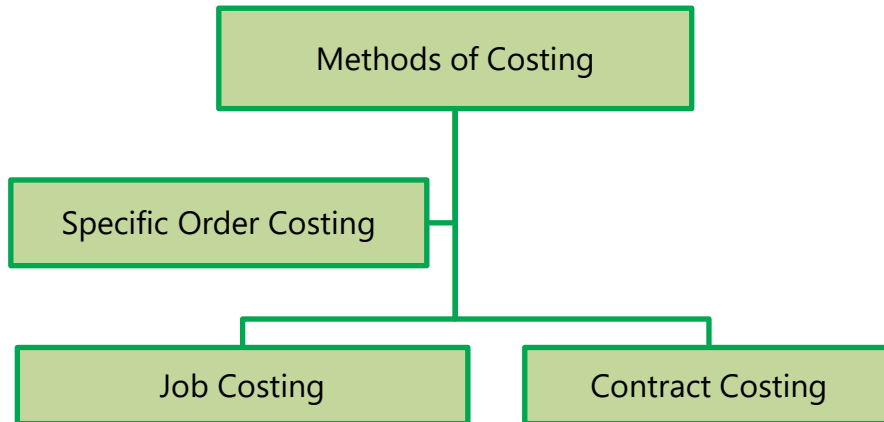


# JOB AND CONTRACT COSTING



## LEARNING OUTCOMES

- ❑ Describe Job Costing methods.
- ❑ Explain the accounting entries for cost elements under both the methods.
- ❑ Determining cost for a job.
- ❑ Ascertain the cost of a contract, Progress payment, Retention money, Value of work certified, Cost of Work not certified.
- ❑ Discuss Escalation clause, Cost plus contract.
- ❑ Compute Notional or Estimated profit from a contract.

**CHAPTER OVERVIEW**  **9.1 JOB COSTING****9.1.1 Meaning of Job Costing**

CIMA London defines Job Costing as **“the category of basic costing methods which is applicable where the work consists of separate contracts, jobs or batches, each of which is authorised by specific order or contract.”** According to this method, costs are collected and accumulated according to jobs, contracts, products or work orders. Each job or unit of production is treated as a separate entity for the purpose of costing. Job costing is carried out for the purpose of ascertaining cost of each job and takes into account the cost of materials, employees and overhead etc. The job costing method is also applicable to industries in which production is carried out in batches. **Batch production basically is of the same character as the job order production, the difference being mainly one in the size of different orders.**

**9.1.2 Principles of Job Costing**

The job costing method may be regarded as the principal method of costing since the basic object and purpose of all costing is to:

- Analysis and ascertainment of cost of each unit of production
- Control and regulate cost
- Determine the profitability

The basic principles enunciated for the job costing method are valid essentially for all types of industry. For example, printing; furniture; hardware; ship-building; heavy machinery; interior decoration, repairs and other similar work.

### 9.1.3 Process of Job costing

- Prepare a separate cost sheet for each job
- Disclose cost of materials issued for the job
- Employee costs incurred (on the basis of bill of material and time cards respectively)
- When job is completed, overhead charges are added for ascertaining total expenditure

### 9.1.4 Suitability of Job Costing

- When jobs are executed for different customers according to their specifications.
- when no two orders are alike and each order/job needs special treatment.
- Where the work-in-progress differs from period to period on the basis of the number of jobs in hand.



## 9.2 JOB COST CARD/ SHEET

Each job order is asymmetrical to other due to specific and customised requirements. To ascertain cost of a particular job, it is necessary to record all the expenditure related with a job separately. For this purpose, Job Cost card is used. Job cost card is a cost sheet, where the quantity of materials issued, hours spent by different class of employees, amount of other expenses and share of overheads are recorded. This is helpful in knowing the total cost, profitability etc. of a job. The following is an illustrative format of Job Cost card/ sheet.

### Format of Job Cost Sheet:

| JOB COST SHEET        |                         |
|-----------------------|-------------------------|
| Description: _____    | Job No.: _____          |
| Blue Print No.: _____ | Quantity: _____         |
| Material No.: _____   | Date of delivery: _____ |
| Reference No.: _____  | Date commenced: _____   |
|                       | Date finished: _____    |

| Date  | Reference | Details                 | Material             | Labour               | Overhead |
|---|-----------|-------------------------|----------------------|----------------------|----------|
|   |           |                         |                      |                      |          |
|   |           | Total                   |                      |                      |          |
| <i>Summary of costs</i>                                   |           | <i>Estimated</i><br>(₹) | <i>Actual</i><br>(₹) | For the job _____    |          |
| Direct material cost                                      |           |                         |                      | Units produced _____ |          |
| Direct wages  |           |                         |                      | Cost/unit _____      |          |
| Production overhead                                       |           |                         |                      | Remarks _____        |          |
| PRODUCTION COST   |           |                         |                      | Prepared by: _____   |          |
| Administration and<br>Selling & Distribution<br>Overheads |           |                         |                      | Checked by: _____    |          |
| TOTAL COST  |           |                         |                      |                      |          |
| PROFIT/LOSS   |           |                         |                      |                      |          |
| SELLING PRICE   |           |                         |                      |                      |          |



## 9.3 COLLECTION OF COSTS FOR A JOB

### 9.3.1 Collection of Materials Cost

An essential requirement of job cost accounting is that **direct materials and their cost must be traced to and identified with specific job or work order.** This segregation of materials cost by jobs or work order is brought by the use of separate stores requisitions for each job or work order. Where a bill of material is prepared, it provides the basis for the preparation of these stores requisitions. But when the entire quantity of materials specified in the bill of materials is drawn in one lot or in installments, the bill itself could be made to serve as a substitute for the stores requisition.

After the materials have been issued and the stores requisitions have been priced, it is usual to enter the value of the stores requisition in a material abstract or

analysis book. It serves to analyse and collect the cost of all direct materials according to job or work orders and departmental standing orders or expense code numbers. From the abstract book, **the summary of materials cost of each job is posted to individual job cost sheets or cards in the Work-in-Progress ledger.** The postings are usually made weekly or monthly. Similarly, at periodic intervals, from the material abstract books, summary cost of indirect material is posted to different standing orders or expense code numbers in the Overhead Expenses ledger. If any special material has been purchased for a particular job, it is generally the practice to charge such special material direct to the job concerned without passing it through the Stores Ledger, as soon as it is purchased.

If any surplus material is left over in the case of any job, unless it can be immediately and economically used on some other job, the same is returned to the stores with a proper supporting document/stores Debit Note or Shop Credit, and the relevant job account is credited with the value of excess material returned to the stores. **If the surplus material is utilised on some other job, instead of being returned to the stores first, a material transfer note is prepared.** The transfer note would show the number of the transfer to job as well as transferee job (or jobs) so that, on that basis, the cost thereof can be adjusted in the Work-in-Progress Ledger.

### 9.3.2 Collection of Labour Cost

All direct labour cost must be analysed according to individual jobs or work orders. Similarly, different types of indirect labour cost also must be collected and accumulated under appropriate standing order or expenses code number. The analysis of labour according to jobs or work orders is, usually, made by means of job time cards or sheets. **All direct labour is booked against specific jobs in the job time cards or sheets.** All the idle time also is booked against appropriate standing order expense code number either in the job time card for each job or on a separate idle time card for each worker (where the job time card is issued job-wise). The time booked or recorded in the job time and idle time cards is valued at appropriate rates and entered in the labour abstract or analysis book. All direct employee cost is accumulated under relevant job or work order numbers, and **the total or the periodical total of each job or work order is then posted to the appropriate job cost card or sheet in Work-in-Progress ledger.** The postings are usually made at the end of each week or month.

The abstraction of idle time costs under suitable standing order or expenses code numbers is likewise done and the amounts are posted to the relevant departmental standing order or expense code number in the Overhead Expenses Ledger at periodical intervals. As regards other items of indirect labour cost these are collected from the payrolls books for the purpose of posting against standing order or expenses code numbers in the Overhead Expenses ledger.

### 9.3.3 Collection of Overheads

Manufacturing overheads are collected under suitable standing order numbers and selling and distribution overheads against cost accounts numbers. Total overhead expenses so collected are apportioned to service and production departments on some suitable basis. The expenses of service departments are finally transferred to production departments. The total overhead of production departments is then applied to products on some realistic basis, e.g. machine hour; labour hour; percentage of direct wages; percentage of direct materials; etc. It should be remembered that the use of different methods will lead to a different amount being computed for the works overhead charged to a job hence to different total cost. The problem of accurately absorbing, in each individual job or work order, the overhead cost of different cost centres or departments involved in the manufacture is difficult under the job costing method. It is because the cost or the expenses thereof cannot be traced to or identified with any particular job or work order. In such circumstances, the best that can be done is to apply a suitable overhead rate to each individual article manufactured or to each production order. This is essentially an *arbitrary* method.

### 9.3.4 Treatment of spoiled and defective work

**Spoiled work is the quantity of production that has been totally rejected and cannot be rectified.**

**Defective work refers to production that is not as perfect as the saleable product but is capable of being rectified** and brought to the required degree of perfection provided some additional expenditure is incurred. Normally, all the manufacturing operations are not fully successful; they result in turning out a certain amount of defective work. Nonetheless, over a period of time it is possible to work out a normal rate of defectives for each manufacturing process which would represent the number of defective articles which a process shall produce in spite of due care. Defects arise in the following circumstances:

| Circumstances  | Treatment   |
|--|---|
| (1) <b>Where a percentage of defective work is allowed in a particular batch as it cannot be avoided.</b>        | When a normal rate of defectives has already been established, if the actual number of defectives is within the normal limit or is near thereto <b>the cost of rectification will be charged to the whole job and spread over the entire output of the batch.</b> If, on the other hand, the number of defective units substantially exceeds the normal, the cost of rectification of the number which exceeds the normal will be written off as a loss in the Costing Profit and Loss Account.   |
| (2) <b>Where defect is due to bad workmanship.</b>   | In this case cost of rectification will be abnormal cost, <i>i.e.</i> , not a legitimate element of the cost. Therefore, <b>the cost of rectification shall be written off as a loss</b> , unless by an arrangement, it is to be recovered as a penalty from the workman concerned. It is possible, however that the management did provide for a certain proportion of defectives on account of bad workmanship as an unavoidable feature of production. If that be the case, the cost of rectifying to the extent provided for by the management will be treated as a normal cost and charged to the batch. |
| (3) <b>Where defect is due to the Inspection Department wrongly accepting incoming material of poor quality.</b> | In this case the <b>cost of rectification will be charged to the department and will not be considered as cost of manufacture of the batch.</b> Being an abnormal cost, it will be written off to the Costing Profit and Loss Account.  |



## 9.4 ACCOUNTING OF COSTS FOR A JOB

### 9.4.1 Entries in Control Accounts

1. For purchase of materials-  
Stores Ledger Control A/c Dr.  
    To Cost Ledger Control A/c\*
2. For the value of direct materials issued to jobs-  
Work-in-Process Control A/c Dr.  
    To Stores Ledger Control A/c
3. For return of direct materials from jobs-  
Stores Ledger Control A/c Dr.  
    To Work-in-Process Control A/c
4. For return of materials to suppliers –  
Cost Ledger Control A/c Dr.  
    To Stores Ledger Control A/c
5. For indirect materials-  
Factory Overhead Control A/c Dr.  
    To Stores Ledger Control A/c
6. For wages paid-  
Wages Control A/c Dr.  
    To Cost Ledger Control A/c
7. For direct wages incurred on jobs-  
Work-in-Process Control A/c Dr.  
    To Wages Control A/c
8. For indirect wages –  
Factory Overhead Control A/c Dr.  
    To Wages Control A/c
9. For any indirect expense paid-  
Factory Overhead Control A/c Dr.  
    To Cost Ledger Control A/c
10. For charging overhead to jobs-  
Work-in-Process Control A/c Dr.  
    To Factory Overhead Control A/c



11. For the total cost of jobs completed-
- |                                 |     |
|---------------------------------|-----|
| Cost of Sales A/c               | Dr. |
| To Work-in-Progress Control A/c |     |
12. The balance of Cost of Sales A/c is transferred to Costing Profit and Loss a/c; For such transfer –
- |                             |     |
|-----------------------------|-----|
| Costing Profit and Loss A/c | Dr. |
| To Cost of Sales A/c        |     |
13. For the sales value of jobs completed -
- |                                  |     |
|----------------------------------|-----|
| Cost Ledger Control A/c          | Dr. |
| To Costing Profit and Loss A/c** |     |

\*General ledger adjustment account is another name of Cost Ledger Control Account.

\*\*The balance of Costing Profit and Loss Account shall now represent profit or loss. The balance of Cost Ledger Control Account shall be carried forwarded. With the balance on all the accounts trial balance can be drawn.

### ILLUSTRATION 1:

*The manufacturing cost of a work order is ₹ 1,00,000; 8% of the production against that order spoiled and the rejection is estimated to have a realisable value of ₹ 2,000 only. The normal rate of spoilage is 2%. RECORD this in the costing journal.*

### SOLUTION

Actual loss due to spoilage = 8% of ₹ 1,00,000 = ₹8,000 and Normal loss = 2% of ₹ 1,00,000 = ₹2,000, therefore abnormal loss = ₹6,000.

The rejection has a realisable value of ₹ 2,000, which is to be apportioned between normal loss and abnormal loss in the ratio of 2 : 6.

The accounting entries necessary for recording the above facts would be:

|   |     | (₹)   | (₹)   |
|---|-----|-------|-------|
| General Ledger Control Account          | Dr. | 2,000 |       |
| Overhead Control Account                | Dr. | 1,500 |       |
| Costing Profit and Loss Control Account | Dr. | 4,500 |       |
| To Work-in-Progress Control Account     |     |       | 8,000 |

In the case of defectives being inherent in the manufacturing process, the rectification cost may be charged to the specific jobs in which they have arisen. In case defectives cannot be identified with jobs, the cost of rectification may be

treated as factory overheads. Abnormal defectives should be written off to the Costing Profit and Loss Account.

### ILLUSTRATION 2

A shop floor supervisor of a small factory presented the following cost for Job No. 303, to determine the selling price.

|   | <i>Per unit (₹)</i> |
|---|---------------------|
| Materials   | 70                  |
| Direct wages 18 hours @ ₹2.50<br>(Deptt. X 8 hours; Deptt. Y 6 hours; Deptt. Z 4 hours) | 45                  |
| Chargeable expenses   | 5                   |
|   | 120                 |
| Add : 33-1/3 % for expenses cost  | 40                  |
|   | 160                 |

#### **Analysis of the Profit/Loss Account (for the current financial year)**

|                       | (₹)             |                    | (₹)             |
|-----------------------|-----------------|--------------------|-----------------|
| Materials used        | 1,50,000        | Sales less returns | 2,50,000        |
| Direct wages:         |                 |                    |                 |
| Deptt. X      10,000  |                 |                    |                 |
| Deptt. Y      12,000  |                 |                    |                 |
| Deptt. Z <u>8,000</u> | 30,000          |                    |                 |
| Special stores items  | 4,000           |                    |                 |
| Overheads:            |                 |                    |                 |
| Deptt. X      5,000   |                 |                    |                 |
| Deptt. Y      9,000   |                 |                    |                 |
| Deptt. Z <u>2,000</u> | <u>16,000</u>   |                    |                 |
| Works cost            | 2,00,000        |                    |                 |
| Gross profit c/d      | <u>50,000</u>   |                    |                 |
|                       | <u>2,50,000</u> |                    | <u>2,50,000</u> |
| Selling expenses      | 20,000          | Gross profit b/d   | 50,000          |
| Net profit            | <u>30,000</u>   |                    |                 |
|                       | <u>50,000</u>   |                    | <u>50,000</u>   |

It is also noted that average hourly rates for the three Departments X, Y and Z are similar.

You are required to:

- (i) PREPARE a job cost sheet.
- (ii) CALCULATE the entire revised cost using current financial year actual figures as basis.
- (iii) Add 20% to total cost to DETERMINE selling price.

**SOLUTION**

**Job Cost Sheet**

Customer Details \_\_\_\_\_

Job No. \_\_\_\_\_

Date of commencement \_\_\_\_\_

Date of completion \_\_\_\_\_

| Particulars   | Amount<br>(₹) |
|---|---------------|
| Direct materials  | 70            |
| Direct wages:   |               |
| Deptt. X ₹ 2.50 × 8 hrs. = ₹ 20.00  |               |
| Deptt. Y ₹ 2.50 × 6 hrs. = ₹ 15.00  |               |
| Deptt. Z ₹ 2.50 × 4 hrs. = ₹ 10.00  | 45            |
| Chargeable expenses   | <u>5</u>      |
| <b>Prime cost</b>   | <b>120</b>    |
| Overheads:  |               |
| Deptt. X = $\frac{₹5,000}{₹10,000} \times 100 = 50\%$ of ₹ 20 = ₹ 10.00       |               |
| Deptt. Y = $\frac{₹9,000}{₹12,000} \times 100 = 75\%$ of ₹ 15 = ₹ 11.25       |               |
| Deptt. Z = $\frac{₹2,000}{₹8,000} \times 100 = 25\%$ of ₹ 10 = ₹ 2.50         | <u>23.75</u>  |
| <b>Works cost</b>   | <b>143.75</b> |
| Selling expenses = $\frac{₹20,000}{₹2,00,000} \times 100 = 10\%$ of work cost | <u>14.38</u>  |
| Total cost  | 158.13        |
| Profit (20% of total cost)  | <u>31.63</u>  |
| <b>Selling price</b>  | <b>189.76</b> |

### 9.4.2 Advantages and Disadvantages of Job Costing

Some of the advantages and disadvantages of Job costing are summarised as below:

| Advantages   | Disadvantages  |
|--|--|
| 1. The details of Cost of material, labour and overhead for all job is available to control. | 1. Job Costing is costly and laborious method.   |
| 2. Profitability of each job can be derived.   | 2. As lot of clerical process is involved the chances of error is more.                      |
| 3. It facilitates production planning.   | 3. This method is not suitable in inflationary condition.                                    |
| 4. Budgetary control and Standard Costing can be applied in job costing.                     | 4. Previous records of costs will be meaningless if there is any change in market condition. |
| 5. Spoilage and detective can be identified and responsibilities can be fixed accordingly.   |  |

### 9.4.3 Difference between Job Costing and Process Costing

The main points which distinguish job costing and process costing are as below:

| Job Costing  | Process Costing   |
|--|---|
| (i) A Job is carried out or a product is <b>produced by specific orders</b> .            | The process of producing the product has a continuous flow and the <b>product produced is homogeneous</b> .               |
| (ii) Costs are determined <b>for each job</b> .  | Costs are compiled on time basis i.e., for production of a given accounting period <b>for each process</b> or department. |
| (iii) <b>Each job is separate and independent</b> of other jobs.                         | <b>Products lose their individual identity</b> as they are manufactured in a continuous flow.                             |
| (iv) Each job or order has a number and costs are collected against the same job number. | The unit cost of process is an average cost for the period.   |

|  |  |
|--|--|
| (v) <b>Costs are computed when a job is completed.</b> The cost of a job may be determined by adding all costs against the job.            | <b>Costs are calculated at the end of the cost period.</b> The unit cost of a process may be computed by dividing the total cost for the period by the output of the process during that period. |
| (vi) As production is not continuous and each job may be different, so <b>more managerial attention is required for effective control.</b> | Process of production is usually standardized and is therefore, quite stable. Hence <b>control here is comparatively easier.</b>   |

## 9.5 CONTRACT COSTING

**Contract costing is a form of specific order costing where job undertaken is relatively large and normally takes period longer than a year to complete.**

Contract costing is usually adopted by the contractors engaged in any type of contracts like construction of building, road, bridge, erection of tower, setting up of plant etc. Contract costing have the following distinct features:

1. The major part of the work in connection with each **contract is ordinarily carried out at the site of the contract.**
2. The **bulk of the expenses incurred by the contractor are considered as direct.**
3. The indirect expenses mostly consist of office expenses, stores and works.
4. **A separate account is usually maintained for each contract.**
5. The number of contracts undertaken by a contractor at a time is usually few.
6. The cost unit in contract costing is the contract itself.

**A contract takes longer period to complete and the result of the contract can be known only after the completion of the contract.** To have a better control over the contract and cost, it is necessary to have an idea of profitability of contracts at regular intervals or atleast in a year. For this purpose, a contractor needs to calculate expected profit or notional profit for a contract. It also helps in profit comparison for a period and provide a good basis for performance measurement and evaluation of those who are engaged in the contract. The expected or notional profit in respect of each contract in progress (i.e. incomplete contracts) is transferred to the costing profit and loss account (consolidated) for the year to determine overall profitability of the contractor.



## 9.6 RECORDING OF CONTRACT COSTS

### (i) Material Cost

All materials supplied from the stores or purchased directly for the contract are debited to the concerned contract account.

Contract Account (Contract No: )..... Dr.

To Stores Ledger Control A/c (Issued from stores) or

To Cost Ledger Control A/c (Direct purchase)

In the case of transfer of excess material from one contract to another, cost of these excess materials are adjusted on the basis of Material Transfer Note.

Contract Account (Contract No. XYZ) ..... Dr.

To Contract Account (Contract No. ABC)

In case the return of surplus material appears uneconomical on account of high cost of transportation, the same is sold and the concerned contract account is credited with the price realised. Any loss or profit arising therefrom is transferred to the Costing Profit and Loss Account.

Cost Ledger Control A/c .....Dr.

Costing Profit & Loss A/c (Loss)..... Dr.

To Contract A/c

To Costing Profit & Loss A/c (Profit)

Any loss of material due to theft or destruction etc. is transferred to the Costing Profit and Loss Account.

Costing Profit & Loss A/c..... Dr.

To Contract A/c

If any stores items are used for manufacturing tools, the cost of such stores items are charged to the work expenses account.

Works expenses A/c..... Dr.

To Stores Ledger Control A/c

(With amount of stores used for works)

Contract A/c..... Dr.

To Works expenses

(With amount of works used in the contract)

If the contractee has supplied some materials without affecting the contract price, no accounting entries will be made in the contract account, only a note may be given about it.

### **(ii) Employee Labour Cost**

Workers employed on the site of the contract is regarded as direct employees (irrespective of the nature of the task performed) and the wages paid to them are charged to the concerned contract directly. If an employee is engaged concurrently in other contract also then the total wages paid is apportioned to the contracts on some reasonable basis, usually on time basis.

Contract A/c..... Dr.

To Wages Control A/c

### **(iii) Direct Expenses**

Direct expenses (if any) are directly charged to the concerned contract account.

Contract A/c..... Dr.

To Direct Expenses A/c

### **(iv) Indirect Expenses**

Indirect expenses (such as expenses of engineers, surveyors, supervisors, corporate office etc.) may be distributed over several contracts on certain reasonable basis as overheads.

Contract A/c..... Dr.

To Overheads A/c

### **(v) Plant and Machinery**

The value of the plant in a contract may be either debited to contract account and the written down value thereof at the end of the year entered on the credit side for closing the contract account, or only a charge (depreciation) for use of the plant may be debited to the contract account.

Contract A/c..... Dr.

To Plant and Machinery A/c (with cost)

Plant and Machinery A/c (with WDV) .... Dr.

To Contract A/c

Or

Contract A/c..... Dr.

To Depreciation on Plant and Machinery A/c

#### (vi) Sub-Contract

Sub-contract costs are also debited to the Contract Account.

Contract A/c..... Dr.

To Cost of Sub-Contract A/c

**Extra work:** The extra work amount payable by the contractee should be added to the contract price. If extra work is *substantial*, it is better to treat it as a separate contract. If it is *not substantial*, expenses incurred should be debited to the contract account as "Cost of Extra work".



## 9.7 MEANING OF THE TERMS USED IN CONTRACT COSTING

**(i) Work-in-Progress:** Work-in-progress in contract costing refers to **the contract which is not complete at the reporting date**. In Contract Accounts, the value of the work-in-progress consists of

- (i) the cost of work completed, both certified and uncertified;
- (ii) the cost of work not yet completed; and
- (iii) the amount of estimated/ notional profit.

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

**(ii) Cost of Work Certified or Value of Work Certified:** A contract is a continuous process and to know the cost or value of the work completed as on a particular date; assessment of the completion of work is carried out by an expert (it may be any professional like surveyor, architect, engineer etc.). **The**



**expert, based on his assessment, certifies the work completion in terms of percentage of total work.** The cost or value of certified portion is calculated and is known as Cost of work certified or Value of work certified respectively.

*Mathematically:*

- (a) Value of Work Certified = Value of Contract × Work certified (%)
- (b) Cost of Work Certified = Cost of work to date – (Cost of work uncertified + Material in hand + Plant at site)

**(iii) Cost of Work Uncertified:** It represents the cost of the work which has been carried out by the contractor but has not been certified by the expert. **It is always shown at cost price.** The cost of uncertified work may be ascertained as follows:

|                              | (₹) | (₹) |
|------------------------------|-----|-----|
| Total cost to date           |     | xxx |
| Less: Cost of work certified | xxx |     |
| Material in hand             | xxx |     |
| Plant at site                | xxx | xxx |
| Cost of work uncertified     |     | xxx |

**(iv) Progress Payment:** A Contractor gets payments for work done on a contract based on work completion. Since, a contract takes longer period to complete and requires large investment in working capital to progress the contract work, hence, it is desirable by the contractor to have periodic payments from the contractee against the work done to avoid working capital shortage. For this a contractor enters into an agreement with the contractee and agrees on payment on some reasonable basis, which generally, includes percentage of work completion as certified by an expert.

*Mathematically:*

$$\text{Progress payment} = \text{Value of work certified} - \text{Retention money} - \text{Payment to date}$$

**(v) Retention Money:** In a contract, a contractee generally keeps some amount payable to contractor with himself as security deposit. In a contract, a contractor undertakes to completed a job work on the basis of pre- determined

terms and conditions and work specifications. To ensure that the work carried out by the contractor is as per the plan and specifications, it is monitored periodically by the contractee. **To have a cushion against any defect or undesirable work, the contractee upholds some money payable to contractor. This security money upheld by the contractee is known as retention money.** In some contracts the contractor has to deposit some security money before starting of the contract as a term of contract. This is known as Earnest money. If any deficiency or defect is noticed in the work, it is to be rectified by the contractor before the release of the retention money. Retention money provides a safeguard against the risk of loss due to faulty workmanship.

*Mathematically:*

$$\text{Retention Money} = \text{Value of work certified} - \text{Payment actually made/ cash paid}$$

**(vi) Cash Received:** It is ascertained by deducting the retention money from the value of work certified *i.e.*

$$\text{Cash received} = \text{Value of work certified} - \text{Retention money}$$

**(vii) Notional Profit:** It represents the difference between the value of work certified and cost of work certified. It is determined:

$$\text{Notional profit} = \text{Value of work certified} - (\text{Cost of work to date} - \text{Cost of work not yet certified})$$

**(viii) Estimated Profit:** It is the excess of the contract price over the estimated total cost of the contract.

### ILLUSTRATION 3:

*COMPUTE estimated profit on a contract (which has been 90% complete) from the following particulars:*

|   | (₹)       |
|---|-----------|
| <i>Total expenditure to date</i>  | 22,50,000 |
| <i>Estimated further expenditure to complete the contract (including contingencies)</i> | 2,50,000  |
| <i>Contract price</i>   | 32,50,000 |
| <i>Work certified</i>   | 27,50,000 |

|                         |           |
|-------------------------|-----------|
| <i>Work uncertified</i> | 1,75,000  |
| <i>Cash received</i>    | 21,25,000 |

**SOLUTION****Calculation of Estimated Profit:**

|   | (₹)              |
|---|------------------|
| Total expenditure to date   | 22,50,000        |
| Estimated further expenditure to complete the contract<br>(including contingencies) | <u>2,50,000</u>  |
|   | 25,00,000        |
| Estimated profit on contract (Balancing figure)                                     | <u>7,50,000</u>  |
| Contract price  | <u>32,50,000</u> |



## 9.8 COST PLUS CONTRACT

Cost- plus contract is a contract where **the value of the contract is determined by adding an agreed percentage of profit to the total cost.** These types of contracts are entered into when it is not possible to estimate the contract cost with reasonable accuracy due to unstable condition of factors that affect the cost of material, employees, etc.

**Cost plus contracts have the following advantages and disadvantages:***Advantages:*

- (i) The **Contractor is assured of a fixed percentage of profit.** There is no risk of incurring any loss on the contract.
- (ii) It is useful specially **when the work to be done is not definitely fixed** at the time of making the estimate.
- (iii) Contractee can ensure himself about 'the cost of the contract', as he is empowered to examine the books and documents of the contractor to ascertain the veracity of the cost of the contract.

*Disadvantages* - The contractor may not have any inducement to avoid wastages and effect economy in production to reduce cost.

### 9.8.1 Escalation Clause in a Contract

**Escalation clause in a contract empowers a contractor to revise the price of the contract in case of increase in the prices of inputs due to some macro-economic or other agreed reasons.** A contract takes longer period to complete and the factors based on which price negotiation is done at the time of entering into the contract may change till the contract completes. This protect the contractor from adverse financial impacts and empowers the contractor to recover the increased prices. **As per this clause, the contractor increases the contract price if the cost of materials, employees and other expenses increase beyond a certain limit.** Inclusion of such a clause in a contract deed is called an "Escalation Clause".

#### ILLUSTRATION 4

|  |          |
|--|----------|
| <i>The following expenses were incurred on a contract:</i> | (₹)      |
| <i>Materials purchased</i>                                 | 6,00,000 |
| <i>Material drawn from stores</i>                          | 1,00,000 |
| <i>Wages</i>   | 2,25,000 |
| <i>Plant issued</i>  | 75,000   |
| <i>Chargeable expenses</i>                                 | 75,000   |
| <i>Apportioned indirect expenses</i>                       | 25,000   |

*The contract was for ₹ 20,00,000 and it commenced on April 1, 2020. The value of the work completed and certified upto 28th February, 2021 was ₹ 13,00,000 of which ₹ 10,40,000 was received in cash, the balance being held back as retention money by the contractee. The value of work completed subsequent to the architect's certificate but before 31st March, 2021 was ₹ 60,000. There were also lying on the site materials of the value of ₹ 40,000. It was estimated that the value of plant as at 31st March, 2021 was ₹ 30,000.*

*You are required to COMPUTE value of work certified, cost of work not certified and notional profit on the contract till the year ended 31<sup>st</sup> March, 2021.*

#### SOLUTION

##### Contract Account

| Particulars |                    | (₹)      | Particulars |                   | (₹)       |
|-------------|--------------------|----------|-------------|-------------------|-----------|
| To          | Material purchased | 6,00,000 | By          | Work-in-progress: |           |
| "           | Stores issued      | 1,00,000 |             | Value of work     | 13,00,000 |

|   |           |  |           |
|---|-----------|--|-----------|
| " Wages   | 2,25,000  | certified<br>Cost of work<br>uncertified | 60,000    |
| " Plant   | 75,000    | " Material unused                        | 40,000    |
| " Chargeable expenses                                   | 75,000    | " Plant less<br>depreciation             | 30,000    |
| " Indirect expenses                                     | 25,000    |  |           |
| " Costing P&L A/c<br>(Notional profit) (bal.<br>figure) | 3,30,000  |  |           |
|   | 14,30,000 |  | 14,30,000 |

**ILLUSTRATION 5**

A contractor prepares his accounts for the year ending 31st March each year. He commenced a contract on 1st July, 2020.

The following information relates to the contract as on 31st March, 2021:

|                   |          |
|-------------------|----------|
|                   | (₹)      |
| Material issued   | 2,51,000 |
| Wages             | 5,65,600 |
| Salary to Foreman | 81,300   |

A machine costing ₹ 2,60,000 has been on the site for 146 days, its working life is estimated at 7 years and its final scrap value at ₹ 15,000.

A supervisor, who is paid ₹ 8,000 p.m. has devoted one-half of his time to this contract.

All other expenses and administration charges amount to ₹ 1,36,500.

Material in hand at site costs ₹ 35,400 on 31st March, 2021.

The contract price is ₹ 20,00,000. On 31st March, 2021 two-third of the contract was completed. The architect issued certificates covering 50% of the contract price, and the contractor had been paid ₹ 7,50,000 on account.

PREPARE Contract A/c and show the notional profit or loss as on 31st March, 2021.

## SOLUTION

## Contract Account

| Particulars                           | (₹)       | Particulars                                 | (₹)       |
|---------------------------------------|-----------|---|-----------|
| To Material issued                    | 2,51,000  | By Machine (Working note 1)                 | 2,46,000  |
| " Wages                               | 5,65,600  | " Material (in hand)                        | 35,400    |
| " Foreman's salary                    | 81,300    | " Works cost (balancing figure)             | 10,49,000 |
| " Machine                             | 2,60,000  |   |           |
| " Supervisor's salary (₹ 8,000 × 9)/2 | 36,000    |   |           |
| " Administrative charges              | 1,36,500  |   |           |
|                                       | 13,30,400 |   | 13,30,400 |
| " Works cost                          | 10,49,000 | " Value of work certified                   | 10,00,000 |
| " Costing P&L A/c (Notional profit)   | 2,13,250  | " Cost of work uncertified (Working Note 2) | 2,62,250  |
|                                       | 12,62,250 |   | 12,62,250 |

## Working notes:

1. Written down value of Machine:

$$= \frac{\text{₹}2,60,000 - \text{₹}15,000}{7 \text{ years}} \times \frac{146 \text{ days}}{365 \text{ days}} = \text{₹} 14,000$$

Hence the value of machine after the period of 146 days = ₹ 2,60,000 – ₹ 14,000 = ₹ 2,46,000

2. The cost of 2/3<sup>rd</sup> of the contract is ₹ 10,49,000

$$\therefore \text{Cost of 100\% " " " " } \frac{\text{₹}10,49,000}{2} \times 3 = \text{₹} 15,73,500$$

∴ Cost of 50% of the contract which has been certified by the architect is ₹ 7,86,750. Also, the cost of 1/3<sup>rd</sup> of the contract, which has been completed but not certified by the architect is ₹ 2,62,250.

**ILLUSTRATION 6**

M/s. Bansals Construction Company Ltd. took a contract for ₹ 60,00,000 expected to be completed in three years. The following particulars relating to the contract are available:

|                             | 2018-19 (₹) | 2019-20 (₹) | 2020-21 (₹) |
|-----------------------------|-------------|-------------|-------------|
| Materials                   | 6,75,000    | 10,50,000   | 9,00,000    |
| Wages                       | 6,20,000    | 9,00,000    | 7,50,000    |
| Transportation cost         | 30,000      | 90,000      | 75,000      |
| Other expenses              | 30,000      | 75,000      | 24,000      |
| Cumulative work certified   | 13,50,000   | 45,00,000   | 60,00,000   |
| Cumulative work uncertified | 15,000      | 75,000      | —           |

Plant costing ₹ 3,00,000 was bought at the commencement of the contract. Depreciation was to be charged at 25% per annum, on the written down value method. The contractee pays 75% of the value of work certified as and when certified and makes the final payment on completion of the contract.

You are required to PREPARE a contract account for three years and total estimated profit/ loss from the contract.

**SOLUTION****Contract Account (For the year 2018-19)**

| Particulars           | (₹)       | Particulars                                | (₹)       |
|-----------------------|-----------|--|-----------|
| To Materials          | 6,75,000  | By Plant at site c/d<br>(75% of ₹3,00,000) | 2,25,000  |
| " Wages               | 6,20,000  | " Work-in-progress c/d:                    |           |
| " Transportation cost | 30,000    | - Work certified                           | 13,50,000 |
| " Other expenses      | 30,000    | - Work uncertified                         | 15,000    |
| " Plant               | 3,00,000  | " Costing P&L A/c<br>(Loss for the year)   | 65,000    |
|                       | 16,55,000 |  | 16,55,000 |

**Costing Profit & Loss A/c for the year 2018-19**

| Particulars |   | (₹)    | Particulars |                    | (₹)    |
|-------------|---|--------|-------------|--------------------|--------|
| To          | Contract A/c<br>(Notional Loss on contract) | 65,000 | By          | Balance c/d (Loss) | 65,000 |
|             |   | 65,000 |             |                    | 65,000 |

**Contract Account (For the year 2019-20)**

| Particulars |   | (₹)       | Particulars |   | (₹)       |
|-------------|---|-----------|-------------|---|-----------|
| To          | Plant at site b/d                                 | 2,25,000  | By          | Plant at site c/d<br>(75% of ₹2,25,000) | 1,68,750  |
| "           | Work-in-progress b/d:                             |           | "           | Work-in-progress c/d:                   |           |
|             | - Work certified 13,50,000                        |           |             | - Work certified 45,00,000              |           |
|             | - Work uncertified <u>15,000</u>                  | 13,65,000 |             | - Work uncertified <u>75,000</u>        | 45,75,000 |
| "           | Materials   | 10,50,000 |             |   |           |
| "           | Wages   | 9,00,000  |             |   |           |
| "           | Transportation cost                               | 90,000    |             |   |           |
| "           | Other expenses                                    | 75,000    |             |   |           |
| "           | Costing P&L A/c<br>(Notional Profit for the year) | 10,38,750 |             |   |           |
|             |   | 47,43,750 |             |   | 47,43,750 |

**Costing Profit & Loss A/c for the year 2019-20**

| Particulars |                      | (₹)       | Particulars |   | (₹)       |
|-------------|----------------------|-----------|-------------|---|-----------|
| To          | Balance b/d          | 65,000    | By          | Contract A/c<br>(Notional profit on contract) | 10,38,750 |
| To          | Balance c/d (Profit) | 9,73,750  |             |   |           |
|             |                      | 10,38,750 |             |   | 10,38,750 |



**Contract Account (For the year 2020-21)**

| Particulars                     | (₹)       | Particulars                                       | (₹)       |
|---------------------------------|-----------|---|-----------|
| To Plant at site b/d            | 1,68,750  | By Plant at site c/d<br>(75% of ₹1,68,750)        | 1,26,563  |
| " Work-in-progress b/d:         |           | " Contractee A/c                                  | 60,00,000 |
| - Work certified 45,00,000      |           | " Costing P&L A/c<br>(Notional Loss for the year) | 3,66,187  |
| -Work uncertified <u>75,000</u> | 45,75,000 |   |           |
| " Materials                     | 9,00,000  |   |           |
| " Wages                         | 7,50,000  |   |           |
| " Transportation cost           | 75,000    |   |           |
| " Other expenses                | 24,000    |   |           |
|                                 | 64,92,750 |   | 64,92,750 |

**Costing Profit & Loss A/c for the year 2020-21**

| Particulars                                 | (₹)      | Particulars    | (₹)      |
|---|----------|----------------|----------|
| To Contract A/c (Notional loss on contract) | 3,66,187 | By Balance b/d | 9,73,750 |
| To Estimated profit on Contract             | 6,07,563 |                |          |
|   | 9,73,750 |                | 9,73,750 |

**ILLUSTRATION 7:**

A contractor has entered into a long term contract at an agreed price of ₹ 17,50,000 subject to an escalation clause for materials and wages as spelt out in the contract and corresponding actual are as follows:

| Materials | Standard   |          | Actual     |          |
|-----------|------------|----------|------------|----------|
|           | Qty (tons) | Rate (₹) | Qty (tons) | Rate (₹) |
| A         | 5,000      | 50.00    | 5,050      | 48.00    |
| B         | 3,500      | 80.00    | 3,450      | 79.00    |
| C         | 2,500      | 60.00    | 2,600      | 66.00    |

| <b>Wages</b> | <b>Hours</b> | <b>Hourly Rate (₹)</b> | <b>Hours</b> | <b>Hourly Rate (₹)</b> |
|--------------|--------------|------------------------|--------------|------------------------|
| X            | 2,000        | 70.00                  | 2,100        | 72.00                  |
| Y            | 2,500        | 75.00                  | 2,450        | 75.00                  |
| Z            | 3,000        | 65.00                  | 3,100        | 66.00                  |

Reckoning the full actual consumption of material and wages, the company has claimed a final price of ₹ 17,73,600. Give your ANALYSIS of admissible escalation claim and indicate the final price payable.

### SOLUTION

#### Statement showing final claim

|                  | <b>Standard Qty/Hrs.</b>        | <b>Standard Rate (₹)</b> | <b>Actual Rate (₹)</b> | <b>Variation in Rate (₹)</b> | <b>Escalation Claim (₹)</b> |
|------------------|---------------------------------|--------------------------|------------------------|------------------------------|-----------------------------|
|                  | (a)                             | (b)                      | (c)                    | (d) = (c)–(b)                | (e) = (a) × (d)             |
| <b>Materials</b> |                                 |                          |                        |                              |                             |
| A                | 5,000                           | 50.00                    | 48.00                  | (–) 2.00                     | (–) 10,000                  |
| B                | 3,500                           | 80.00                    | 79.00                  | (–) 1.00                     | (–) 3,500                   |
| C                | 2,500                           | 60.00                    | 66.00                  | (+) 6.00                     | 15,000                      |
|                  | Materials escalation claim: (A) |                          |                        |                              | 1,500                       |
| <b>Wages</b>     |                                 |                          |                        |                              |                             |
| X                | 2,000                           | 70.00                    | 72.00                  | (+) 2.00                     | 4,000                       |
| Y                | 2,500                           | 75.00                    | 75.00                  | –                            | –                           |
| Z                | 3,000                           | 65.00                    | 66.00                  | (+) 1.00                     | 3,000                       |
|                  | Wages escalation claim: (B)     |                          |                        |                              | 7,000                       |
|                  | Final claim: (A + B)            |                          |                        |                              | 8,500                       |

#### Statement showing final price payable

|                            |         |                    |
|----------------------------|---------|--------------------|
| Agreed price               |         | ₹ 17,50,000        |
| Agreed escalation:         |         |                    |
| Material cost              | ₹ 1,500 |                    |
| Labour cost                | ₹ 7,000 | ₹ 8,500            |
| <b>Final price payable</b> |         | <b>₹ 17,58,500</b> |

The claim of ₹ 17,73,600 is based on the total increase in cost. This can be verified as shown below:

**Statement showing total increase in cost**

|                     | Standard Cost |             |                    | Actual Cost |             |                    | Increase/<br>(Decrease) |
|---------------------|---------------|-------------|--------------------|-------------|-------------|--------------------|-------------------------|
|                     | Qty/hrs       | Rate<br>(₹) | Amount<br>(₹)      | Qty/hrs     | Rate<br>(₹) | Amount<br>(₹)      |                         |
|                     | (a)           | (b)         | (c) =<br>(a) × (b) | (d)         | (e)         | (f) = (d)<br>× (e) | g = (f) –<br>(c)        |
| <b>I. Materials</b> |               |             |                    |             |             |                    |                         |
| A                   | 5,000         | 50.00       | 2,50,000           | 5,050       | 48.00       | 2,42,400           | (7,600)                 |
| B                   | 3,500         | 80.00       | 2,80,000           | 3,450       | 79.00       | 2,72,550           | (7,450)                 |
| C                   | 2,500         | 60.00       | 1,50,000           | 2,600       | 66.00       | 1,71,600           | 21,600                  |
|                     |               |             | 6,80,000           |             |             | 6,86,550           | 6,550                   |
| <b>II. Wages</b>    |               |             |                    |             |             |                    |                         |
| X                   | 2,000         | 70.00       | 1,40,000           | 2,100       | 72.00       | 1,51,200           |                         |
| Y                   | 2,500         | 75.00       | 1,87,500           | 2,450       | 75.00       | 1,83,750           |                         |
| Z                   | 3,000         | 65.00       | 1,95,000           | 3,100       | 66.00       | 2,04,600           |                         |
|                     |               |             | 5,22,500           |             |             | 5,39,550           | 17,050                  |
|                     |               |             |                    |             |             |                    | 23,600                  |

Contract price ₹ 17,50,000

Add: Increase in cost ₹ 23,600

The final price claimed by the company ₹ 17,73,600

This claim is not admissible because escalation clause covers only that part of increase in cost, which has been caused by inflation.

**Note:** It is fundamental principle that the contractee would compensate the contractor for the increase in costs which are caused by factors beyond the control of contractor and not for increase in costs which are caused due to inefficiency or wrong estimation.

## SUMMARY

- ◆ **Job Costing:** The category of basic costing methods which is applicable where the work consists of separate contracts, jobs or batches, each of which is authorised by specific order or contract.
- ◆ **Contract Costing:** It is a form of specific order costing where job undertaken is relatively large and normally takes period longer than a year to complete.
- ◆ **Value of Work Certified:** The value of a contract which is certified by an expert in terms of percentage of total work.
- ◆ **Cost of Work Uncertified:** It represents the cost of the work which has been carried out by the contractor but has not been certified by the expert.
- ◆ **Retention Money:** Portion of value of work certified, which is kept by a contractee as security money for any loss or damage caused by the contractor.
- ◆ **Cost-plus Contract:** A contract where the value of the contract is determined by adding an agreed percentage of profit to the total cost.
- ◆ **Escalation Clause:** A clause in a contract which empowers a contractor to revise the price of the contract in case of increase in the prices of inputs due to some macro-economic or other agreed reasons.

## TEST YOUR KNOWLEDGE

### MCQs based Questions

1. In case product produced or jobs undertaken are of diverse nature, the system of costing to be used should be:
  - (a) Process costing
  - (b) Operating costing
  - (c) Job costing
  - (d) None of the above
2. The production planning department prepares a list of materials and stores required for the completion of a specific job order, this list is known as:
  - (a) Bin card
  - (b) Bill of material

- (c) Material requisition slip
  - (d) None of the above
3. Job costing is similar to that under Batch costing except with the difference that a:
- (a) Job becomes a cost unit.
  - (b) Batch becomes the cost unit instead of a job
  - (c) Process becomes a cost unit
  - (d) None of the above.
4. The main points of distinction between job and contract costing includes:
- (a) Length of time to complete
  - (b) Big jobs
  - (c) Activities to be done outside the factory area
  - (d) All of the above
5. In job costing which of the following documents are used to record the issue of direct material to a job':
- (a) Goods received note
  - (b) Material requisition
  - (c) Purchase order
  - (d) Purchase requisition
6. Which of the following would best describe the characteristics of contract costing:
- (i) homogeneous products;
  - (ii) customer driven production;
  - (iii) short period of time between the commencement and completion of the cost unit
- (a) (i) and (ii) only
  - (b) (ii) and (iii) only
  - (c) (i) and (iii) only
  - (d) (ii) only

7. The most suitable cost system where the products differ in type of materials and work performed is :
- (a) Job Costing
  - (b) Process Costing
  - (c) Operating Costing
  - (d) None of these.
8. Which of the following statements is true:
- (a) Job cost sheet may be used for estimating profit of jobs.
  - (b) Job costing cannot be used in conjunction with marginal costing.
  - (c) In cost plus contracts, the contractor runs a risk of incurring a loss.
  - (d) None of these.
9. Which of the following statements is true:
- (a) In job costing method, a cost sheet is prepared for each job.
  - (b) A production order is an order received from a customer for particular jobs.
  - (c) In contract costing, the contract which is complete up to one fourth of the total contract, one-fourth of the profit should be transferred to Profit & Loss Account.
  - (d) In contract costing profit of each contract is computed when the contract is completed.
10. Which of the following statements is true:
- (a) Job cost sheet may be prepared for facilitating routing and scheduling of the job
  - (b) Job costing can be suitably used for concerns producing uniformly any specific product
  - (c) Job costing cannot be used in companies using standard costing
  - (d) Neither (a) nor (b) nor (c)

### Theoretical Questions

1. DESCRIBE job Costing giving example of industries where it is used?
2. DISTINGUISH between Job Costing & Batch Costing?

3. WRITE a note on cost-plus-contracts.
4. WRITE a note on Escalation Clause.
5. EXPLAIN Retention money in Contract costing

**Practical Questions**

1. In a factory following the Job Costing Method, an abstract from the work-in-progress as on 30<sup>th</sup> September was prepared as under.

| Job No. | Materials (₹) | Direct hrs. | Labour (₹) | Factory Overheads applied (₹) |
|---------|---------------|-------------|------------|-------------------------------|
| 115     | 1325          | 400 hrs.    | 800        | 640                           |
| 118     | 810           | 250 hrs.    | 500        | 400                           |
| 120     | 765           | 300 hrs.    | 475        | 380                           |
|         | 2,900         |             | 1,775      | 1,420                         |

Materials used in October were as follows:

| Materials Requisition No. | Job No. | Cost (₹) |
|---------------------------|---------|----------|
| 54                        | 118     | 300      |
| 55                        | 118     | 425      |
| 56                        | 118     | 515      |
| 57                        | 120     | 665      |
| 58                        | 121     | 910      |
| 59                        | 124     | 720      |
|                           |         | 3,535    |

A summary for labour hours deployed during October is as under:

| Job No. | Number of Hours |        |
|---------|-----------------|--------|
|         | Shop A          | Shop B |
| 115     | 25              | 25     |
| 118     | 90              | 30     |
| 120     | 75              | 10     |
| 121     | 65              | --     |

|                                      |     |     |
|--------------------------------------|-----|-----|
| 124                                  | 25  | 10  |
|                                      | 275 | 75  |
| Indirect Labour: Waiting of material | 20  | 10  |
| Machine breakdown                    | 10  | 5   |
| Idle time                            | 5   | 6   |
| Overtime premium                     | 6   | 5   |
|                                      | 316 | 101 |

A shop credit slip was issued in October, that material issued under Requisition No. 54 was returned back to stores as being not suitable. A material transfer note issued in October indicated that material issued under Requisition No. 55 for Job 118 was directed to Job 124.

The hourly rate in shop A per labour hour is ₹ 3 per hour while at shop B, it is ₹ 2 per hour. The factory overhead is applied at the same rate as in September. Job 115, 118 and 120 were completed in October.

You are asked to COMPUTE the factory cost of the completed jobs. It is the practice of the management to put a 10% on the factory cost to cover administration and selling overheads and invoice the job to the customer on a total cost plus 20% basis. DETERMINE the invoice price of these three jobs?

2. COMPUTE Notional profit and estimated profit on a contract (which has been 90% complete) from the following particulars.

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

3. AKP Builders Ltd. commenced a contract on April 1, 2020. The total contract was for ₹ 5,00,000. Actual expenditure for the period April 1, 2020 to March



31, 2021 and estimated expenditure for April 1, 2021 to December 31, 2021 are given below:

| Particulars            | 2020-21<br>(actual) | 2021-22<br>(9 months) (estimated) |
|------------------------|---------------------|-----------------------------------|
| Materials issued       | 90,000              | 85,750                            |
| Wages: Paid            | 75,000              | 87,325                            |
| Outstanding at the end | 6,250               | 8,300                             |
| Plant                  | 25,000              | -                                 |
| Sundry expenses: Paid  | 7,250               | 6,875                             |
| Prepaid at the end     | 625                 | -                                 |
| Establishment charges  | 14,625              | -                                 |

A part of the material was unsuitable and was sold for ₹ 18,125 (cost being ₹15,000) and a part of plant was scrapped and disposed- off for ₹ 2,875. The value of plant at site on 31 March, 2021 was ₹ 7,750 and the value of material at site was ₹ 4,250. Cash received on account to date was ₹ 1,75,000, representing 80% of the work certified. The cost of work uncertified was valued at ₹ 27,375.

The contractor estimated further expenditure that would be incurred in completion of the contract:

- The contract would be completed by 31<sup>st</sup> December, 2021.
- A further sum of ₹ 31,250 would have to be spent on the plant and the residual value of the plant on the completion of the contract would be ₹ 3,750.
- Establishment charges would cost the same amount per month as in the previous year.
- ₹ 10,800 would be sufficient to provide for contingencies.

Required:

PREPARE a Contract Account for the year ended 31<sup>st</sup> March, 2021, and CALCULATE estimated total profit on this contract.

4. RST Construction Ltd. commenced a contract on April 1, 2020. The total contract was for ₹ 49,21,875. Actual expenditure for the period April 1, 2020 to March 31, 2021 and estimated expenditure for April 1, 2021 to September 30, 2021 are given below:

|  | <i>April 1, 2020 to<br/>March 31, 2021<br/>(Actual) (₹)</i> | <i>April 1, 2021 to<br/>Sept. 30, 2021<br/>(Estimated) (₹)</i> |
|--|---|--|
| Materials issued                         | 7,76,250  | 12,99,375  |
| Wages: Paid                              | 5,17,500  | 6,18,750   |
| Prepaid                                  | 37,500  | -  |
| Outstanding                              | 12,500  | 5,750  |
| Plant purchased                          | 4,00,000  | -  |
| Expenses: Paid                           | 2,25,000  | 3,75,000   |
| Outstanding                              | 25,000  | 10,000   |
| Prepaid                                  | 15,000  | -  |
| Plant returns to store (historical cost) | 1,00,000<br>(on September 30,<br>2020)                      | 3,00,000<br>(on September 30,<br>2021)                         |
| Work certified                           | 22,50,000   | Full   |
| Work uncertified                         | 25,000  | -  |
| Cash received                            | 18,75,000   | -  |
| Materials at site                        | 82,500  | 42,500   |

The plant is subject to annual depreciation @ 25% on written down value method. The contract is likely to be completed on September 30, 2021.

Required:

PREPARE the Contract A/c for the year ended 31<sup>st</sup> March, 2021 and determine the estimated profit on the contract.

## ANSWERS/ SOLUTIONS

### Answers to the MCQs based Questions

1. (c)    2. (b)    3. (a)    4. (d)    5. (b)    6. (d)  
7. (a)    8. (a)    9. (a)    10. (d)

### Answers to the Theoretical Questions

- Please refer paragraph 9.1
- Please refer paragraph 9.4
- Please refer paragraph 9.8

4. Please refer paragraph 9.8
5. Please refer paragraph 9.7

### Answers to the Practical Questions

#### 1. Factory Cost Statement of Completed Job.

| Month     | Job No. | Materials | Direct labour | Factory overheads<br>(80% of direct labour cost) | Factory cost |
|-----------|---------|-----------|---------------|--|--------------|
|           | (₹)     | (₹)       | (₹)           | (₹)  | (₹)          |
| September | 115     | 1,325     | 800           | 640  | 2,765        |
| October   | 115     | --        | 125           | 100  | 225          |
| Total     |         | 1,325     | 925           | 740  | 2,990        |
| September | 118     | 810       | 500           | 400  | 1,710        |
| October   | 118     | 515       | 330           | 264  | 1,109        |
| Total     |         | 1,325     | 830           | 664  | 2,819        |
| September | 120     | 765       | 475           | 380  | 1,620        |
| October   | 120     | 665       | 245           | 196  | 1,106        |
| Total     |         | 1,430     | 720           | 576  | 2,726        |

#### Invoice Price of Complete Job

| Job No.  | 115<br>(₹)      | 118<br>(₹)      | 120<br>(₹)      |
|--|-----------------|-----------------|-----------------|
| Factory cost   | 2,990.00        | 2,819.00        | 2,726.00        |
| Administration and selling overheads @ 10% of factory cost | 299.00          | 281.90          | 272.60          |
| Total cost   | 3,289.00        | 3,100.90        | 2,998.60        |
| Profit (20% of total cost)                                 | 657.80          | 620.18          | 599.72          |
| <b>Invoice Price</b>                                       | <b>3,946.80</b> | <b>3,721.08</b> | <b>3,598.32</b> |

Assumption: - Indirect labour costs have been included in the factory overhead which has been recovered as 80% of the labour cost.

|  |                 |
|--|-----------------|
| 2. Computation of Notional Profit                      | (₹)             |
| Value of work certified                                | 5,50,800        |
| Less: Cost of work certified                           |                 |
| (₹ 4,50,000 – ₹ 34,000)                                | <u>4,16,000</u> |
| Notional profit  | <u>1,34,800</u> |
| <b>Computation of Estimated Profit</b>                 | (₹)             |
| Contract price   | 6,12,000        |
| Less: Cost of work to date                             | 4,50,000        |
| Estimated further expenditure to complete the contract | <u>25,000</u>   |
| Estimated total cost                                   | <u>4,75,000</u> |
| Estimated profit                                       | <u>1,37,000</u> |

### 3. Contract Account (2020-21)

| Particulars                              | (₹)             | Particulars                    | (₹)             |
|--|-----------------|--------------------------------|-----------------|
| To Materials issued                      | 90,000          | By Material sold               | 18,125          |
| To Wages paid 75,000                     |                 | By Plant sold                  | 2,875           |
| Add: Outstanding <u>6,250</u>            | 81,250          | By Plant at site c/d           | 7,750           |
| To Plant                                 | 25,000          | By Material at site c/d        | 4,250           |
| To Sundry Expenses 7,250                 |                 | By Work-in-progress c/d        |                 |
| Less: Prepaid <u>625</u>                 | 6,625           | Work certified 2,18,750        |                 |
| To Establishment charges                 | 14,625          | (₹1,75,000 ÷ 80%)              |                 |
| To Costing P & L A/c (₹18,125 – ₹15,000) | 3,125           | Work uncertified <u>27,375</u> | 2,46,125        |
| To Notional profit (Profit for the year) | 58,500          |                                |                 |
|  | <u>2,79,125</u> |                                | <u>2,79,125</u> |

## Calculation of Estimated Profit

|     |  | (₹)     | (₹)      |
|-----|--|---------|----------|
| (1) | Material consumed (90,000 + 3,125 – 18,125)          | 75,000  |          |
|     | Add: Further consumption                             | 85,750  | 1,60,750 |
| (2) | Wages:   | 81,250  |          |
|     | Add: Further cost (87,325 – 6,250)                   | 81,075  |          |
|     | Add: Outstanding                                     | 8,300   | 1,70,625 |
| (3) | Plant used (25,000 – 2,875)                          | 22,125  |          |
|     | Add: Further plant introduced                        | 31,250  |          |
|     | Less: Closing balance of plant                       | (3,750) | 49,625   |
| (4) | Establishment charges                                | 14,625  |          |
|     | Add: Further charges for nine months (14,625 × 9/12) | 10,969  | 25,594   |
| (5) | Sundry expenses                                      | 7,250   |          |
|     | Add: Further expenses                                | 6,875   | 14,125   |
| (6) | Reserve for contingencies                            |         | 10,800   |
|     | Estimated profit (balancing figure)                  |         | 68,481   |
|     | Contract price                                       |         | 5,00,000 |

## 4. Contract A/c (1-4-2020 to 31-3-2021)

| Particulars             | (₹)      | Particulars                             | (₹)       |
|-------------------------|----------|---|-----------|
| To Materials issued     | 7,76,250 | By Plant returned to Store on 30-9-2020 | 1,00,000  |
| To Wages 5,17,500       |          | Less: Depreciation (1/2)                | (12,500)  |
| Less: Prepaid (37,500)  |          |   |           |
| Add: Outstanding 12,500 | 4,92,500 | By Plant at site on 31.3.21             | 3,00,000  |
| To Plant purchased      | 4,00,000 | Less: Depreciation                      | (75,000)  |
| To Expenses 2,25,000    |          | By Materials at site c/d                | 82,500    |
| Less: Prepaid (15,000)  |          | By Work-in-progress c/d                 |           |
| Add: Outstanding 25,000 | 2,35,000 | Work certified                          | 22,50,000 |
|                         |          | Work uncertified                        | 25,000    |

|                    |           |  |           |
|--------------------|-----------|--|-----------|
| To Notional profit | 7,66,250  |  | -         |
|                    | 26,70,000 |  | 26,70,000 |

### Computation of Estimated Profit

Contract A/c (1-4-2020 to 30-9-2021)

| Particulars   | (₹)       | Particulars  | (₹)       |
|---|-----------|--|-----------|
| To Materials issued<br>(7,76,250 + 12,99,375)   | 20,75,625 | By Materials at site   | 42,500    |
| To Wages<br>(5,17,500 - 37,500 +<br>12,500 + 6,18,750 + 37,500<br>- 12,500 + 5,750)     | 11,42,000 | By Plant returned to store<br>on 30.9.2020<br>(1,00,000 - 12,500)            | 87,500    |
| To Plant purchased  | 4,00,000  | By Plant returned to store<br>on 30.9.21 (4,00,000 -<br>1,00,000 - 1,03,125) | 1,96,875  |
| To Expenses<br>(2,25,000 + 25,000 -<br>15,000 + 3,75,000 - 25,000<br>+ 15,000 + 10,000) | 6,10,000  | By Contractee A/c  | 49,21,875 |
| To Estimated profit   | 10,21,125 |  |           |
|   | 52,48,750 |  | 52,48,750 |

### Workings:

#### Calculation of written down value of plant as on 30-9-2021

(₹)

|  |                 |
|--|-----------------|
| Plant purchased on 1-4-2020                                | 4,00,000        |
| Less: Plant returned to store on 30-9-2020                 | <u>1,00,000</u> |
| (Depreciation on it ₹ 1,00,000 × 25/100 × 6/12 = ₹ 12,500) |                 |
|  | 3,00,000        |
| Less: Depreciation on Balance plant (3,00,000 × 25/100)    | <u>75,000</u>   |
| WDV of Plant on 1-4-2021                                   | 2,25,000        |
| Less: Depreciation (2,25,000 × 25/100 × 6/12)              | <u>28,125</u>   |
| WDV of plant returned to store on 30-9-2021                | <u>1,96,875</u> |