and certified by contracted engineers and architects. As per provision of the contract, a fixed percentage of such work certified is paid by contracted to contractor. Some percentage of work certified is retained money. The work certified include the portion of notional profits, therefore, if the cost of work certified is lower than the work certified, the different amount is called motioned profit. If the amount of cost of work certified is higher than the work certified, the difference will the loss.

2. Work uncertified. On the date of preparation of contract account, there may be some completed but uncertified work. The work of contract which is completed but not certified by the engineers is called work uncertified. It is always recorded at cost price and not on contract prices so as to avoid any profit element in it. The work uncertified never includes the portion of notional profit.

Contract account For the year ended.

DR CR.

Particulars	\$	particulars	\$
Materials issued from store	Xxx	Materials at site	Xxx
Materials purchased	Xxx	Materials sold	Xxx
Plant	Xxx	Plant in hand Xxx	
Wages xxx		Less: depreciation <u>xx</u>	Xxx
Add: outstanding <u>xx</u>	Xxx	Work in progress	
Other expenses	Xxx	Work certified xxx	
Notional profit	Xxx	work uncertified <u>xx</u>	Xxx
(when the credit side is heavier)		net loss	Xxx
	Xxx	(when the debit side is heavier)	Xxx

Treatment of materials in contract account

The procedure of recording materials in a contract account is as follows;

Items	Treatment
Stock of materials	The opening stock is debited and the closing stock is credited

Stock of materials	The opening stock is debited and the closing stock is credited
Purchase of materials	The material purchased for the contract is debited
Transfer on materials	Material transferred to the contract from other contracts is debited whereas materials transferred to other contracts is credited
Sales of materials	The materials sold from contract is credited on the selling price
Profit or loss on sale	The profit on sale of materials is credited
Loss of material	The losses of material due to; theft, fire, damage, etc. are credited. The claim accepted by the insurance company is credited like sales

Treatment of plant contract account

The machinery used for a contract is recorded in a contract account through two ways. They are;

- 1. The cost of machinery and equipment to be used for a longer period or purchase for the contract is shown in the debit side of the contract account. The book value of the machinery and equipment is shown in the credit side. The book value is calculated by deducting the depreciation from the cost of the machinery and equipment
- 2. If the machinery and equipment is used for a shorter period in the contract, the amount of depreciation charged is only debited in the contract account. In such a situation, the purchase price in the debit side and the book value in the credit side are not shown. This is generally done, if the plant and equipment are not used till the end of the accounting period.

The treatment of plant and machinery in a contract account under different conditions is presented below;

Items	Treatment

Plant at beginning	The value of plant at the beginning of the contract period is debited
	whereas plant at the end is credited
Purchase of	The value of machinery purchase for the contract is debited
machinery	
Transfer of machinery	The value of machinery transferred to the contract from other
	contracts is debited and the machinery transferred to other contracts
	is credited
Sale of machinery	The value of machinery sold is shown in credit side on the selling
	price or market value
Profit or loss on sale	The profit earned from sale of machinery is debited and the loss
	suffered is credited
Loss of machinery	The loss of machinery due to; theft, fire, damages, etc. are shown in
	the credit side of the contract account. However, the claim accepted
	by the insurance company is credited like sales.

Methods of transferring profits

Profits earned against the completion of a contract is assumed to be the net profit and transferred to profit and loss account. Generally, a contract is completed in a long period of time and the profit/loss is to be calculated at the end of each accounting period. Out of the notional profit i.e. the profit earned during the work in progress, only some portion is to be transferred to profit and loss account. The remaining part of the notional profit is transferred to reserves. Therefore, there are some factors which are to be considered to transfer the proportion of notional profit to profit and loss ale and reserves. They are;

a. Work certified. The work of a contract completed by a contractor is supervised and certified by the engineer of the contracted. The portion of the work completed and certified by the contracted is called work certified. The work completed but not certified due to different reasons

is called work uncertified. Work certified is one of the bases of transferring the notional profit to the profit and loss account.

b. Cash received. The contractor receives cash from the contracted depending on the level of work completed. He/she receives cash on the basis of work certified. The whole amount of work certified is not paid to the contractor. The portion of the work certified that is not paid to the contractor is known as retention money. The relationship between the work certified and cash received is shown below;

Cash received=work certified*% of cash received

% of cash received= 100% - retention rate

Work certified cash received* 1 00%/ cash received.

The ways of transferring notional profit to the profit and loss account

a. Transfer of profit of incomplete contract.

The methods of transferring the notional profit when is in progress are given below.

Stages of completion	Profit to be transferred to profit and loss a/c
Just started work i.e. less than % of the total work is completed	No profit transferred
Sufficient completion i.e. more	Notional profit * 1/3 *cash received/work
than % but less than % of the work is completed	certified
Almost completed i.e. work completed between 50%	Notional profit * 2/3 * cash received/work
to 90% of the work	certified

b. Transfer of profit when a contract is almost completed.

The contract in which it is possible to estimate the % of the contract completion and future cost to be incurred to complete the work and more than 90% of the work has been completed is called the almost completed contract. The method of ascertainment of profit and transferring the profit and account are given below. -

1. Ascertain the total estimated cost of the	Total cost=cost of work to date + future estimated cost
contract	
2. Ascertain the	Estimated profit=contract price-total cost
estimated profit	 a. Estimated profit *value of work certified/contract price b. Estimated profit * work certified/contract price*cash received/work certified Or, estimated profit * cash received/contract price c. Estimated profit * cost of work to date/total cost d. Estimated profit * cost of work to date/total cost* cash received/work certified

Some other items used in contract costing account

1. Labor cost:

All the workers engage at the site of a particular contract, irrespective of the nature of the work performed by items, and are treated as direct workers and the amount of wages paid to them as direct wages. Such wages are to be charged to the particular contract directly. In case a worker (generally the supervisory staff) is engage at two or more contracts, his total wages may be apportionment to different contract on the basis of time devoted to each contract or on some other equipment basis' wages accrued or outstanding at the end of the accounting period should appear on the debit side of the contract account.

2. Direct expenses:

All expenses (other than material cost and direct wages) which have been incurred specifically for a particular contract are direct expenses and shall be debited to contract alc. example of direct expenses are here charges of special plant (not owned), carriage on materials purchases, travelling expenses relating to contract, etc.

3. Indirect expenses.

There are certain expenses, which cannot be directly charged to a particular contract e.g., salary of general manager, salary of architect engaged at a number of contract simultaneously, salary of storekeeper, expenses of store and office expenses. Since these expenses are incurred for the business as a whole, they are to be apportioned to the different contract on some equitable basis.

4. Cost of sub-contracts.

Generally, the work of a specialized character e.g. road construction in a building, installment of lifts, electrical fittings, is passed on to some other contractor by the main contractor. In such cases, the work performed by the sub-contractor forms a direct charged to be contractor concerned and the sub-contractor price paid shall be debited to contract account.

5. Cost of extra work:

Sometimes, in case of a contract, some additional work or variations of the work originally contracted for may be required by the contracted. Since the additional work required will not be covered by the terms and condition of original contract, it will be the subject of a separate char4.f the additional work required by the contracted is quite substation, it should be treated as a separate contract and dealt with in a separate account to be opened for it. But in case the additional work is not substantial, the expenses incurred on extra work should be debited to contract account as a 'cost of extra work, and the extra amount which the contracted has agreed to pay to the contractor should be added to the original contract price.

6. Contract price:

The contract price is the agreed price at which the contractor undertakes to execute to contractor. The contractor account is credited with the contractor price if it has been completed. In such a case, the amount of contract price is debited to the contracted personal account and credited to the contract account. No entry is passed in respect of the contract price in case of incomplete contracts.

7. Retention money.

Generally, the terms of the contract provide that the whole of the amount shown by the architect's certificate shall not be paid to the contractor but a specified percentage or portion money (say 10% or 20%) thereof shall be retained by the contracted of the contract.

To money so retained is known as 'retention money'. The cash received from the contracted is credited to his personal account. The value of work (certified and uncertified) is credited to work-in progress account. The work in progress account is shown as an asset in the balance sheet after deducting the amount received from the contracted. In the beging of the New Year, the wOrk in progress account is transferred to the debit side of the contract account. On completion of the contract, the contracted account is debited and contract account is credited by total contract price.

Illustration 1.

The following was the expenditure on the contract for \$1,200,000 commenced in January

\$

Material 240,000

Wages 328,000

plant 40,000

overheads 17,200

Cash received on account of the contract on 3 1 December was \$ 480,000 being 80% of the work certified. The value of material in hand was \$ 20,000. The plant had undergone 20% depreciation. Prepare a contract account.

Solution:

Contract account

For the year ended 3lct December

DR. CR

\$		\$	
Materials	240,000	Work certified	600,000
Wages	328,000	Material in hand	20,000
Plant	40000	Plant in plant	32,000
Overheads	17,200		
Notional profit	26,800		
	652,000		652,000
To profit and loss			26,800

26,800*2/3*80/100 14,293	14,293	
To balance c/d 12,507	12,507	
·		
	68,800	26,800

Work certified

If 80% = \$480,000

$$100\% = \underline{480,000*100}\\80$$

= \$ 600,000

Illustration 2:

A firm of builders, carrying out large contracts kept in a contract ledger separate accounts for each contract.

The following particulars relate to a certain contract carried out during the year ended 30^{th} June.

	\$
Work certified by architects	143,000
cash received from the contracted	130,000
materials sent to site	64,500
labor engage on site	54,800
plant installed at site	11,300
value of plant at 30t1 June (closing)	8,200
cost of work not yet certified	3,400
establishment charges	3,250
direct expenditure	2,400

wages accrued due	1,800
material closing balance	1,400
materials returned from store	400
direct expenses accrued due	200
contract price	200000

You are required to prepare an account showing the profit on the contract to June

Solution:

$\label{eq:contract} \textbf{Contract Account}$ For the year ended 30th June

DR. CR.

	\$		\$
Materials	64,500	Work in progress	
Labour	54,800	Work certified 143,000	
Wages outstanding	1,800	Work uncertified 3,400	146,400
Plant	11,300	Material returned	400
Establishment	3,250	Plant in hand	8,200
Direct expenditure	2,400	Material in hand	1,400
Add: outstanding	200		
Notional profit	<u>18,150</u>		
	<u>156,400</u>		<u>156,400</u>
To profit and loss	11,000	To notional profit	18,150
(18,150*2/3*130,000/143,000)			

To balance c/d	7,150	
	<u>18,150</u>	18,150

Tutor Marked Assessment-Study Unit 9

- a) State and explain the different types of contracts
- b) The following particulars relate to a certain contract cried out during the year ended 30th June 2018.

Work certified by architects	143,000
Cash received from the contractee	130,000
Materials sent to site	64,500
Labour engaged on site	54,800
Plant installed at site	11,300
Value of plant at 30 th June (closing)	8,200
Cost of work not yet certified	3,400
Establishment charges	3,250
Direct expenditure	2,400
Wages accrued due	1,800
Materials, closing balance	1,400
Materials returned to store	400
Direct expenses accrued due	200
Contract price	2,000,000

Required: Prepare an account, showing the profits on the contract to 30th June 2018