Contract Costing

PRACTICAL QUESTION WILL APPEAR FROM THIS TOPIC. 100% CHANCES.

Students can call me at 8860828731 for any query at the time of lecture. I will be available at that time.

Day - 1

★ Introduction to Contract Costing

Features of Contract Costing

The following are the main features of contract costing:

1. Contracts are executed according to customer's specifications.
2. Contracts differ from each other.
3. Each contract is a separate cost unit and is to be costed separately.
4. Contracts are executed away from contractor's premises generally at customer's site.
5. Contracts take long time to complete, generally more than a year.
6. Contracts are generally of large size involving large costs.
7. Larger proportion of total costs are of the nature of direct costs. Most purchases of materials and other costs are specific to contracts. This is true of labour cost also.
8. Sometimes sub-contractors are employed for performing specialised jobs involved in a contract, *e.g.* electricity fittings, welding, etc.
9. Separate accounts are prepared to determine profitability of each contract.
10. Contractors receive payment for execution of contracts in installments based on the extent of completion as certified by the expert.
11. Contracts involve problem of valuation of work-in-progress at the end of each accounting period.
12. There is need to estimate profit on incomplete contracts at the end of each accounting period.
13. Imposition of penalties is normal in case of many types of contracts,
14. Control on materials, labour and other costs is generally more difficult in case of contracts because work in generally done at a place far away from contractor's premises and work on a number of contracts may take place simultaneously at different places.
15. Contracts generally involve three parties :
    (i) Contractor, who executes the contract;
    (ii) Contractee, who grants the contract to the contractor. He is contractor's client,
    (iii) Certifier, or evaluator, who periodically examines the progress of the contract both by inspecting the documents as well as by personally observing the work at site. He certifies the value of work done up to a point of time. This expert or certifier or evaluator works on behalf of the contractee. In case of contract for building of flats and houses, the certifier is an architect of repute; in case of building of bridges etc., it could be a firm of civil engineers; in case of construction of boiler houses, it could be a firm of boiler house engineers; and so on. This expert may also function as an arbitrator in case of a dispute or a separate arbitrator may be appointed.

Types of Contracts

Contracts are generally of three types:

1. ***Fixed Price Contracts:*** Under these contracts a fixed price of the contract is agreed upon between the contractor and the contractee. Agreed price is paid by the contractee to the contractor. Deductions are made for defectives and penalties for delay and extra payment is made for additional work.

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11.2

2. ***Contracts with Escalation Clause:*** In these cases the contract price is fixed with a provision that it will be increased with increase in price of materials, wage rates and other major costs, and reduced with the decline in costs. This escalation is implemented according to mutually pre-determined formula.
3. ***Cost Plus Contracts:*** This method is adopted where the probable cost of the contract cannot be ascertained in advance with a reasonable accuracy; In case of these contracts no fixed price is pre-determined for the contract. Contractee compensates the contractor for all allowable costs actually incurred by him. Over and above these costs the contractor is paid a fixed percentage of cost as profit or a lump sum fee of profit.

★ There are two parties in a contract: Contractor and the Contractee. Contractee is the person who grants the contract to the contractor and contractor is the person who executes the contract.

★ One more party is there called certifier/evaluator/engineer. Now what is the role of the certifier/ evaluator/engineer? Actually, contractee gives money to the contractor on the basis of the work completed. Suppose, contract price is Rs. 10,00,000 and contractor says to the contractee that 40% work is completed and give me Rs. 4,00,000 *i.e.* 40% of the contract price. Now, what if the work completed is not 40% or if the work completed is 40%? In such a case after taking money the contractor may leave the work in between. Now the certifier/evaluator/engineer (from the side of the contractee) comes in the picture. Contractee sends the certifier/evaluator/engineer to the site and certifier/evaluator/engineer gives a certificate for the completed work. On the basis of this certificate only the contractee gives money to the contractor. Also, the contractee does not give the full money to the contractor, because if he does so, then contractor may leave the work in between. So the contractee retains some money which is called the **Retention Money**. Now, if the certifier/evaluator/engineer gives a certificate of 25% work completed then the value of the work certified will be Rs. 2,50,000 (Rs. 10,00,000 × 25%). Now the contractor is eligible to get Rs. 2,50,000. But the contractee gives only Rs. 2,00,000 to the contractor, then Rs. 50,000 will be the retention money. This retention money is the 20% of the work certified (Rs. 50,000 / 2,50,000 × 100). Any work which is completed but not certified by the certifier/evaluator/engineer is called the work not certified. Also the expenses incurred after obtaining the certificate for the completion of work will form part of the work not certified.

★ In order to prepare the contract account, first of all learn/cram the format of the contract account. **It's like a mini profit and loss account.** Its prepared on the basis of two principles—debit what comes in and credit what goes out, and debit all expenses and losses and credit all incomes and gains.

★ Further, while preparing the contract account one must keep in mind the principle of normality also. All the abnormal losses and abnormal incomes shall be excluded from the contract account. For example, if there is any loss on sales of plant/machinery/material then obviously it's already included/debited in/to the contract account, so the amount of such loss shall be credited to the contract account. Likewise, if there is any profit on sales of plant/machinery/material then obviously it's already included/credited in/to the contract account so the amount of such loss shall be debited to the contract account.

★ In case of expenses are being incurred then such expenses shall be debited to the contract account on accrual basis. Outstanding expenses shall be added to the concerned expense and prepaid expenses shall be subtracted.

★ In case of material is being used for the contract then such amount shall be debited. In case of outgoing material the amount shall be credited using the principle of real accounts. At the time of completion of the contract material is returned to the stores and it's written on the credit side. Sometimes the material consumed is calculated (or given) in the question, then such material

consumed shall be debited. In such a case all other transactions related to the material are not be recorded in the contract account. Even profit/loss on sales of material or loss due to fire, rain, theft, etc. are not be recorded.

Note: Material Consumed = Opening Material + Material Purchased + Material Received from Stores + Material Transferred from Other Contracts – Material Returned to Stores – Material Sold (Cost) – Material Transferred to Other Contracts – Material in Hand or Material at Site

★ In case of plant and machinery is being used for the contract then cost of this shall be debited. In case of outgoing plant and machinery the amount is to be credited using the principle of real accounts. Record cost of the plant on the debit side and WDV (cost *less* depreciation) on the credit side. All the outgoing plant and machineries shall be credited with the WDV *i.e.* cost *less* depreciation.

If the rate of depreciation is given per annum, then depreciation shall be calculated on the basis of time but if per annum is not mentioned with the rate then depreciation shall be calculated for whole of the year ignoring the time factor even though the plant was used for less than a year.

At the time of completion of the contract we return the plant to the stores and it's WDV (cost *less* depreciation) is recorded on the credit side.

★ There is another method under which we do not record the cost on the debit side and WDV on the credit side. In this method we only record the depreciation of the plant on the debit side. The depreciation of all the plants (whether outgoing or balance of the plant at the end of the year) shall be recorded on the debit side. In this method all other transactions related to the plant are not recorded in the contract account. Even profit/loss on sales of plant or loss due to fire, rain, theft, etc. is not recorded.

★ In case of the completion of the contract we write down the contract price on the credit side of the contract account and the journal is:

Contractee Account	**Dr.**	-----	
To Contract Account			-----

Note: We do not record the Work Certified or Work Not Certified in the year of completion on the credit side.

★ In case of the completion of the contract, if the debit side is more than the credit side, then loss will be there on the contract and the journal is:

Profit and Loss Account	**Dr.**	-----	
To Contract Account			-----

★ In case of the completion of the contract, if the credit side is more than the debit side then profit will be there on the contract and the journal entry is:

Contract Account	**Dr.**	-----	

To Profit and Loss Account **-----**

★ In case the contract is incomplete then:

1. First of all write down the amount of the Work Certified and Work Not Certified under the heading Work-in-Progress (see the format) on the credit side of the contract account (as given in the format).
2. If debit side is more than the credit side, then loss will be there and such loss shall be credited to the contract account. Journal entry is:

   Profit and Loss Account **Dr.** **-----**

   To Contract Account **-----**
3. If credit side is more than the debit side, then profit is there. But this total profit cannot be assumed actual profit because the contract is incomplete. Such profit is called **Notional Profit** and then bifurcated in to two parts. One part is transferred to the profit and loss account (How much amount shall be transferred to the profit and loss account? There are certain rules for this and discussed below the format of the contract account) and the remaining part is transferred to the work in progress account (also called reserve). Why to take only a part of the Notional Profit to the profit and loss account? It's because of the Principle of the Conservatism or Principle of Prudence. However, the true profit can be calculated only at the completion of the contract. But if we calculate the profit only at the completion of the contract then for a company engaged in the business of taking contracts, profits will be very high in the year in which too many contracts are being completed and profits may be very low or sometime NIL in the year in which a few contracts are being completed or no contracts are being completed. Thus the calculation of the profit only at the time of completion of the contract puts the uneven burden on the profit and loss account. By calculating notional profit and then bifurcation of it in two parts puts the even burden on the profit and loss account and also helps the contractor to follow the principle of conservatism/prudence.

Day - 2

Format of the Contract Account

Performa Contract Account			
Particulars	**Amount Rs.**	**Particulars**	**Amount Rs.**
To material issued from store	----	By material at site	----
To material purchased	----	By material returned to store	----
To material transferred from other contracts	----	By material transferred to other contracts	----
		By profit and loss account:	
		• Material/Plant stolen ---	
To material consumed (if given, and in this case all other items related to material shall be ignored)	----	• Material/Plant lost due to unforeseen reasons *eg.* fire, rain, etc. ---	
		• Loss on sales of material/plant ---	----
To labour ---		By plant at site (Cost) ---	
Add: Outstanding labour (---)	----	*Less:* Depreciation (---)	----
To plant issued	----	By plant returned to store (Cost) ---	
To plant purchased	----	*Less:* Depreciation (---)	----
		By plant transferred to other contracts (Cost) ---	
To plant transferred from other contracts	----	*Less:* Depreciation (---)	----
To sub contract cost	----	By material/plant sold	----
		By work in progress(In case contract is incomplete) :	
To cost of extra work done	----	Work certified ---	
To site expenses	----	Work not certified ---	----
To direct expenses ---		By CONTRACTEE ACCOUNT (by the amount of contract price on the completion of contract)	----
Add: Outstanding expenses (---)	----		
To indirect expenses/overheads ---		By profit and loss account (if there is loss on contract either before completion or after completion)	----
Add: Outstanding expenses (---)	----		
To profit and loss account:			
(Profit on sales of material/plant)	----		
To Contract escalation (Decrease in CP)	----	By Contract escalation (Increase in CP)	----
To profit and loss account (if contract is completed and profit is there)	----	To profit and loss account (if contract is completed and loss is there)	----
To notional profit c/d (if work certified is more than 25% of the contract price but less than 90% of the contract price)	----		
Total	****	**Total**	****
To profit and loss account (part of notional profit if the contract is not completed)*	----	By notional profit b/d	----
To work in progress (transferred to reserve only when the contract is not completed)	----		
Total	****	**Total**	****

Explanation to all the items of the contract account

1. Material

To material issued from store: Any material issued from the store shall be debited to the contract account because it's an expense. Apply the principle—Debit all expenses and losses. Further, you can also apply the principle—Debit what comes in.

To material purchased: Any material purchased shall be debited to the contract account because it's an expense. Further, you can also apply the principle—Debit what comes in.

To material transferred from other contracts: Any material transferred from any other contract shall be debited to the contract account because it's an expense for this contract. Apply the principle—Debit all expenses. Further, you can also apply the principle—Debit what comes in.

To material consumed (if given/calculated, then in this case all other items related to material shall be ignored): Sometimes the material consumed is calculated in the question, then, such material consumed shall be recorded on the debit side. In such a case all other transactions related to the material shall not be recorded in the contract account. Even profit/loss on sales of material or loss due to fire, rain, theft, etc. shall not be recorded.

> **Note:** Material Consumed = Opening Material + Material Purchased + Material Received from Stores + Material Transferred from Other Contracts – Material Returned to Stores – Material Sold (Cost) – Material Transferred to Other Contracts – Material in Hand or Material at Site

By material at site: This is the unused material so it shall be credited to the contract account. Apply the principle—Credit what goes out. We write **"By material at site"** when the contract is not completed. In case the contract is competed then we write **"By material returned to stores"**.

By material returned to store/supplier: This is the unused material so it is returned to the store/supplier. It shall be credited to the contract account. Apply the principle—Credit what goes out. Sometimes it's specifically mentioned that the material is returned though the contract is not completed, in such a case write **"By material returned to store"**.

By material transferred to other contracts: If any other contract(s) is/are running short of material then the material can be transferred to that other contract(s). Because this material is not used for this contract so we credit this to the contract account and apply the principle—Credit what goes out.

By profit and loss account (Material stolen, Material lost due to unforeseen reasons eg. fire, rain, etc., Loss on sales of material): The above losses are abnormal in nature. Further, while preparing the contract account one must keep in mind the principle of normality also, so all the abnormal losses shall be excluded from the contract account. Credit all these losses and the journal entry is:

Profit and Loss Account Dr. -----

To Contract Account -----

By material sold: Sometimes the material is sold because it's of no use or not up to the specifications, etc. Credit the amount of this because this will reduce the cost of the material or we can also say that it's outgoing in nature so credit it. Apply the principle—Credit what goes out.

2. To Labour/Wages

It's an expense so it's shall be debited to the contract account by applying the principle—Debit all expenses. Any outstanding amount shall be added and any prepaid amount shall be subtracted.

3. To Plant and Machinery

To plant issued: Cost of any plant issued from the store shall be debited to the contract account because it's an expense. Apply the principle—Debit what comes in.

To plant purchased: Cost of any plant purchased shall be debited to the contract account because it's an expense. Apply the principle—Debit what comes in.

To Plant transferred from other contracts: Any plant transferred from any other contract shall be debited to the contract account because it's an expense for this contract. Apply the principle—Debit what comes in.

By profit and loss account (Plant stolen, Plant lost due to unforeseen reasons eg. fire, rain, etc., Loss on sales of plant): The above losses are abnormal in nature. Further, while preparing the contract account one must keep in mind the principle of normality also, so all the abnormal losses shall be excluded from the contract account. Credit all these losses and the journal entry would be:

Profit and Loss Account Dr. -----

To Contract Account -----

By plant at site: This is the remaining plant so it shall be credited to the contract account. Apply the principle—Credit what goes out. We write **"By plant at site"** when the contract is not completed. But it must be noted that only WDV *i.e.* (Cost – Depreciation) shall be recorded.

By plant returned to store: This is the remaining plant and if not intended for further use then it can be returned to the store. So it shall be credited to the contract account. Apply the principle—Credit what goes out. But it must be noted that only WDV *i.e.* (Cost – Depreciation) shall be recorded.

By plant transferred to other contracts: If any other contract(s) is/are running short of plant then the plant can be transferred to that other contract(s). Because this plant is not used for this contract so we credit this to the contract account and apply the principle—Credit what goes out. But it must be noted that only WDV *i.e.* (Cost – Depreciation) shall be recorded.

By plant sold: Sometimes the plant is sold because it's of no use or not up to the specifications, etc. Credit the amount of this because this will reduce the cost of the plant or we can also say that it's outgoing in nature so credit it. Apply the principle—Credit what goes out.

Rate of depreciation is important: If the rate of depreciation is given per annum, then depreciation shall be calculated on the basis of time but if per annum is not mentioned then depreciation shall be calculated for whole of the year ignoring the time factor even though the plant was used for less than a year.

In all the cases whenever we are crediting the plant, only WDV shall be credited *i.e.* Cost – Depreciation. **But if any plant is being returned or transferred at the beginning of the year** then there is no need to write down the WDV *i.e.* Cost – Depreciation. Mean to say that only cost of the plant shall be credited if it's being returned at the beginning of the year. [Sometimes the time of returning the plant is not given in the question, in such a case you may take an assumption regarding the time.]

There is another method under which we do not record the cost on the debit side and WDV on the credit side. In this method we only record the depreciation of the plant on the debit side. The depreciation of all the plants (whether outgoing or balance of the plant at the end of the year) shall be recorded on the debit side. In this method all other transactions related to the plant are not recorded in the contract account. Even profit/loss on sales of plant or loss due to fire, rain, theft, etc. is not recorded.

4. Sub contract cost

The contractor is not able to carry out all task related to the contract on his own. In such a case he can give sub contract to other persons. *e.g.* In case of building construction the sub contract can be given for the wiring, painting, wood work, finishing etc. Any amount incurred for the sub contract shall be debited as it's an expense. Apply the principle—Debit all expenses and losses.

5. Cost of extra work done

In case the contractor has carried out any extra work as per the specifications/instructions given by the contractee then such expense shall be debited. Apply the principle—Debit all expenses and losses. Later on contractor can recover this amount from the contractee.

6. Site expenses

Any expense incurred on the site shall also be debited. There may be too many expenses under this head. Apply the principle—Debit all expenses and losses.

7. Direct expenses

Any expense of direct nature shall be debited. Apply the principle—Debit all expenses and losses. Any outstanding amount shall be added and any prepaid amount shall be credited.

8. Indirect expenses

Any expense of indirect nature shall be debited. Apply the principle—Debit all expenses and losses. Any outstanding amount shall be added and any prepaid amount shall be credited.

9. To profit and loss account (Profit on sales of material/plant)

The above incomes are abnormal in nature. Further, while preparing the contract account one must keep in mind the principle of normality also, so all the abnormal incomes shall be excluded from the contract account. Debit all these incomes and the journal entry would be:

Contract Account	**Dr.**	**-----**	
To Profit and Loss Account			**-----**

10. To Contract escalation (Decrease in CP)

Sometimes the contract is subject to the escalation/de-escalation. If due to the applicability of the escalation/de-escalation clause there is decrease in the contract price then such amount shall be debited to the contract account. The journal entry would be:

Contract Account	**Dr.**	**-----**	
To Contractee a/c			**-----**

11. To profit and loss account (if contract is completed and profit is there)

In case of completion of the contract we write down the contract price on the credit side of the contract account and the journal entry would be:

Contractee Account	**Dr.**	**-----**	
To Contract Account			**-----**

Note: We do not record the Work Certified or Work Not Certified on the credit side in the year of completion.

12. To notional profit c/d (if work certified is more than 25% of the contract price but less than 90% of the contract price) / Profit and loss account (part of notional profit if the contract is not completed)* / Work in progress (transferred to reserve only when the contract is not completed) / Work in progress (In case contract is incomplete): Work certified and Work not certified

In case the contract is incomplete then:

1. First of all write down the amount of the **Work Certified** and **Work Not Certified** under the heading Work-in-Progress (see the format) on the credit side of the contract account (as given in the format).
2. If debit side is more than the credit side, then loss will be there and such loss shall be credited to the contract account. Journal entry would be:

   Profit and Loss Account Dr. -----

   To Contract Account -----
3. If credit side is more than the debit side, then profit is there but this total profit cannot be assumed actual profit because the contract is incomplete. Such profit is called **Notional Profit** and then bifurcated in to two parts. One part is transferred to the profit and loss account (how much amount shall be transferred to the profit and loss account for this there are certain rules and discuss later immediately after the format of the contract account) and the remaining is transferred to the work in progress account (also called reserve). Why to take only a part of the Notional Profit to the profit and loss account? It's because of the Principle of the Conservatism or Principle of Prudence. However, the true profit can be calculated only at the completion of the contract. And if we calculate the profit only at the completion of the contract then for a company engaged in the business of taking contracts, profits will be very high in the year in which too many contracts are being completed and profits may be very low or sometime NIL in the year in which a few contracts are being completed or no contracts are being completed. Thus the calculation of the profit only at the time of completion of the contract puts the uneven burden on the profit and loss account. By calculating notional profit and then bifurcation of it in two parts puts the even burden on the profit and loss account and also helps the contractor to follow the principle of conservatism/prudence.

Click to go to the topic.

13. CONTRACTEE ACCOUNT (by the amount of contract price on the completion of contract)

In case of the completion of the contract we record the contract price on the credit side of the contract account and the journal entry is:

Contractee Account **Dr.** **-----**

To Contract Account **-----**

Note: We do not record the Work Certified or Work Not Certified in the year of completion on the credit side.

14. Profit and loss account (if there is loss on contract either before completion or after completion)

In case of the completion of the contract, if the credit side is more than the debit side then profit will be there on the contract and the journal entry would be:

Contract Account **Dr.** **-----**

To Profit and Loss Account **-----**

In case the contract is incomplete then:

1. First of all write down the amount of the Work Certified and Work Not Certified under the heading Work-in-Progress (see the format) on the credit side of the contract account (as given in the format).
2. If debit side is more than the credit side, then loss will be there and such loss shall be credited to the contract account. Journal entry would be:

Profit and Loss Account **Dr.** **-----**

To Contract Account **-----**

15. Contract escalation (Increase in CP)

Sometimes the contract is subject to the escalation/de-escalation. If due to the applicability of the escalation/de-escalation clause there is increase in the contract price then such amount shall be credited to the contract account. The journal entry would be:

Contractee Account **Dr.** **-----**

To Contract **-----**

16. Profit and loss account (if contract is completed and loss is there)

1. First of all write down the amount of the Work Certified and Work Not Certified under the heading Work-in-Progress (see the format) on the credit side of the contract account (as given in the format).
2. If debit side is more than the credit side, then loss will be there and such loss shall be credited to the contract account. Journal entry would be:

Profit and Loss Account **Dr.** **-----**

To Contract Account **-----**

17. Notional profit b/d

1. **Notional profit is calculated only when the contract is incomplete.** Further the value of the work certified shall be less than ¼th of the contract price. Also when value of work certified is equal to or more than 90% of the contract price or estimated cost is given in the question or in the question it is given that the contract is near completion, calculate the notional profit and then estimated profit shall be calculated and the appropriate amount of the estimated profit shall be transferred to the profit and loss account using any one of the formula given below (Click here to go to the link).
2. First of all write down the amount of the Work Certified and Work Not Certified under the heading Work-in-Progress (see the format) on the credit side of the contract account (as given in the format).
3. If credit side is more than the debit side, then profit is there but this total profit cannot be assumed actual profit because the contract is incomplete. Such profit (balancing figure) is called **Notional Profit** and then it's bifurcated in two parts. One part is transferred to the profit and loss account (how much amount shall be transferred to the profit and loss account for this there are certain rules and discuss later immediately after the format of the contract account) and the remaining part is transferred to the work in progress account (also called reserve). Why to take only a part of the Notional Profit to the profit and loss account? It's because of the Principle of the Conservatism or Principle of Prudence. However, the true profit can be calculated only at the completion of the contract. And if we calculate the profit only at the completion of the contract then for a company engaged in the business of taking contracts, profits will be very high in the year in which too many contracts are being completed and profits may be very low or sometime NIL in the year in which a few contracts are being completed or no contracts are being completed. Thus the calculation of the profit only at the time of completion of the contract puts the uneven burden on the profit and loss account. By calculating notional profit and then bifurcation of it in two parts puts the even burden on the profit and loss account and also helps the contractor to follow the principle of conservatism/prudence.

   Note: Always calculate the notional profit as a balancing figure and the brought down it and then bifurcate it.

* How much of the notional profit should be transferred to Profit and Loss Account when the contract is incomplete?

(i) When the value of work certified is less than ¼th of the contract price:

In this case notional profit shall not be calculated and whole of the balance shall be transferred to the Work in Progress Account (only in case the total of credit side is more than the debit side).

Profit and Loss Account = NIL

Important Note: In case total of debit side is more than the credit side then the difference shall be transferred to the Profit and Loss account.

(ii) When value of work certified is equal to or more than ¼th of the contract price and less than ½ of the contract price:

$$Profit\ and\ Loss\ Account = Notional\ Profit \times \frac{1}{3} \times \frac{Cash\ Received}{Work\ Certified}$$

(iii) When value of work certified is equal to or more than ½ of the contract price and less than 90% of the contract price:

$$Profit\ and\ Loss\ Account = Notional\ Profit \times \frac{2}{3} \times \frac{Cash\ Received}{Work\ Certified}$$

(iv) When value of work certified is equal to or more than 90% of the contract price *or* estimated cost is given in the question *or* in the question it is given that the contract is near completion:

In this case first of all estimated profit shall be calculated and then the appropriate amount of the estimated profit shall be transferred to the profit and loss account using any one of the formula given below.

$$Estimated\ Profits = Contract\ Price - Estimated\ Cost$$

$$P\ \&\ L\ a/c\ = Estimated\ Profits \times \frac{Cash\ Received}{Contract\ Price}\ (Best\ Formula), or$$

$$P\ \&\ L\ a/c\ = Estimated\ Profits \times \frac{Work\ Certified}{Contract\ Price}, or$$

$$P\ \&\ L\ a/c\ = Estimated\ Profits \times \frac{Cost\ of\ Work\ to\ Date}{Estimated\ Total\ Cost}, or$$

$$P\ \&\ L\ a/c\ = Estimated\ Profits \times \frac{Cost\ of\ Work\ to\ Date}{Estimated\ Total\ Cost} \times \frac{Cash\ Received}{Work\ Certified}$$

(v) Amount to be transferred to the work in progress account (reserve)

Amount to be transferred to the work in progress account = Notional Profit – P & L a/c

Treatment of Work in Progress in Balance Sheet

Sometimes in the question it is asked to prepare the balance sheet and to show the relevant items in it.

Then the balance sheet shall be prepared as follows:

Balance Sheet as on DD/MM/YEAR				
Liabilities	**Amount**	**Assets**		**Amount**
Plant and machinery (Cost – Depreciation *i.e.* WDV)		**Work in Progress:**		
	–––	Work Certified	–––	
Material in hand	–––	Work un–certified	–––	
Profit on sales of material/plant	–––	*Less:* Reserve for unrealized profit	–––	
Profit on the contract (before or after completion)		*Less:* Cash received from Contractee	(–––)	–––
	–––	Loss on sales of material/plant		–––
		Loss on the contract (before or after completion)		–––

If you are showing relevant items in the balance sheet then obviously total will not tally.

Day - 3

Example 1: Treatment of material

Example:

Mohan took a contract for constructing a Dispensary. Material purchased from market ₹ 80,000, material issued from store, ₹ 15,000 material transferred to this contract from another contract ₹ 28,000, material costing ₹ 7,000 was stolen from site, material costing ₹ 13,000 returned to store, material lost by fire on site ₹ 1,200 material costing ₹ 1,000 were sold for ₹ 800, material costing ₹ 4,000 transferred to another contract and material on site at closing date was ₹ 8,000.

You are to show these particulars about material in contract A/c.

Contract Account (Dispensary)

Particulars	Amount (₹)	Particulars		Amount (₹)
To Material Purchased	80,000	By Material at site		8,000
To Material issued from store	15,000	By Material returned to store		13,000
To Material received from other contract	28,000	By Material transferred to another contract		4,000
		By Material sold		800
		Cost	1,000	
		Sales	800	
		By Profit & Loss A/c (Loss on sale of material)		200
		By Material Stolen		7,000
		By Material Lost by Fire		1,200

Note: If in the statement only the word material is given it is to be taken as material purchased but if both material consumed and material at site are given then in the contract A/c. only material consumed is to be shown on the debit side and no treatment of material at site is needed because material consumed is calculated as follows:

Material Purchased	40,000
Add: Opening Stock	12,000
	52,000
Less: Closing Stock	5,000
Material consumed	47,000

construction work or contract labour at site is to be

Example 2: Treatment of material

Material purchased Rs. 1,00,000; Opening material Rs. 20,000; Material at site Rs. 30,000; Material costing Rs. 10,000 was sold for Rs. 12,000; Material costing Rs. 5,000 was sold for Rs. 3,000; Material costing Rs. 4,000 lost by fire. Show the treatment of the material using both the methods.

Solution:

Method 1

Contract Account			
Particulars	**Amount (Rs.)**	**Particulars**	**Amount (Rs.)**
To opening material	20,000	By material at site	30,000
To material purchased	1,00,000	By material sold	12,000
To P & L a/c (profit on sales of material)	2,000	By material sold	3,000
		By P & L a/c (loss on sales of material)	2,000
		By P & L a/c (material lost by fire)	4,000

Note: If you calculate the balance of the above contract account then you will get Rs. 71,000 as balancing figure which is the amount of the material consumed.

Method 2

Contract Account			
Particulars	**Amount (Rs.)**	**Particulars**	**Amount (Rs.)**
To material consumed	71,000		

Material Consumed = Opening Material + Material Purchased –Material at Site – Material Sold (Cost) – Material Sold (Cost) – Material Lost by Fire (Cost)

=1,00,000 + 20,000 – 30,000 – 10,000 – 5,000 – 4,000 = =71,000

From the above example (example 2) it's clear that whatever method (Method 1 or Method 2) is used for the treatment/adjustment of the material the impact/effect on the contract account is same.

Example 3: Treatment of plant & machinery

Dinesh a building contractor started a work from1st January 2010. On 1st March 2010 a plant costing Rs. 60,000 was purchased for the contract. A part of the plant costing Rs. 10,000 was unsuitable and returned to store on 31st May 2010. Plant costing Rs. 6,000 was stolen from the site at the beginning. Plant costing Rs. 20,000 was sold for Rs. 13,000 on 31st December 2010. Accounts are closed on 31st December every year. Charge depreciation (i) at 10% and (ii) at 10% per annum and show the treatment in the contract account.

Solution:

Case 1: When depreciation is charged at 10%

Contract Account			
Particulars	**Amount (Rs.)**	**Particulars**	**Amount (Rs.)**
To plant	60,000	**By plant returned to store:** Cost Rs. 10,000 Less: Dep. @ 10% (Rs. 1,000) **(Note – 1)**	9,000
		By P & L a/c (Plant stolen)	6,000
		By plant sold	13,000
		By P & L a/c (Loss on sales of plant) **(Note -2)**	5,000
		Plant at site: Cost Rs. 24,000 Less: Dep. @ 10% (Rs. 2,400) **(Note- 3)**	21,600

Note – 1: Calculation on depreciation on plant returned to store (on 31st may 2010)

Rs. 10,000 × 10 / 100 = Rs. 1,000 (Time ignored as per annum is not given with the rate)

Note – 2: Calculation of loss on sales of plant (on 31st December 2010)

	Rs.
Cost of the plant	20,000
Less: Depreciation @ 10% (time ignored as per annum is not given with the rate)	(2,000)
Written Down Value	18,000
Less: Sales of the Plant	(13,000)
Loss on Sales	**5,000**

Note – 3: Calculation of plant at site (on 31st December 2010)

	Rs.
Cost of the plant	60,000
Less: Cost of the plant returned	(10,000)
Less: Cost of the plant stolen	(6,000)
Less: Cost of the plant sold	(20,000)
Cost of the plant at site	**24,000**
Less: Depreciation @ 10% (time ignored as per annum is not given with the rate)	(2,400)
Value of the plant at site	**21,600**

The above example **(Example 3 and Case – 1)** can be also be solved by taking the amount of the depreciation only. In such a case the amount of depreciation shall be debited to the contract account and all other transactions shall be ignored. Let us calculate the amount of depreciation:

	Rs.
Depreciation on plant returned (10,000 × 10%)	1,000
Depreciation on plant stolen (Not applicable as the plant was stolen and it is abnormal in nature)	0
Depreciation on plant sold (Rs. 20,000 × 10%)	2,000
Depreciation on plant at site (Rs. 24,000 × 10%)	2,400
Total depreciation	**5,400**

Note: If you calculate the balance of the above contract account then you will get Rs. 5,400 as balancing figure which is the amount of the material consumed.

Case 2: When depreciation is charged at 10% per annum

Contract Account			
Particulars	**Amount (Rs.)**	**Particulars**	**Amount (Rs.)**
To plant	60,000	**By plant returned to store:** Cost Rs. 10,000 Less: Dep. @ 10% (Rs. 250) **(Note – 1)**	9,750
		By P & L a/c (Plant stolen)	6,000
		By plant sold	13,000
		By P & L a/c (Loss on sales of plant) **(Note -2)**	5,333
		Plant at site: Cost Rs. 24,000 Less: Dep. @ 10% (Rs. 2,000) **(Note – 2)**	22,000

Note – 1: Calculation on depreciation on plant returned to store on 31st may 2010
Rs. 10,000 × 10 / 100 × 2 Months / 12 Months = Rs. 250
Note – 2: Calculation of loss on sales of plant (on 31st December 2010)

	Rs.
Cost of the plant	20,000
Less: Depreciation @ 10% for 10 months	(1,667)
Written Down Value	**18,333**
Less: Sales of the Plant	(13,000)
Loss on Sales	**5,333**

Note – 3: Calculation of plant at site

	Rs.
Cost of the plant	60,000
Less: Cost of the plant returned	(10,000)
Less: Cost of the plant stolen	(6,000)
Less: Cost of the plant sold	(20,000)
Cost of the plant at site	**24,000**
Less: Depreciation @ 10% for 10 months	(2,000)
Value of the plant at site	**22,000**

The above example **(Example 3 and Case – 2)** can be also be solved by taking the amount of the depreciation only. In such a case the amount of depreciation shall be debited to the contract account and all other transactions shall be ignored. Let us calculate the amount of depreciation:

	Rs.
Depreciation on plant returned (10,000 × 10% per annum × 3 Months/ 12 Months)	250
Depreciation on plant stolen (Not applicable as the plant was stolen and it is abnormal in nature)	0
Depreciation on plant sold (Rs. 20,000 × 10% per annum× 10 Months / 12 Months)	1,667
Depreciation on plant at site (Rs. 24,000 × 10% per annum × 10 Months / 12 Months)	2,000
Total depreciation	**3,917**

Note: If you calculate the balance of the above contract account then you will get Rs. 3,917 as balancing figure which is the amount of the material consumed.

Example 4

The total contract price of a contract is Rs. 20,00,000. On 31st march 2017, the value of work certified was Rs. 15,00,000 and the total cost incurred was Rs. 11,00,000. The value of work uncertified was Rs. 50,000. The cash received was Rs. 10,00,000. You are required to determine the amount of the profit to be taken to the P & L a/c and to the work in progress account (reserve).

Solution:

First of all prepare the contract account and calculate the notional profit. Then using the formula used to calculate the amount to be transferred to the profit and loss account. (Click here to see the rules for the calculation of amount to be transferred to the P & L a/c in case of incomplete contracts). It is to be noted that always calculate the notional profit first of all as a balancing figure and then brought it down and then bifurcate the notional profit in to parts. This is the easiest approach.

Contract Account For the year ending 31st March 2017			
Particulars	**Amount (Rs.)**	**Particulars**	**Amount (Rs.)**
To cost incurred	11,00,000	**By work in progress:** Work certified Rs. 15,00,000 Work not certified Rs. 50,000	15,50,000
To notional profit c/d	4,50,000		
Total	**15,50,000**	**Total**	**15,50,000**
To P & L account **(Note – 1)**	2,00,000	By notional profit b/d	4,50,000
To work in progress a/c (Bal. figure) **(Note – 2)**	2,50,000		
Total	**4,50,000**	**Total**	**4,50,000**

Note – 1: Percentage of the work certified to the contract price is 75% *i.e.* Rs. 15,00,000 / Rs. 20,00,000 × 100. Because the value of work certified is equal to or more than ½ of the contract price but less than 90% of the contract price so profit (which is to be transferred to the P & L a/c) shall be calculated using the following formula:

$$Profit\ and\ Loss\ Account = Notional\ Profit \times \frac{2}{3} \times \frac{Cash\ Received}{Work\ Certified}$$

$$= 4{,}50{,}000 \times \frac{2}{3} \times \frac{10{,}00{,}000}{15{,}00{,}000} = Rs.\ 2{,}00{,}000$$

Note – 2: Amount which is to be transferred to the work in progress account:

= Notional Profit – Amount transferred to the P & L a/c

= Rs. 4,50,000 – Rs. 2,00,000 = Rs. 2,50,000

Example 5

The contract price is Rs. 20,00,000. On 31st March 2018, 90% of the work had been completed and certified by the architects. The costs incurred up to 31st march, 2018 on this project amounted to Rs. 16,00,000. It was estimated that another 80,000 would have to be incurred further to complete the project. The contractee paid 75% of the value of the work certified. Work not certified is Rs. 1,00,000. Find out the profit to be taken to profit and loss account.

Solution:

Contract Account For the year ending 31st March 2018			
Particulars	**Amount (Rs.)**	**Particulars**	**Amount (Rs.)**
To cost incurred	16,00,000	**By work in progress:** Work certified Rs. 18,00,000 Work not certified Rs. 1,00,000	19,00,000
To notional profit c/d	3,00,000		
Total	**19,00,000**	**Total**	**19,00,000**
To P & L account **(Note – 2)**	2,16,000	By notional profit b/d	3,00,000
To work in progress a/c (Bal. figure) **(Note – 3)**	84,000		
Total	**3,00,000**	**Total**	**3,00,000**

In this question it's clearly stated that the 90% of the work has been completed and certified, so the contract is near completion. So first of all estimate the profit as follows (Click here to see the rules for the calculation of estimated profit and amount to be transferred to the P & L a/c in case of near completion contracts):

Note – 1: Estimated Profit = Contract Price – Estimated Cost
= Rs. 20,00,000 – (Rs. 16,00,000 already incurred + Rs. 80,000 to be incurred)
= Rs. 3,20,000

Note – 2: Profit to be taken to the P & L a/c (In case the contract is near competion):

$$Profit\ and\ Loss\ Account = \text{Estimated } Profit \times \frac{Cash\ Received}{Contract\ Price} = 3{,}20{,}000 \times \frac{13{,}50{,}000}{20{,}00{,}000} = Rs.\ 2{,}16{,}000$$

Note – 3: Amount which is to be transferred to the work in progress account:
= Notional Profit – Amount transferred to the P & L a/c
= Rs. 3,00,000 – Rs. 2,16,000 = Rs. 84,000

Example 6

Following is the information related to the contract account number 101:

Contract price	Rs. 6,00,000
Wages	Rs. 1,64,000
General expenses	Rs. 8,600
Raw materials	Rs. 1,20,000
Plant	Rs. 20,000

As on date, cash received was Rs. 2,40,000, being 80% of the work certified. The value of materials remaining at site was Rs. 10,000. Depreciate plant by 10%. Prepare the contract account. (Examination Question)

Solution:

Contract Account
For the year ending 31st March 20xx

Particulars	Amount (Rs.)	Particulars		Amount (Rs.)
		By work in progress:		
		Work certified **(Note – 1)**	Rs. 3,00,000	
To raw material	1,20,000	Work not certified	Rs. 0	3,00,000
		By plant at site:		
		Cost	Rs. 20,000	
		Less: Depreciation	(Rs. 2,000)	
To wages	1,64,000	**(Note – 2)**		18,000
To general expenses	8,600	By material at site		10,000
To plant **(Note – 6)**	20,000			
To notional profit c/d **(Note – 3)**	15,400			
Total	**3,28,000**	**Total**		**3,28,000**
To P & L a/c **(Note – 4)**	8,213	By notional profit b/d		15,400
To work in progress a/c (Bal. figure) **(Note – 5)**	7,187			
Total	**15,400**	**Total**		**15,400**

Note – 1: Cash received is given Rs. 2,40,000 which is 80% of the work certified. So, work certified can be calculated as follows—

$$Value\ of\ work\ certified = \frac{2{,}40{,}000}{80\%}\ or\ 2{,}40{,}000 \times \frac{100}{80} = Rs.\ 3{,}00{,}000$$

Note – 2: Depreciation has been calculated at 10%. Time factor has been ignored as the per annum is not given with the rate.

$$Depreciation = Cost\ of\ the\ plant \times \frac{10}{100} = 20{,}000 \times \frac{10}{100} = Rs.\ 2{,}000$$

Note – 3: In this question the percentage of the work certified is 50% *i.e.* Work Certified/Contract Price × 100 *i.e.* Rs. 3,00,000/Rs. 6,00,000×100. Further the credit side of the contract is more than the debit side, so notional profit is there. Then notional profit has been brought down so that it can be bifurcated in two parts.

Note – 4: Percentage of the work certified to the contract price is 50% *i.e.* Rs. 3,00,000 / Rs. 6,00,000 × 100. Because the value of work certified is equal to or more than ½ of the contract price but less than 90% of the contract price so profit (which is to be transferred to the P & L a/c) shall be calculated using the following formula:

$$P\ \&\ L\ a/c = Notional\ Profit \times \frac{2}{3} \times \frac{Cash\ Received}{Work\ Certified}\ or\ Notional\ Profit \times \frac{2}{3} \times \frac{\%\ of\ Cash\ Received}{100}$$

$$= 15{,}400 \times \frac{2}{3} \times \frac{2{,}40{,}000}{3{,}00{,}000}\ \text{or}\ 15{,}400 \times \frac{2}{3} \times \frac{80}{100} \cong Rs.\ 8{,}213$$

Note – 5: Amount which is to be transferred to the work in progress account:

= Notional Profit – Amount transferred to the P & L a/c

= Rs. 15,400 – Rs. 8,213 = Rs. 7,187

Note – 6: Alternatively the depreciation of Rs. 2,000 can be debited and in such a case cost of the plant and the WDV of the plant shall not be recorded in the contract account.

Example 7

How much profit will be credited to profit and loss account in the following cas:

Contract price	Rs. 20,00,000
Cost incurred	Rs. 11,20,000
Cash received (90% of work certified)	Rs. 10,80,000
Work not certified	Rs. 1,20,000 (Examination question)

Solution:

First of all prepare the contract account and calculate the notional profit. Then using the formula used to calculate the amount to be transferred to the profit and loss account. (Click here to see the rules for the calculation of amount to be transferred to the P & L a/c in case of incomplete contracts). It is to be noted that always calculate the notional profit first of all as a balancing figure and then brought it down and then bifurcate the notional profit in to parts. This is the easiest approach.

Contract Account
For the year ending 31st March 2017

Particulars	Amount (Rs.)	Particulars		Amount (Rs.)
		By work in progress:		
		Work certified **(Note – 1)**	Rs. 12,00,000	
To cost incurred	11,20,000	Work not certified	Rs. 1,20,000	13,20,000
To notional profit c/d	2,00,000			
Total	**13,20,000**		**Total**	**13,20,000**
To P & L account **(Note – 2)**	1,20,000	By notional profit b/d		2,00,000
To work in progress a/c (Bal. figure) **(Note – 3)**	80,000			
Total	**2,00,000**		**Total**	**2,00,000**

Note – 1: Cash received is given Rs. 10,80,000 which is 90% of the work certified. So, work certified can be calculated as follows—

$$Value\ of\ work\ certified = \frac{10{,}80{,}000}{90\%}\ or\ 2{,}40{,}000 \times \frac{100}{90} = Rs.\ 12{,}00{,}000$$

Note – 2: Percentage of the work certified to the contract price is 60% *i.e.* Rs. 12,00,000 / Rs. 20,00,000 × 100. Because the value of work certified is equal to or more than ½ of the contract price but less than 90% of the contract price so profit (which is to be transferred to the P & L a/c) shall be calculated using the following formula:

$$Profit\ and\ Loss\ Account = Notional\ Profit \times \frac{2}{3} \times \frac{Cash\ Received}{Work\ Certified}$$

$$= 2{,}00{,}000 \times \frac{2}{3} \times \frac{10{,}80{,}000}{20{,}00{,}000} = Rs.\ 1{,}20{,}000$$

Note – 3: Amount which is to be transferred to the work in progress account:

= Notional Profit – Amount transferred to the P & L a/c

= Rs. 2,00,000 – Rs. 1,20,000 = Rs. 80,000

Example 8 (Illustration Number 7.7 or 8.7 of Maheshwari-Mittal)

Modern construction limited has taken two contracts on 1st October 2017. The position of contracts as on 30th September 2018 was as follows:

Particulars	Contract – I (Rs.)	Contract – II (Rs.)
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 (Cost)	1,60,000	3,00,000
Unused material at site	40,000	60,000
Wages payable (outstanding)	36,000	54,000
Other expenses due (outstanding)	4,000	9,000
Work certified	16,00,000	30,00,000
Cash received	12,00,000	22,50,000
Work completed but not yet certified	80,000	90,000

The plant at site is to be depreciated at 10%. Prepare the contract account in respect of each contract showing the notional profit and also the profit to be transferred to P & L a/c.

Solution

Contract Account
For the year ending on 30th September 2018

Particulars	**Contract – I (Rs.)**	**Contract – II (Rs.)**	**Particulars**	**Contract – I (Rs.)**	**Contract – II (Rs.)**
Materials	5,80,000	10,80,000	**By work in progress:**		
Wages paid	11,24,000	16,50,000	Work certified	16,00,000	30,00,000
Wages payable	36,000	54,000	Work not certified	80,000	90,000
Depreciation on plant **(Note – 1)**	16,000	30,000	By material at site	40,000	60,000
Other expenses	28,000	60,000	By P & L a/c **(Note – 2)**	68,000	
Other expenses due	4,000	9,000			
To notional profit c/d		2,67,000			
Total	**17,88,000**	**31,50,000**	**Total**	**17,88,000**	**31,50,000**
To P & L a/c **(Note – 3)**		1,33,500	By notional profit b/d		2,67,000
To work in progress **(Note – 4)**		1,33,500			
Total		**2,67,000**	**Total**		**2,67,000**

Note – 1: The depreciation has been calculated at 10%. Time factor has been ignored as per annum is not given with the rate. Further, we have debited the depreciation only and not the cost and WDV of the plant. Alternatively the cost of the plant can be debited to the contract account and the WDV can be credited as follows:

Particulars	**Contract – I (Rs.)**	**Contract – II (Rs.)**	**Particulars**	**Contract – I (Rs.)**	**Contract – II (Rs.)**
To plant	1,60,000	3,00,000	By plant at site (WDV)	1,44,000	2,7,000
Plant at site for contract – I: Cost – Depreciation @ 10% = Rs. 1,60,000 – 16,000 = Rs. 1,44,000 **Plant at site for contract – II:** Cost – Depreciation @ 10% = Rs. 3,00,000 – 30,000 = Rs. 2,70,000					

Note-2: In case of contract – I the debit side is more than the credit side so loss is there and such loss shall be transferred to the P & L a/c.

Note – 3: Percentage of the work certified to the contract price is 59.26% *i.e.* Rs. 16,00,000 / Rs. 27,00,000 × 100. Because the value of work certified is equal to or more than ½ of the contract price but less than 90% of the contract price so profit (which is to be transferred to the P & L a/c) shall be calculated using the following formula:

$$Profit\ and\ Loss\ Account = Notional\ Profit \times \frac{2}{3} \times \frac{Cash\ Received}{Work\ Certified}$$

$$= 2{,}67{,}000 \times \frac{2}{3} \times \frac{12{,}00{,}000}{16{,}00{,}000} = Rs.\ 1{,}33{,}500$$

Note – 4: Amount which is to be transferred to the work in progress account:

= Notional Profit – Amount transferred to the P & L a/c

= Rs. 2,67,000 – Rs. 1,33,500 = Rs. 1,33,500

Example 9 (When the work certified is less than ¼th of the contract price)

Particulars	**Case – 1 (Rs.)**	**Case – 2 (Rs.)**
Contract price	10,00,000	10,00,000
Work certified	2,40,000	2,40,000

Work not certified	10,000	10,000
Cost incurred	2,00,000	2,60,000

Solution:

Case – 1 (When the credit side is more than the debit side)

Contract Account For the year ending 31st March 20xx			
Particulars	**Amount (Rs.)**	**Particulars**	**Amount (Rs.)**
		By work in progress:	
		Work certified Rs. 2,40,000	
To cost incurred	2,00,000	Work not certified Rs. 10,000	2,50,000
To work in progress a/c **(Note)**	50,000		
Total	**2,50,000**	**Total**	**2,50,000**

Note: In this case the work certified is 24% of the contract price, so, it's less than ¼th of the contract price. In this case notional profit shall not be calculated and whole of the balance shall be transferred to the Work in Progress Account (only in case the total of credit side is more than the debit side).

Case – 2 (When the debit side is more than the credit side)

Contract Account For the year ending 31st March 20xx			
Particulars	**Amount (Rs.)**	**Particulars**	**Amount (Rs.)**
		By work in progress:	
		Work certified Rs. 2,40,000	
To cost incurred	2,60,000	Work not certified Rs. 10,000	2,50,000
		By P & L a/c **(Note)**	10,000
Total	**2,60,000**	**Total**	**2,60,000**

Note: In this case the work certified is 24% of the contract price, so, it's less than ¼th of the contract price. In this case the debit side is more than credit side, so loss is there and it shall be transferred to the P & L a/c.

Example 10

Prepare the contract account with the help of following:

Direct material	Rs. 28,000
Wages	Rs. 22,000
Special plant	Rs. 18,000
Stores issued	Rs. 9,000
Loose tools	Rs. 2,500
Cost of tractor used	Rs. 1,20,000
Fuel for tractor	Rs. 4,000
Wages of tractor driver	Rs. 8,000

The contract was completed in 26 weeks at the end of which plant was returned subject to a depreciation of **20% on the original cost.** The value of loose tools and stores returned were Rs. 500 and Rs. 1,000 respectively. The tractor is subject to a depreciation of 20% per annum. Provide office overheads at 10% of the works/facotry cost. The contract was agreed to be performed at a profit of 25% of the total cost.

Solution:

In this some important points are there which are:

1. It's a cost plus contract. So the contract price shall be calculated by adding the profit of 25% to the total cost.
2. Tractor shall be treated like plant. Either the cost can be debited and WDV can be credited or only the amount of the depreciation can be debited. Further, the expenses of the tractor like fuel and driver's wages shall also be debited.
3. **(This contract is completed)** In this question office overheads are 10% of the works/factory cost. How can the works/factory cost be calculated? It's very easy. **First of all prepare the contract account as usual but do not credit the amount of the contract price. Now calculate the balance of the contract account (debit side will**

be more than the credit side). This balance is the works/factory cost. Then brought down this balance and calculate the office overheads at 10% of the works/factory cost. Debit these office overheads and calculate the total cost. Brought down this total cost and calculate profit at 25% on total cost. Debit this profit. Now you will get a balancing figure on the credit side which is the contract price.

4. (In case of incomplete contracts) **First of all prepare the contract account as usual but do not credit the work certified and work not certified. Now calculate the balance of the contract account (debit side will be more than the credit side). This balance is the works/factory cost. Then brought down this balance and calculate the office overheads at 10% of the works/factory cost. Debit these office overheads and credit the work certified and work not certified (if these are given). If credit side is more than the debit side then notional profit is there and then it should be bifurcated in two parts as usual. Transfer one part to the P & L a/c using the formulae discussed earlier and transfer the balance to the work in progress a/c. But if the debit side is more than the credit side then there is loss and such loss shall be transferred to the P & L a/c.**

Contract Account
For the year ending ……

Particulars	**Amount (Rs.)**	**Particulars**	**Amount (Rs.)**
		By plant returned:	
		Cost Rs. 18,000	
To direct material	28,000	**Less:** Depreciation (Rs. 3,600) **(Note – 1)**	14,400
To wages	22,000	By stores returned (WDV given)	500
To special plant	18,000	By loose tools returned (WDV given)	1,000
		By tractor returned:	
		Cost Rs. 1,20,000	
To stores issued	9,000	**Less:** Depreciation (Rs. 12,000) **(Note – 2)**	1,08,000
To loose tools	2,500		
To cost of tractor	1,20,000		
To fuel for tractor	4,000		
Wages of tractor driver	8,000	By works/factory cost c/d	87,600
Total	**2,11,500**	**Total**	**2,11,500**
To works/factory cost b/d	87,600		
To office overheads **(Note – 3)**	8,760	By total cost c/d	96,360
Total	**96,360**	**Total**	**96,360**
To total cost b/d	96,360	By contractee account (Balancing figure) **(Note – 5)**	1,20,450
To profit **(Note – 4)**	24,090		
Total	**1,20,450**	**Total**	**1,20,450**

Note – 1: Depreciation on special plant shall be calculated at 20% (ignoring the time factor as per annum is not given with the rate). Depreciation would be Rs. 3,600 (Rs. 18,000 × 20 / 100).

Note – 2: depreciation on tractor has been calculated for 26 weeks (on the basis of time as the per annum is given with the rate). Depreciation would be Rs. 12,000 (Rs. 1,20,000 × 20 / 100 × 26 Weeks / 52 Weeks).

Note – 3: Office overheads are 10% of the works cost so the amount would be Rs. 8,760 (Rs. 87,600 *i.e.* works cost × 10 / 100).

Note – 4: Profit is 25% on cost so the amount would be Rs. 24,090 (Rs. 1,20,450 *i.e.* Total cost × 25 / 100).

Note – 5: As this is a cost plus contract. So the contract price has been calculated by adding the profit of 25% to the total cost (or the balancing figure is the contract price).

Day - 4

Example 11 (Illustration 7.9 or 8.9 of Maheshwari Mittal)

The Hindutan Construction Company Limited has undertaken the construction of a bridge over the river Yamuna for a municipal corporation. The value of the contract is Rs. 12,50,000 subject to a retention 0f 20% until one year after the certified completion of the contract, and final approval of the corporation's engineer. The following are the details as shown in the bookson3oth June 2000:

Labour on site	Rs. 4,05,000
Material direct to site *less* returns	Rs. 4,20,000
Material received from stores	Rs. 81,200
Hire and use of plant – plant upkeep account	Rs. 12,100
Direct expenses	Rs. 23,000
General overheads allocated to the contract	Rs. 37,100
Material in hand on 30th June 2000	Rs. 6,300
Wages accrued/outstanding on 30th June 2000	Rs. 7,800
Direct expenses accrued/outstanding on 30th June 2000	Rs. 1,600
Work not yet certified by the Corporation Engineer	Rs. 16,500
Amount certified by the Corporation Engineer	Rs. 11,00,000
Cash received on account	Rs. 8,80,000

Prepare (a) Contract account; (b) Contractee's account; and (c) how the relevant items would appear in the Balance Sheet.

Solution:

Contract Account
For the year ending 30th June March 2000

Particulars		Amount (Rs.)	Particulars		Amount (Rs.)
To labour on site	Rs. 4,05,000				
Add: Outstanding	Rs. 7,800	4,12,800	By material in hand		6,300
			By work in progress: (Note – 5)		
			Work certified	Rs. 11,00,000	
To material direct to site *less* returns		4,20000	Work not certified	Rs. 16,500	11,16,500
To material received from store		81,200			
To hire and use of plant – plant upkeep account		12,100			
To direct expenses	Rs. 23,000				
Add: Outstanding	Rs. 1,600	24,600			
To general overhead allocated to the Contract		37,100			
To notional profit c/d **(Note – 1)**		1,35,000			
Total		**11,22,800**	**Total**		**11,22,800**
To P & L a/c **(Note – 2)**		72,000	By notional profit b/d		1,35,000
To work in progress account **(Note – 3 and 6)**		63,000			
Total		**1,35,000**	**Total**		**1,35,000**

Contractee Account
For the year ending 30th June March 2000

Particulars	Amount (Rs.)	Particulars	Amount (Rs.)
To balance c/d	8,80,000	By cash account **(Note – 4)**	8,80,000
Total	**8,8,0000**	**Total**	**8,80,000**

Work in progress Account
For the year ending 30th June March 2000

Particulars		Amount (Rs.)	Particulars	Amount (Rs.)
To contract account **(Note – 5)**				
Work certified	Rs. 11,00,000		By contract account (transfer to reserve)	
Work not certified	Rs. 16,500	11,16,500	**(Note – 6)**	63,000
			By balance c/d	10,53,500

Total	**11,16,500**	**Total**	**11,16,500**

Balance sheet as on 30th June March 2000			
Liabilities	**Amount (Rs.)**	**Assets**	**Amount (Rs.)**
		Work in progress: (Note – 7) Work certified Rs. 11,00,000 **Add:** work not certified Rs. 16,500 Rs. 11,16,500 **Less:** Transfer to reserve (Rs. 63,000) Rs. 10,53,500 **Less:** Cash received (Rs. 8,80,000)	
Wages accrued	7,800	**(Note – 8)**	1,73,500
Direct expenses accrued	1,600	Material in hand	6,300
Profit and loss a/c	72,000		
Total	**-NA-**	**Total**	**-NA-**

Note – 1: The percentage of the work certified to the contract price is 88% and the credit side of the contract side is more than the debit side so notional profit is there.

Note – 2: Percentage of the work certified to the contract price is 58% *i.e.* Rs. 11,00,000 / Rs. 12,50,000 × 100. Because the value of work certified is equal to or more than ½ of the contract price but less than 90% of the contract price so profit (which is to be transferred to the P & L a/c) shall be calculated using the following formula:

$$Profit\ and\ Loss\ Account = Notional\ Profit \times \frac{2}{3} \times \frac{Cash\ Received}{Work\ Certified}$$

$$= 1{,}35{,}000 \times \frac{2}{3} \times \frac{8{,}80{,}000}{11{,}00{,}000} \text{ or } 1{,}35{,}000 \times \frac{2}{3} \times \frac{80\ (\text{Percentage of the cash received})}{100} = Rs.\ 72{,}000$$

Note – 3: Amount which is to be transferred to the work in progress account:

= Notional Profit – Amount transferred to the P & L a/c

= Rs. 1,35,000 – Rs. 72,000 = Rs. 63,000

Note – 4: Cash received from the contractree is 80% of the work certified, so it would be Rs. 11,00,000 × 80 / 100 = Rs. 8,80,000 (it's already given in the question). Journal entry to receive cash is

Cash a/c Dr. Rs. 8,80,000

To Contractee a/c Rs. 8,80,000

(Being cash received from the contractee)

We have just posted this journal entry in the contractee account. After posting the journal entry calculate the balance of the contractee account whoch would be Rs. 8,80,000.

Note – 5: The journal entry for the recording of the work in progress account (work certified + work not certified) is:

Work in progress a/c Dr. Rs. 11,16,500

To Contract a/c Rs. 11,16,500

(Being work in progress transferred to the contract account)

Now post this entry in to the contract and work in progress account.

Note – 6: The amount we transfer to the reserve (work in progress account), the journal entry for that is:

To Contract a/c Rs. 63,000

Work in progress a/c Dr. Rs. 63,000

(Being part of the notional profit transferred to the reserve/work in progress account)

Now post this entry in to the contract and work in progress account. Then calculate the balance of the work in progress account which would be Rs. 10,53,600.

Note – 7: We can also show the balance of the work in progress in the balance sheet as follows:

Balance sheet as on 30th June March 2000			
Liabilities	**Amount (Rs.)**	**Assets**	**Amount (Rs.)**
		Work in progress Rs. 10,53,500 **Less:** Cash received (Rs. 8,80,000)	1,73,500
Total	**-NA-**	**Total**	**-NA-**

Note – 8: This is the balance of the contractee account. Alternatively this can be shown on the liabilities side.

Example 12 (Illustration Number 7.11 or 8.11 of Maheshwari Mittal)

Illustration 7.11. The following information relates to a building contract for ₹ 10,00,000 :

Particulars	2005	2006
	₹	₹
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	—
Material at site	5,000	7,000
Plant issued	14,000	2,000
Cash received from contractor	6,00,000	10,00,000

The value of plant at the end of 2005 and 2006 was Rs. 7,000 and Rs. 5,000 respectively. prepare (i) Contract Account, (ii) Contractee Account for two years 2005 and 2006 taking into consideration such profit for transfer to Profit and Loss Account as you think proper.

Solution:

When the contract account is to be prepared for more than one year then some important points are to be kept in mind in such questions which are:

1. Prepare the contract account, work in progress account and the contractee account for every year.
2. The work in progress of 1st year shall be transferred to the debit side of the 2nd year's contract account on the first day of the 2nd year. (This process is called passing of the reversing journal as no balance of the work in progress is maintained on the first day of the 2nd year)
3. The work in progress of 2nd year shall be transferred to the debit side of the 3rd year's contract account on the first day of the 3rd year. (This process is called passing of the reversing journal as no balance of the work in progress is maintained on the first day of the 3rd year)
4. In the last year *i.e.* year of completion, there will be no work in progress. In this year we credit the contract account by the contract price.
5. The plant at site, material at site and prepaid expenses at site at the end of the 1st year shall be debited to the 2nd year's contract account at their WDV on the first day of the 2nd year.
6. The plant at site, material at site and prepaid expenses at site at the end of the 1st year shall be debited to the 3rd year's contract account on the first day of the 3rd year.
7. In the last year all unused material and remaining plant shall be returned to the stores.
8. Any outstanding expense at the end of the 1st year shall be credited to the 2nd year's contract account on the first day of the 2nd year.
9. Any outstanding expense at the end of the 2nd year shall be credited to the 3rd year's contract account on the first day of the 3rd year.
10. Every year (except last year) notional profit shall be calculated and shall be bifurcated in two parts. One part is transferred to the P & L a/c and remaining portion is transferred to the work in progress account.
11. In the year of completion there will be no notional profit. Any profit or loss shall be transferred to the P & L a/c.

Contract Account
For the year ending 31st December2005

Particulars	**Amount (Rs.)**	**Particulars**		**Amount (Rs.)**
To material issued	3,00,000	By material at site		5,000
To direct wages	2,30,000	**By work in progress: (1)**		
To direct expenses	22,000	Work certified	Rs. 7,50,000	
To indirect expenses	6,000	Work not certified	Rs. 8,000	7,58,000
To plant issued	14,000	**By plant at site:**		
To notional profit c/d	1,98,000	Cost	Rs. 14,000	
		Less: Depreciation	(Rs. 7,000)	7,000
Total	**7,70,000**		**Total**	**7,70,000**
To P & L a/c **(2) (Note – 1)**	1,05,600	By notional profit b/d		1,98,000
To work in progress account **(3) (Note – 2)**	92,400			

Total	**1,98,000**	**Total**	**1,98,000**

Contract Account **For the year ending 31st December 2006**			
Particulars	**Amount (Rs.)**	**Particulars**	**Amount (Rs.)**
To work in progress account **(5)**	6,65,600	By material at site	7,000
To material at site b/d	5,000	**By plant at site:**	
To plant at site b/d	7,000	Cost Rs. 7,000 + Rs. 2,000	
To material issues	84,000	**Less:** Dep. (Rs.4,000)	5,000
To direct wages	1,05,000	By contractee account **(6)**	10,00,000
To direct expenses	10,000		
To indirect expenses	1,400		
To plant issued	2,000		
To P & L a/c **(7)**	1,32,000		
Total	**10,12,000**	**Total**	**10,12,000**

Work in progress account					
Date	**Particulars**	**Amount (Rs.)**	**Date**	**Particulars**	**Amount (Rs.)**
31-12-2005	To contract account **(1)**		31-12-2005	By contract account (Reserve) **(3)**	92,400
	(Work certified + Work not certified)	7,58,000	31-12-2005	By balance c/d	6,65,600
	Total	**7,58,000**		**Total**	**7,58,000**
01-01-2006	To balance b/d	6,65,600	01-01-2006	By contract account **(5)**	6,65,600
	Total	**6,65,600**		**Total**	**6,65,600**

Contractee account					
Date	**Particulars**	**Amount (Rs.)**	**Date**	**Particulars**	**Amount (Rs.)**
31-12-2005	To balance c/d	6,00,000	31-12-2005	By cash account **(4)**	6,00,000
	Total	**6,00,000**		**Total**	**6,00,000**
31-12-2006	To contract account **(6)**	10,00,000	01-01-2006	To balance b/d	6,00,000
			31-12-2006	By cash account (Balancing figure) **(8)**	4,00,000
	Total	**10,00,000**		**Total**	**10,00,000**

Journal entries for Work in progress, profit and loss, and cash received from the contractee, etc.

Sr. No.	**Date**	**Particulars**	**L. F.**	**Amount (Rs.)**	**Amount (Rs.)**
1	31-12-2005	Work in progress a/c Dr. To Contract a/c		7,58,000	7,58,000
		Narration: Being work in progress transferred to the contract account.			
2	31-12-2005	Contract a/c Dr. To P & L a/c		1,05,600	1,05,600
		Narration: Being notional profit transferred to the profit and loss account.			

3	31-12-2005	Contract a/c Dr. To Work in progress a/c		92,400	 92,400
		Narration: Being part of notional profit transferred to reserve (work in progress account)			
4	31-12-2005	Cash a/c Dr. To Contractee a/c		6,00,000	 6,00,000
		Narration: Being cash received from the contractee.			
5	01-01-2006	Contract a/c Dr. To work in progress a/c		6,65,600	 6,65,600
		Narration: Being reversing journal passed or Being work in progress on 31st December 2005 transferred to the contract account on 1st January 2006.			
6	31-12-2006	Contractee a/c Dr. To Contract a/c		10,00,000	 10,00,000
		Narration: Being contract completed or Being the contract price receivable from the contractee.			
7	31-12-2006	Contract a/c Dr. To P & L a/c		1,32,000	 1,32,000
		Narration: Profit on completion of contract transferred to the profit and loss account.			
8	31-12-2006	Cash a/c Dr. To Contracteen a/c		4,00,000	 4,00,000
		Narration: Being the balance amount received from the contractee.			

Post all the above entries in the concerned accounts. In case you are not able to understand any posting in any account then please refer to the above journal entries.

Note – 1: Percentage of the work certified to the contract price is 75% *i.e.* Rs. 7,50,000 / Rs. 10,00,000 × 100. Because the value of work certified is equal to or more than ½ of the contract price but less than 90% of the contract price so profit (which is to be transferred to the P & L a/c) shall be calculated using the following formula:

$$Profit\ and\ Loss\ Account = Notional\ Profit \times \frac{2}{3} \times \frac{Cash\ Received}{Work\ Certified}$$

$$= 1{,}98{,}000 \times \frac{2}{3} \times \frac{6{,}00{,}000}{7{,}50{,}000} = Rs.\ 1{,}05{,}600$$

Note – 2: Amount which is to be transferred to the work in progress account:

= Notional Profit – Amount transferred to the P & L a/c

= Rs. 1,98,0000 – Rs. 1,05,600 = Rs. 92,400

Example 13 (Illustration Number 7.12 or 8.12 of Maheshwari Mittal)

Illustration 7.12 or 8.12. Mr. Richardson undertook a contract for Rs. 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% to be retained until the contract was completed.

In 2004, the amounts expended were: Materials, Rs. 9,60,000, Wages Rs. 8,50,000, Carriage Rs. 30,000, cartage Rs. 5,000, Sundry Expenses Rs. 35,000. The work certified for Rs. 18,75000 and 80% was paid as agreed.

In 2005, the amounts expended were: Material Rs. 11,00,000, Wages Rs. 11,50,000, Carriage Rs. 1,15,000, Cartage Rs. 10,000, Sundry Expenses Rs. 20,000. Three-fourth of the contract was certified as done by 31st December and 80% of this was received accordingly. The value of the unused stock and work-in-progress uncertified was ascertained at Rs. 1,00,000.

In 2006, the amounts expended were: Materials Rs. 6,30,000, Wages Rs. 8,50,000, Cartage Rs. 30,000, Sundry Expenses Rs. 15,000. The whole contract was completed on 30th June.

Show how the contract account, work-in-progress account and the contractee's account would appear in each of these years in the books of the contractor assuming that balance due to him was received on completion of the contract. Also show the relevant items in the Balance Sheet.

Solution:

Self

Example 14 (Illustration Number 7.14 or 8.14 of Maheshwari Mittal)

		11,050

Illustration 7.14. Contractors Ltd. began to trade on 1st January, 2006. During 2006 the company was engaged on only one contract of which the contract price was ₹ 5,00,000.

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

On 31st December, 2006 plant which cost ₹ 5,000 was returned to the store, the cost of work done but uncertified was ₹ 2,000 and materials costing ₹ 4,000 were in hand on site.

Charge 10% depreciation on plant crediting *P. & L.* A/c with two-thirds of the profit received and compile Contract Account and Balance Sheet from the following :

TRIAL BALANCE
on 31st December, 2006

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

Solution:

When in the question Share capital, other liabilities, cash, etc. are given then total of the balance sheet will match. The only issue in this question is the preparation of the balance sheet.

Solution :

CONTRACT ACCOUNT

	₹		₹
To Materials	90,000	By Work-in-progress :	
To Plant	25,000	Work certified	2,50,000
To Wages	1,40,000	Work uncertified	2,000
To Expenses	7,000	By P. & L. A/c (Abnormal loss)[1]	9,000
To Profit & Loss A/c (profit transferred)	11,200	By Plant returned to store (Cost ₹ 5,000, Dep. ₹ 500)	4,500
To Work-in-progress A/c (Reserve)	9,800	By Plant at site	13,500
		By Materials at site	4,000
	2,83,000		2,83,000

1. Presumed that plant was lost before it could be used.

BALANCE SHEET

as on 31st December, 2006

Liabilities		Amount	Assets		Amount
	₹	₹		₹	₹
Share Capital		1,20,000	Land and Buildings		43,000
Profit and Loss Account :			Plant : in store	4,500	
Profit transferred from the contract	11,200		at site	13,500	18,000
Less : Abnormal loss of materials and plant	9,000	2,200	Materials at site		4,000
Creditors		10,000	Work-in-progress :		
			Work certified	2,50,000	
			Work uncertified	2,000	
				2,52,000	
			Less : Reserve	9,800	
				2,42,200	
			Less : Cash recd. from the contractee	2,00,000	42,200
			Bank Balance		25,000
		1,32,200			1,32,200

Example 15 (Illustration Number 7.15 or 8.15 of Maheshwari Mittal)

Illustration 7.15. The following is the trial balance of Premier Construction Company, engaged on the execution of Contract No. 747, for the year ended 31st December, 2006 :

	₹	₹
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	
	8,72,000	8,72,000

The work on Contract No. 747 was commenced on 1st-January 2006. 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, 2006.

The contract was of ₹ 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 2006. Uncertified work was estimated at ₹ 15,000 on 31st December, 2006.

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

Prepare Contract No. 747 Account for the year 2006 and make out the Balance Sheet as on 31st December 2006 in the books of Premier Construction Co.

Solution:

In this question share capital, other liabilities, cash, etc. are given so the total of the balance sheet will match. The only issue in this question is the preparation of the balance sheet

Solution : CONTRACT NO. 747 ACCOUNT

for the year ended 31st December 2006

	₹		₹
To Materials	1,70,000	By P. & L. A/c (Ab. loss)	6,000
To Wages	1,80,000	By Plant retd. to stores	
To Expenses (25% of wages)	45,000	(₹ 2,00,000 – 15,000)	1,85,000
To Plant	2,50,000	By Plant at site (₹ 50,000 – 5,000)	45,000
To P. & L. A/c (See Note 1)	45,000	By Materials at site	4,000
To Work-in-progress		By Work-in-progress :	
(Reserve)	45,000	Work certified	4,80,000
		Work uncertified	15,000
	7,35,000		7,35,000

Working Notes :

1. The profit taken to Profit and Loss Account has been arrived at as follows :

$$90{,}000 \times \frac{2}{3} \times \frac{3}{4} = ₹\ 45{,}000$$

The Profit to be taken to *P. & L.* account may also be calculated on the basis of actual cash received. In such a case the amount will be ₹ 37,500 calculated as follows :

$$90{,}000 \times \frac{2}{3} \times \frac{3{,}00{,}000}{4{,}80{,}000} = ₹\ 37{,}500$$

2. Depreciation is to be charged @ 10% on plant for the whole year. Plant costing ₹ 1,50,000 has been used only for 9 months on the contract. Depreciation for 9 months amounting to ₹ 15,000 has been charged to the contract and the rest ₹ 5,000 to P. & L. Account.

BALANCE SHEET AS ON 31ST DEC., 2006

Liabilities			Amount	Assets		Amount
			₹			₹
Capital		₹	5,00,000	Buildings		1,60,000
Profit & Loss Account		45,000		Plant :		
Less : Ab. Loss	6,000			in store		1,80,000
Depreciation on plant	5,000			at contract site		45,000
Unabsorbed expenses*	2,000			Materials :		
		13,000	32,000	in store		30,000
Creditors			72,000	at contract site		4,000
				Work in progress :	₹	
				Work certified	4,80,000	
				Work uncertified	15,000	
					4,95,000	
				Less : Reserve	45,000	
					4,50,000	
				Less : Cash recd. from contractee	3,00,000	1,50,000
				Bank Balance		35,000
			6,04,000			6,04,000

2020-3-18

*Alternatively they may be carried forward.

Example 16

Illustration 3. The following information relate to a contract undertaken by a company for ₹ 80 lacs.

	2016	2017	2018
Materials sent to site	9,70,000	12,50,000	6,90,000
Wages incurred	8,30,000	9,60,000	6,00,000
Expenses	40,000	60,000	30,000
Plant issued to site	10,00,000	2,00,000	Nil
Material at site	20,000	1,20,000	10,000 (Return to store)
Work Certified	18,00,000	60,00,000	80,00,000
Work Uncertified	80,000	90,000	Nil

The work on contract commenced on Jan. 1, 2016 and the plants were issued at the beginning of each year. Depreciation on plant was charged at 20% per annum. The contractee has paid 90% of the work certified every year and settled the account on 30th June, 2018, the date of completion of the contract. Prepare contract account, contractee's account and work-in-progress account for the year 2016, 2017 and 2018 ending on December, 31st.

Solution:

Contract Account for the year ending Dec. 31, 2016

Dr. Cr.

Particulars	Amt. ₹	Particulars		Amt. ₹
To Materials sent to site	9,70,000	By Work-in-progress :		
To Plant issued	10,00,000	Work certified	18,00,000	
To Wages	8,30,000	Work uncertified	80,000	18,80,000
To Expenses	40,000			
		By Plant at site (10,00,000 – 2,00,000)		8,00,000
		By Material at site		20,000
		By Profit & Loss A/c (Loss transferred)		1,40,000
	28,40,000			28,40,000

Contract Account for the year ending Dec. 31, 2017

Particulars		Amt. ₹	Particulars		Amt. ₹
To Opening Balances :			By Work-in-progress :		
Work-in-progress :			Work Certified	60,00,000	
Work Certified	18,00,000		Work Uncertified	90,000	60,90,000
Work Uncertified	80,000	18,80,000	By Material at site	1,20,000	
Plant at site		8,00,000	By Plant on hand (₹10,00,000 – ₹2,00,000)		8,00,000
Material at site		20,000			
To Plant issued		2,00,000			
To Materials sent to site		12,50,000			
To Wages		9,60,000			
To Expenses		60,000			
To Notional Profit c/d		18,40,000			
		70,10,000			70,10,000
To Profit & Loss A/c		11,04,000	By Notional Profit b/d		18,40,000
To Work-in-progress (Reserve A/c)		7,36,000			
		18,40,000			18,40,000

Contract Account for the year ending Dec. 31, 2018

Particulars		Amt. ₹	Particulars	Amt. ₹
To Opening Balances :				
Work-in-progress :			By work-in-progress A/c	
Work certified	60,00,000		(Reserve)	7,36,000
Work uncertified	90,000	60,90,000	By Contractee's A/c (Contract price)	80,00,000
Plant at site		8,00,000	By plant returned (8,00,000 – 80,000)	7,20,000
Material at site		1,20,000	By Material return to store	10,000
To Materials sent to site		6,90,000		
To Wages		6,00,000		
To Expenses		30,000		
To P & L A/c		11,36,000		
		94,66,000		94,66,000

Note: Depreciation on plant was charged for 6 months in 2018.

Contractee's Account

Particulars	Amt. ₹	Particulars	Amt. ₹
Dec, 31, 2016		Dec, 31, 2016	
To Balance c/d	16,20,000	By Bank	16,20,000
	16,20,000		16,20,000
Dec. 31, 2017		Jan. 1, 2017	
To Balance c/d	54,00,000	By Balance b/d	16,20,000
		By Bank	37,80,000
	54,00,000		54,00,000
		Jan. 1, 2018	
June, 30, 2018		By Balance c/d	54,00,000
To Contract a/c	80,00,000	June, 30, 2018	
		By Bank a/c	26,00,000
	80,00,000		80,00,000

Work-in-Progress Account

Particulars		Amt. ₹	Particulars	Amt. ₹
Dec. 31, 2016			Dec. 31, 2016	
To Contract a/c			By Balance c/d	18,80,000
Work certified	18,00,000			
Work uncertified	80,000	18,80,000		
		18,80,000		18,80,000
Jan. 1, 2017			Jan. 1, 2017	
To Balance b/d		18,80,000	By Contract A/c (transfer)	18,80,000
Dec. 31, 2017				
To Contract a/c			By Contract A/c (reserve)	7,36,000
Work certified	60,00,000		By Balance c/d	53,54,000
Work uncertified	90,000	60,90,000		79,70,000
		79,70,000		
Jan. 1, 2018			Jan. 1, 2018	
To Balance b/d		53,54,000	By Contract A/c (transfer)	53,54,000
		53,54,000		53,54,000

Working Notes:

$WN_1 \rightarrow$ In 2016, contract has shown a loss of ₹ 1,40,000, entire loss has been transferred to profit and loss account.

$WN_2 \rightarrow$ *Profit taken to P & L A/c in 2017 :* Since more than 50% of the value of work has been certified, the profit to be taken to profit and loss account can be calculated as follows :

$$= \frac{2}{3} \times 18,40,000 \times \frac{90}{100} = ₹ 11,04,000$$

$WN_3 \rightarrow$ Depreciation has been charged on the basis of diminishing balance method.

Example 17

Illustration 11. ABC Co Limited has undertaken a contract for ₹2,00,000 on April 1, 2017. Prepare a contract account and the balance sheet in T format from the trial balance and the adjustments given below:

The Trial Balance as on March 31, 2018

Particulars	Dr. Amount ₹	Cr. Amount ₹
Share Capital		40,000
Cash received on Contract (80% of work certified)		1,00,000
Plant and Tools	12,200	
Material sent to Site	44,250	
Labour Charges	56,180	
Land and Building	25,000	
Sundry Creditors	4,380	
General Expenses	4,650	
Cash in Hand	2,100	
Total	1,44,380	1,44,380

Material returned to store is ₹ 2,125. Of the plant and tools sent to site, plant worth ₹ 1,300 were lost due to carelessness of the staff. The value of the plant and tools as on 31-03-2018 was ₹ 8,000. Reserve 1/3 of the profit. The work completed but not certified is ₹ 6,145. Assume that this was the only contract in hand during 2017-2018. *[B.Com(H), Delhi Univ. 2012]*

Solution:

Contract Account for the year ending 31-03-2018

Particulars	Amount ₹	Particulars		Amount ₹
To Materials	44,250	By Work-in-progress:		
To Plant and Tools	12,200	Work Certified :	1,25,000	
		$\left(₹1,00,000 \times \frac{100}{80}\right)$		
To Labour Charges	56,180			
To General Charges	4,650	Work Uncertified :	6,145	1,31,145
To Notional Profit c/d	25,290	By P & L A/c(Loss of plant)		1,300
		By Materials returned to store		2,125
		By Plant and Tools at Site		8,000
	1,42,570			1,42,570
		By Notional Profit b/d		25,290
To P & L A/c (2/3×25,290)	16,860			
To Work-in-progress (Reserve)	8,430			
	25,290			25,290

Balance Sheet as on 31-3-2018

Capital & Liabilities		₹	Assets		₹
Share Capital		40,000	Cash in Hand		2,100
P & L A/c	16,860		Land and Building		25,000
Less : Loss	1,300	15,560	Plant and Tools		8,000
Sundry Creditors		4,380	Material at Store		2,125
			Contract Account :		
			Work-in-progress :		
			Work Certified	1,25,000	
			Work Uncertified	6,145	
				1,31,145	
			Less: Reserve	8,430	
				1,22,715	
			Less: Cash recd.on Account	1,00,000	22,715
		59,940			59,940

Example 18

Illustration 12. Surya Construction Ltd. Started its business with a paid up capital of ₹50 lacs. On 1st April 2017, it undertook a contact of a building for ₹60 lacs. Cash received on account of the contract up to 31st March 2018 was ₹18 lacs (being 90 % of work certified). Work uncertified as on 31st March 2018 was estimated at ₹1,00,000. As on 31st March 2018, the cost of materials at site was ₹30,000 and outstanding wages were ₹5,000. Of the plant and machinery charged to the contract, machinery costing ₹2,00,000 was returned to stores on 31st March 2018. Plant and machinery charged to the contract is to be depreciated at 5 %. The following were the ledger balances (Dr.) as per the trial balance as on 31st March 2018:

	₹
Land and building	23,00,000
Plant and machinery (60 % at site)	25,00,000
Furniture	60,000
Materials	14,00,000
Fuel and power	1,25,000
Site expenses	5,000
Office expenses	12,000
Rates and taxes	15,000
Cash at Bank	1,33,000
Wages	2,50,000

Prepare contract account and balance sheet for the year ending 31st March 2018.

[B Com. I

Solution:

Solution:

Surya Construction Ltd.

Contract Account for the year ending 31st March 2018

Dr. Cr.

Particulars		Amt. ₹	Particulars		Amt. ₹
To Materials		14,00,000	By Work-in-Progress A/c:		
To Plant and Machinery sent to site		15,00,000	Certified	20,00,000	
To Wages (₹2,50,000 + O/S ₹ 5,000)		2,55,000	Uncertified	1,00,000	21,00,000
To Fuel and Power		1,25,000	By Plant returned to Store		1,90,000
To Site Expenses		5,000	By Plant at Site		12,35,000
To Office Expenses		12,000	By Material at site		30,000
To Rates and Taxes		15,000			
To Notional Profit c/d		2,43,000			
		35,55,000			35,55,000
To Profit & Loss A/c	72,900		By Notional profit b/d		2,43,000
To WIP (Reserve)	1,70,100	2,43,000			
		2,43,000			2,43,000

Balance Sheet as on 31-03-2018

Capital & Liabilities	₹	*Assets*		₹
Share Capital	50,00,000	Cash at Bank		1,33,000
P & L A/c (WN_2)	72,900	Furniture		60,000
Wages Outstanding	5,000	Land and Building		23,00,000
		Plant & Machinery in store (10,00,000 + 1,90,000)		11,90,000
		Contract Account		
		Machinery at site ₹ (13,0 0,0 00 – 65,000)		12,35,000
		Materials at site		30,000
		Work-in-progress :		
		Work Certified	20,00,000	
		Work Uncertified	1,00,000	
			21,00,000	
		Less: Reserve	1,70,100	
			19,29,900	
		Less: Cash recd.on account	18,00,000	1,29,900
	50,77,900			50,77,900

Working Notes **:-WN_1 → Value of Work Certified** $= 18,00,000 \times \frac{100}{90} =$ ₹20,00,000

WN_2 → Profit taken to P & L A/c: Since less than 50% of the value of work has been certified, the profit o be taken to profit and loss account can be calculated as follows:

$$= \frac{1}{3} \times 2,43,000 \times \frac{90}{100} = ₹72,900$$

Day - 5

Example 19 (Illustration Number 7.5 or 8.5 of Maheshwari Mittal)

Contract price is Rs. 50,000. ¾th of the work has been approved by the contrractee. The costs incurred so far for contract A are Rs. 25,000. It is estimated that Rs. 5,000 will be required further to complete the contract. The contractee pays 80% of the work certified by him. Calculate the figure of profit which you consider reasonable to be taken to the credit of the profit and loss account.

Solution:

Contract Account For the year ending ……			
Particulars	**Amount (Rs.)**	**Particulars**	**Amount (Rs.)**
To cost incurred	25,000	**By work in progress:** Work certified Rs. 37,500 Work not certified Rs. 0	37,500
To notional profit c/d	12,500		
Total	**37,500**	**Total**	**37,500**
To P & L account **(Note – 1)**	12,000	By notional profit b/d	12,500
To work in progress a/c (Bal. figure) **(Note – 5)**	500		
Total	**4,50,000**	**Total**	**4,50,000**

Note – 1: Percentage of the work certified to the contract price is ¾th. Because the value of work certified is equal to or more than ½ of the contract price but less than 90% of the contract price so profit (which is to be transferred to the P & L a/c) shall be calculated using the following formula:

$$Profit\ and\ Loss\ Account = Notional\ Profit \times \frac{2}{3} \times \frac{Cash\ Received}{Work\ Certified}$$

But in this question estimated cost is given though the work certified is not equal to or more than 90% of the contract price, so profit shall be estimated and the appropriate formula shall be used to calculate the amount which is to be transferred to the profit and loss account (click here to see the rule).

$$Profit\ and\ Loss\ Account = Estimated\ Profit \times \frac{Cash\ Received}{Contract\ Price} = 12{,}500 \times \frac{30{,}000}{50{,}000} = Rs.\ 12{,}000$$

Note – 2: Estimated Profit = Contract Price – Estimated Cost
= Rs. 50,000 – (Rs. 25,000 already incurred + Rs. 5,000 to be incurred)
= Rs. 20,000

Note – 3: Cash Received = $Work\ Certified \times \frac{80}{100} = 37{,}500 \times \frac{80}{100} = Rs.\ 30{,}000$

Note – 4: Work Certified = $Contract\ Price \times \frac{3}{4} = Rs.\ 37{,}500$

Note – 5: Amount which is to be transferred to the work in progress account:
= Notional Profit – Amount transferred to the P & L a/c
= Rs. 12,500 – Rs. 12,000 = Rs. 500

Example 20 (Illustration Number 7.6 or 8.6 of Maheshwari Mittal)

Utkal Construction Limited took a contract in 2012 for road construction. The contract orice was Rs. 10,00,000 and it is estimated that the cost of completion would be Rs. 9,20,000. At the end of 2012, the company has received Rs. 3,60,000 representing 90% of work certified. Work not yet certified was Rs. 10,000.

Expenditure incurred on the contract during 2012 was as follows:

Materials Rs. 50,000; Labour Rs. 3,00,000; Plant Rs. 20,000.

Materials costing Rs. 5,000 were damaged and had to be disposed off for Rs. 1,000. Plant is considered as having depreciated by 25%.

Prepare Contract Account for the year ending 2012 in the books of Utkal Construction Limited. Also show all possible figures that can reasonably be credited to Profit and Loss Account in respect of the contract.

Solution:

Contract Account For the year ending 31st December 2012				
Particulars	**Amount (Rs.)**	**Particulars**		**Amount (Rs.)**
To materials	50,000	By material sold (disposed off)		1,000
To labour	3,00,000	By P & L a/c (loss on damage of material)		4,000
To plant	20,000	**By plant at site:** Cost **Less:** Dep. @ 25%	Rs. 20,000 (Rs. 5,000)	15,000
To notional profit c/d	60,000	**By work in progress:** Work certified **(Note – 1)** Work not certified	Rs. 4,00,000 Rs. 10,000	4,10,000
Total	**4,30,000**	**Total**		**4,30,000**
To P & L account **(Note – 2)**	28,800	By notional profit b/d		60,000
To work in progress a/c (Bal. figure) **(Note – 4)**	31,200			
Total	**60,000**	**Total**		**60,000**

Note – 1: $Work\ Certified = \frac{Cash\ Received}{90} \times 100 = \frac{3,60,000}{90} \times 100 = Rs.\ 4,00,000$

Note – 2: Percentage of the work certified to the contract price is 40% *i.e.* Work Certified / Contract Price × 100 = Rs. 4,00,000/10,00,000×100. Because the value of work certified is equal to or more than ¼th of the contract price but less than ½ of the contract price so profit (which is to be transferred to the P & L a/c) shall be calculated using the following formula:

$$Profit\ and\ Loss\ Account = Notional\ Profit \times \frac{1}{3} \times \frac{Cash\ Received}{Work\ Certified}$$

But in this question estimated cost is given though the work certified is equal to or more than ¼th of the contract price and less than ½ of the contract price, so profit shall be estimated and the appropriate formula shall be used to calculate the amount which is to be transferred to the profit and loss account (click here to see the rule).

$$Profit\ and\ Loss\ Account = Estimated\ Profit \times \frac{Cash\ Received}{Contract\ Price} = 80,000 \times \frac{3,60,000}{10,00,000} = Rs.\ 28,800$$

Note – 3: Estimated Profit = Contract Price – Estimated Cost
= Rs. 10,00,000 – Rs. 9,20,000 (already given in the question)
= Rs. 80,000

Note – 4: Amount which is to be transferred to the work in progress account:
= Notional Profit – Amount transferred to the P & L a/c
= Rs. 60,000 – Rs. 28,800 = Rs. 31,200

Example 21 (Illustration Number 7.8 or 8.8 of Maheshwari Mittal)

I STRONGLY RECOMMEND STUDENTS TO GO THROUGH THE ESCALATION CLAUSE AT LEAST 4-5 TIMES ALONG WITH THE WORKING NOTE – 1. THE CORRECT CALCULATION OF THE INCREASE IN THE CONTRACT PRICE AND UNDERSTANDING OF THE SOLUTION LIES IN THETHOTOUGH READING OF THE STATEMENT AND NOTE – 1.

Deluxe Limited undertook a contract for Rs. 5,00,000 on 1st July, 2006. On 30th June 2007 when the accounts were closed, the following details about the contract were gathered:

Material purchased	Rs. 1,00,000
Wages paid	Rs. 45,000
General expenses	Rs. 10,000
Plant purchased	Rs. 50,000
Materials in hand on 30.06.2007	Rs. 25,000
Wages accrued/outstanding on 30.06.2007	Rs. 5,000
Work certified	Rs. 2,00,000
Cash received	Rs. 1,50,000
Work not certified	Rs. 15,000
Depreciation on plant	Rs. 5,000

The above contract contained an escalation clause which reads as follows:

"In the event of price of materials and rates of wages increase by more than 5%, the contract price will increase accordingly by 25% of the rise in the cost of materials and wages beyond 5% in each case."

It was found that since the date of signing the agreement, the prices of materials and wage rates increased by 25%. The value of work certified does not take into account the effect of the above clause.

Prepare the contract account. Your workings should form part of the answer.

Click here to see what is a contract subject to escalation or de-escalation clause?
Click here to see rules when the escalation clause is applicable.
Click here to see rules when the de-escalation clause is applicable.

Solution:

Contract Account
For the year ending 30th June 2007

Particulars		Amount (Rs.)	Particulars		Amount (Rs.)
			By work in progress:		
			Work certified	Rs. 2,00,000	
To materials		1,00,000	Work not certified	Rs. 15,000	2,15,000
To wages	Rs. 45,000				
Add: Outstanding	Rs. 5,000	50,000	By material in hand		25,000
			By plant at site:		
			Cost	Rs. 50,000	
To general expenses		10,000	**Less:** Dep. (given)	(Rs. 5,000)	45,000
			By contractee account (increase in contract price) **(Note – 1) (Click to see the final calculation)**		
To plant		50,000			5,000
To notional profit c/d		80,000			
	Total	**2,90,000**		**Total**	**2,90,000**
To P & L a/c **(Note – 2)**		60,000	By notional profit b/d		80,000
To work in progress a/c (reserve) **(Note – 3)**		20,000			
	Total	**80,000**		**Total**	**80,000**

Note – 1: Increase in the contract price due to the escalation clause:

Material and wages are subject to escalation clause. So these two costs are:

Material cost is Rs. 75,000 *i.e.* Rs. 1,00,000 – Rs. 25,000 (Material in hand)

Wages cost is Rs. 50,000 *i.e.* Rs. 45,000 + Rs. 5,000 (Outstanding)

From the perusal of the escalation clause and the second last paragraph of the statement following points emerge (**READ CAREFULLY**):

1. Only material and wages costs are subject to escalation clause.

2. The escalation clause is applicable only in the event of price of materials and rates of wages increase by more than 5%.
3. In the event of price of materials and rates of wages does not increase by more than 5% then the escalation clause is not applicable.
4. Further, in the event of price of materials and rates of wages increase by more than 5% *i.e.* in the event escalation clause is applicable—then the contract price will increase accordingly by 25% of the rise in the cost of materials and wages beyond 5% in each case.
5. Since the date of signing the agreement, the prices of material and wage rates have increased by 25%. So as per the escalation clause the contract price will increase by 25% of the rise in the cost of materials and wages beyond 5% in each case. Because the increase in cost of material and wage rates is 25% and beyond 5% it is 20% (*i.e.* over 5% it is 20%) so the contract price will increase by 25% of 20% increase.
6. If the cost of material and wage rate were 100% at the time of signing the agreement then today these are 125% (*i.e.* 100% + 25% increase).

Materials		
Effect of increase in price of materials		
Total increase	*Increase up to 5%*	*Increase beyond 5% i.e. 20%*
Rs. 75,000 × 25 / 125 = Rs. 15,000	Rs. 75,000 × 5 / 125 = Rs. 3,000	Rs. 75,000 × 20 / 125 = Rs. 12,000

Wages		
Effect of increase in price of materials		
Total increase	*Increase up to 5%*	*Increase beyond 5% i.e. 20%*
Rs. 50,000 × 25 / 125 = Rs. 10,000	Rs. 50,000 × 5 / 125 = Rs. 2,000	Rs. 50,000 × 20 / 125 = Rs. 8,000

Combined *i.e.* Material + Wages		
Effect of increase in price of materials and wages		
Total increase	*Increase up to 5%*	*Increase beyond 5% i.e. 20%*
Rs. 1,25,000 × 25 / 125 = Rs. 25,000	Rs. 1,25,000 × 5 / 125 = Rs. 5,000	Rs. 1,25,000 × 20 / 125 = Rs. 20,000
Rs. 15,000 + Rs. 10,000 = Rs. 25,000	Rs. 3,000 + Rs. 2,000 = Rs. 5,000	Rs. 12,000 + Rs. 8,000 = Rs. 20,000

Increase in contract price (Contract price will increase by 25% of increase in cost of materials and wages beyond 5% in each case) = 20,000 × 25 /100 = Rs. 5,000

Note – 2: Percentage of the work certified to the contract price is 40% *i.e.* Rs. 2,00,000 / Rs. 5,00,000 × 100. Because the value of work certified is equal to or more than ¼th of the contract price and less than ½ of the contract price so profit (which is to be transferred to the P & L a/c) shall be calculated using the following formula:

$$Profit\ and\ Loss\ Account = Notional\ Profit \times \frac{1}{3} \times \frac{Cash\ Received}{Work\ Certified}$$

$$= 80{,}000 \times \frac{1}{3} \times \frac{1{,}50{,}000}{2{,}00{,}000} = Rs.\ 20{,}000$$

Note – 3: Amount which is to be transferred to the work in progress account:

= Notional Profit – Amount transferred to the P & L a/c

= Rs. 80,0000 – Rs. 20,000 = Rs. 60,000

Example 22

Following are the expenses incurred after the certification of the work: Wages Rs. 6,000; Other expenses Rs. 3,500 and Materials Rs. 8,500. Calculate the work not certified.

Solution:

Any expense(s) incurred after the certification of the work will form part of the work not certified as for these expenses the certificate has not been given by the certifier/engineer/evaluator.

Cost of the work uncertified in this question will be Rs. 18,000 and has been calculated as follows:

Wages		Rs. 6,000
Other expenses		Rs. 3,500
Materials		Rs. 8,500
	TOTAL	**RS. 18,000**

Example 23

Wages	Rs. 6,00,000
Materials	Rs. 3,00,000
Overheads	Rs. 1,20,000

5% of the value of the materials issued and 6% of wages may be taken to have been incurred for the portion of work completed but not yet certified. Overheads are charged as a percentage of direct wages. Calculate the value of work not certified.

Solution:

Any expense(s) incurred after the certification of the work will form part of the work not certified as for these expenses the certificate has not been given by the certifier/engineer/evaluator.

Cost of the work uncertified in this question will be Rs. 58,200 and calculated as follows:

Materials (5% of material *i.e.* Rs. 3,00,000 × 5 / 100)	Rs. 15,000
Wages (6% of wages *i.e.* Rs. 6,00,000 × 6 / 100)	Rs. 36,000
Overheads (20% of wages *i.e.* Rs. 36,000 × 20 / 100)	Rs. 7,200
TOTAL	**Rs. 58,200**

Percentage of the overheads to wages $= \frac{Overheads}{Wages} \times 100 = \frac{1,20,000}{6,00,000} \times 100 = 20\%$