

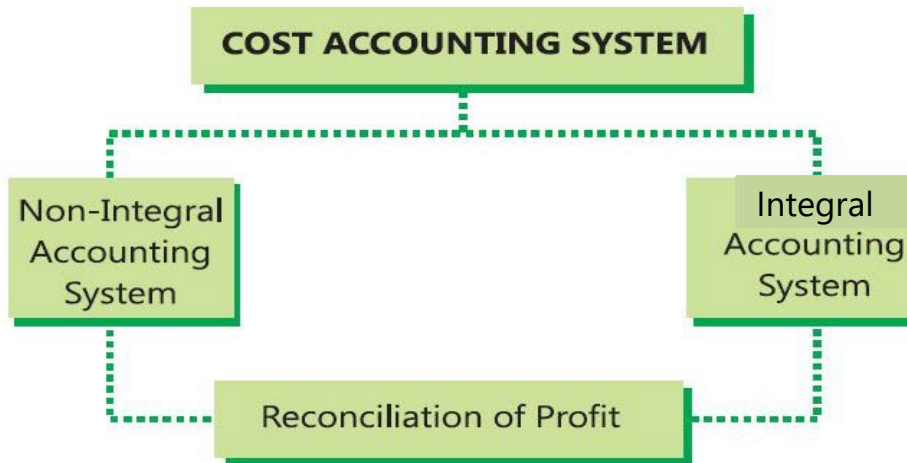
COST ACCOUNTING SYSTEMS



LEARNING OUTCOMES

- ❑ Discuss the Cost Accounting System.
- ❑ Differentiate between Integral and Non- Integral system of accounting.
- ❑ Identify the ledgers maintained under Integral and Non-Integral accounting system.
- ❑ Analyse the reasons for differences in profit under financial and cost accounting systems.
- ❑ Prepare reconciliation statement for profit under financial and cost accounting systems.
- ❑ Discuss the accounting for management information and cost control.

CHAPTER OVERVIEW



7.1 INTRODUCTION

To operate business operations efficiently and successfully, it is necessary to make use of an appropriate accounting system. Such a system should state in clear terms whether cost and financial transactions should be integrated or kept separately (Non-integrated). **Where cost and financial accounting records are integrated, the system so evolved is known as integrated or integral accounting system. In case cost and financial transactions are kept separately, the system is called Non-Integrated Accounting system or Cost Control System.** While non-integrated system of accounting necessitates reconciliation between financial and cost accounts but no reconciliation is required under integrated accounting system.

7.2 NON-INTEGRATED ACCOUNTING SYSTEM

It is a system of accounting under which separate ledgers are maintained for both cost and financial accounts. This system is also known as **cost ledger accounting system**. Under this system the cost accounts restrict itself to recording only those transactions which relate to the product or service being supplied. Items of expenses which are related to sales, production or other matters of factory management are the ones dealt with in such accounts. This leads to the exclusion of certain expenses like interest, bad debts and revenue/income from 'other than the sale of product or service'.

Non-Integrated Accounting Systems contain fewer accounts as compared to financial accounting system due to the exclusion of purchases, expenses and also Balance Sheet items like fixed assets, debtors and creditors. **Items of accounts which are excluded are represented by an account known as *Cost ledger control account*.**

The important ledgers to be maintained under non-integrated accounting system in the Cost Accounting are the followings:

- (a) ***Cost Ledger*** - This is the **principle ledger** of the cost department in which impersonal accounts are recorded. This ledger is made self-balancing by maintaining therein a Control Account for each subsidiary ledger.
- (b) ***Stores Ledger*** - It contains an account for each item of stores. The entries in each account maintained in this ledger are made from the invoice, goods received note, material requisitions, material received note etc. Accounts in respect of each item of stores show receipt, issue and balance in physical as well as in monetary terms.
- (c) ***Work-in-Process Ledger*** - This ledger is also known as **job ledger**, it contains accounts of unfinished jobs and processes. All material costs, wages and overheads for each job in process are posted to the respective job accounts in this ledger. The balance in a job account represents total balance of job/work-in-process, as shown by the job account.
- (d) ***Finished Goods Ledger*** - It contains an account for each item of finished product manufactured or the completed job. If the finished product is transferred to stock, a credit entry is made in the work-in-process ledger and a corresponding debit entry is made in this ledger.

7.2.1 Principal Accounts

The main accounts which are usually prepared when a separate Cost Ledger is maintained are as follows:

- (1) ***Cost Ledger Control Account*** - This account is also known as **General Ledger Adjustment Account. This account is made to complete double entry.** All items of expenditure are credited to this account. Sales are debited to this account and net profit/loss from Costing Profit & Loss Account is transferred to this account. The balance in this account at the end of the particular period represents the net total of all the balances of the impersonal accounts.
- (2) ***Stores Ledger Control Account*** – This account is **debited for the purchase of material and credited for issue of materials from the stores.** The

balance in this account indicates the total balance of all the individual stores accounts. Abnormal losses or gains if any in this account are transferred to Costing Profit & Loss Account. Entries are made on the basis of goods received notes and stores requisitions etc.

- (3) **Wages Control Account** - This account is **debited with total wages paid (direct and indirect)**. Direct wages are further transferred to Work-in-Process Control Account and indirect wages to Production Overhead; Administration Overhead or Selling & Distribution Overhead Control Accounts, as the case may be. Wages paid for abnormal idle time are transferred to Costing Profit & Loss Account either directly or through Abnormal Loss Account.
- (4) **Manufacturing/Production/Works/ Factory Overhead Control Account** - This account is **debited with indirect costs of production** such as indirect material, indirect employee, indirect expenses (carriage inward etc.). **Overhead recovered (absorbed) is credited to this Account**. The difference between overhead incurred and overhead recovered (i.e. Under Absorption or Over Absorption of Overheads) is transferred to Overheads Adjustment Account.
- (5) **Work-in-Process Control Account** - This account is **debited with the total cost of production**, which includes—direct materials, direct employee, direct expenses, production overhead recovered, and is credited with the amount of finished goods completed and transferred. The balance in this account represents total balances of jobs/works-in-process, as shown by several job accounts.
- (6) **Administrative Overhead Control Account** - This account is **debited with overheads incurred and credited with overhead recovered**. The overhead recovered are debited to Finished Goods Control Account, if administrative overhead is related with production activities otherwise to Cost of Sales A/c. The difference between administrative overheads incurred and recovered is transferred to Overhead Adjustment Account.
- (7) **Finished Goods Control Accounts** - This account is **debited with the value of goods transferred from Work-in-process Control Account and administration costs recovered (if relates to production activities)**. This account is credited with Cost of Sales Account. The balance of this account represents the value of goods unsold at the end of the period.

- (8) **Selling and Distribution Overhead Control Account** - This account is debited with selling and distribution overheads incurred and credited with the selling and distribution overheads recovered. The difference between overheads incurred and recovered is transferred usually to Overhead Adjustment Account.
- (9) **Cost of Sales Account** - This account is **debited with the cost of finished goods transferred from Finished Goods Control Account for sale**, General Administrative overhead recovered, Selling and distribution overhead recovered. The balance of this account is ultimately transferred to Sales Account or Costing Profit & Loss Account.
- (10) **Costing Profit & Loss Account** – This account is debited with cost of sales, under-absorbed overheads and abnormal losses and is credited with sales value, over-absorbed overhead and abnormal gains. The net profit or loss in this account is transferred to Cost Ledger Control Account.
- (11) **Overhead Adjustment Account** - This account is to be **debited for under-recovery of overhead and credited with over-recovery of overhead amount**. The net balance in this account is transferred to Costing Profit & Loss Account.

Note: Sometimes, Overhead Adjustment Account is dispensed with and under/over absorbed overheads is directly transferred to Costing Profit & Loss Account from the respective overhead accounts.

7.2.2 Scheme of Accounting Entries

The manner in which the Cost Ledger, when maintained on a double entry basis, would operate is illustrated by the following statements of various journal entries as would appear in the cost books.

Material:

| | | | |
|---------------------------------------|-----|-------|-------|
| (a) Purchase—₹ 5,000 (credit or cash) | | (₹) | (₹) |
| (i) Material Control A/c | Dr. | 5,000 | |
| To Cost Ledger Control A/c | | | 5,000 |
| (ii) Stores Ledger Control A/c | Dr. | 5,000 | |
| To Material Control A/c | | | 5,000 |

Note: Sometimes Material Control Account is dispensed with and entries are directly made into Stores Ledger Control A/c, giving a credit to Cost Ledger Control A/c.

| | | | |
|----------------|---|-----|-------|
| (b) | Purchases worth ₹ 500 for special job | | |
| | Work-in-Process Ledger Control A/c..... | Dr. | 500 |
| | To Cost Ledger Control A/c | | 500 |
| (c) | Material returned to vendor—₹ 500 | | |
| | Cost Ledger Control A/c | Dr. | 500 |
| | To Store Ledger Control A/c | | 500 |
| (d) | (i) Material (Direct) issued to production—₹ 1,000 | | |
| | Work-in-Process Control A/c..... | Dr. | 1,000 |
| | To Store Ledger Control A/c | | 1,000 |
| | (ii) Material (Indirect) issued to production—₹ 200 | | |
| | Production Overhead Control A/c..... | Dr. | 200 |
| | To Store Ledger Control A/c | | 200 |
| (e) | (i) Material worth ₹ 200 returned from shop to stores | | |
| | Stores Ledger Control A/c..... | Dr. | 200 |
| | To Work-in-Process Control A/c | | 200 |
| | (ii) Material worth ₹ 100 is transferred from Job-1 to Job- 2 | | |
| | Job- 2 A/c..... | Dr. | 100 |
| | To Job- 1 A/c | | 100 |
| (f) | Material worth ₹ 100 is issued from stores for repairs | | |
| | Production Overhead Control A/c..... | Dr. | 100 |
| | To Stores Ledger Control A/c | | 100 |
| Labour: | | | |
| (g) | Direct wages paid to workers— ₹ 1,000 | | |
| | Wages Control A/c..... | Dr. | 1,000 |
| | To Cost Ledger Control A/c | | 1,000 |
| (h) | Indirect wages paid to workers in the production— ₹ 700 | | |
| | (i) Wages Control A/c..... | Dr. | 700 |
| | To Cost Ledger Control A/c | | 700 |

| | | | | |
|------|---|-----|-----|-----|
| (ii) | Production Overhead Control A/c..... | Dr. | 700 | |
| | To Wages Control A/c | | | 700 |
| (i) | Indirect wages paid to workers in administration— ₹ 500 | | | |
| (i) | Wages Control A/c..... | Dr. | 500 | |
| | To Cost Ledger Control A/c | | | 500 |
| (ii) | Administration Overhead A/c..... | Dr. | 500 | |
| | To Wages Control A/c | | | 500 |
| (j) | Indirect wages paid to workers in Selling & Dist. department— ₹ 300 | | | |
| (i) | Wages Control A/c..... | Dr. | 300 | |
| | To Cost Ledger Control A/c | | | 300 |
| (ii) | Selling & Dist. Overhead A/c..... | Dr. | 300 | |
| | To Wages Control A/c | | | 300 |

Direct Expenses:

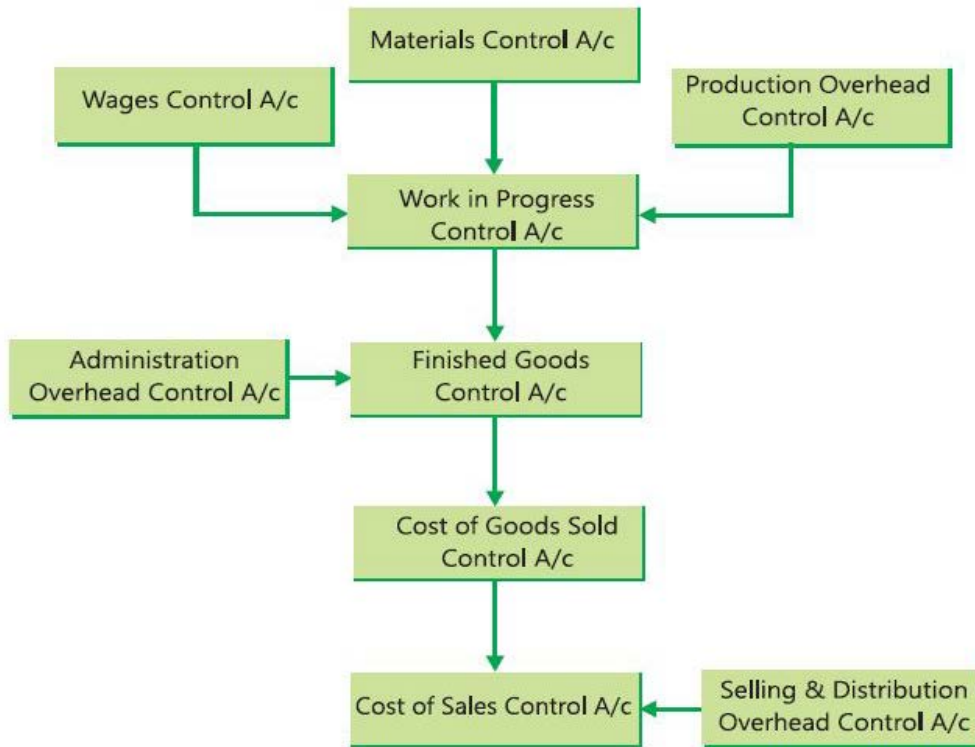
| | | | | |
|-----|---|-----|-----|-----|
| (k) | Direct expenses incurred ₹ 500 for Job No. 12 | | | |
| | Job No. 12 A/c (WIP Control A/c)..... | Dr. | 500 | |
| | To Cost Ledger Control A/c | | | 500 |

Overheads:

| | | | | |
|-----|---|-----|-----|-----|
| (l) | Overhead expenses incurred ₹ 500 (Production ₹150; Administrative ₹150; Selling and Distribution ₹200) | | | |
| | Production Overhead Control A/c..... | Dr. | 150 | |
| | Administrative Overhead Control A/c..... | Dr. | 150 | |
| | Selling & Dist. Overhead Control A/c..... | Dr. | 200 | |
| | To Cost Ledger Control A/c | | | 500 |
| (m) | Carriage Inward (Direct to Factory) —₹ 100 | | | |
| | Production Overhead Control A/c..... | Dr. | 100 | |
| | To Cost Ledger Control A/c | | | 100 |

- (n) Production overhead recovered—₹ 1,000
 Work-in-Process Ledger Control A/c..... Dr. 1,000
 To Production Overhead Control A/c 1,000
- (o) Administrative Overhead recovered ₹ 500 from finished goods
 Finished Goods Ledger Control A/c..... Dr. 500
 To Administrative Overhead Control A/c 500
- (p) Selling and Distribution Overhead ₹ 100 recovered from sales
 Cost of Sales A/c..... Dr. 100
 To Selling & Dist. Overhead Control A/c 100
- (q) Under recovery of overheads
 Costing Profit & Loss A/c..... Dr. xxx
 To Administrative Overhead Control A/c xxx
- (r) Over recovery of overheads
 Production Overheads Control A/c..... Dr. xxx
 To Costing Profit & Loss A/c xxx
- Sales:**
- (s) Cost Ledger Control A/c..... Dr. xxx
 To Costing Profit & Loss A/c xxx
- Profit/ Loss:**
- (t) In case of Profit
 (i) Costing Profit & Loss A/c..... Dr. xxx
 To Cost Ledger Control A/c xxx
- (u) In case of Loss
 (ii) Cost Ledger Control A/c..... Dr. xxx
 To Costing Profit & Loss A/c xxx

Non-Integrated Accounting System-flowchart



**In the diagram administrative overhead is assumed to be related with production activity. In case of general administration expenses, it is treated as a part of Cost of Sales.*

ILLUSTRATION 1

As on 31st March, the following balances existed in a firm's Cost Ledger:

| | <i>Dr.</i> | <i>Cr.</i> |
|------------------------------------|------------|------------|
| | (₹) | (₹) |
| Stores Ledger Control A/c | 3,01,435 | |
| Work-in-Process Control A/c | 1,22,365 | |
| Finished Stock Ledger Control A/c | 2,51,945 | |
| Manufacturing Overhead Control A/c | | 10,525 |
| Cost Ledger Control A/c | | 6,65,220 |
| | 6,75,745 | 6,75,745 |

During the next three months the following items arose:

| | (₹) |
|--|----------|
| Finished product (at cost) | 2,10,835 |
| Manufacturing overhead incurred | 91,510 |
| Raw materials purchased | 1,23,000 |
| Factory Wages | 50,530 |
| Indirect Labour | 21,665 |
| Cost of Sales | 1,85,890 |
| Material issued to production | 1,27,315 |
| Sales returned at Cost | 5,380 |
| Material returned to suppliers | 2,900 |
| Manufacturing overhead charged to production | 77,200 |

You are required to PASS the Journal Entries; write up the accounts and schedule the balances, stating what each balance represents.

SOLUTION

Journal entries are as follows:

| | | | Dr. (₹) | Cr. (₹) |
|----|---|-----|------------|------------|
| 1. | Finished stock ledger Control A/c To Work-in-Process Control A/c | Dr. | 2,10,835 | 2,10,835 |
| 2. | Manufacturing Overhead Control A/c To Cost Ledger Control A/c | Dr. | 91,510 | 91,510 |
| 3. | Stores Ledger Control A/c To Cost Ledger Control A/c | Dr. | 1,23,000 | 1,23,000 |
| 4. | (i) Wage Control A/c To Cost Ledger Control A/c | Dr. | 72,195 | 72,195 |
| | (ii) Work-in-Process Control A/c To Wages Control A/c | Dr. | 50,530 | 50,530 |
| | (iii) Manufacturing Overhead Control A/c To Wages Control A/c | Dr. | 21,665 | 21,665 |

| | | | | |
|----|--|-----|----------|----------|
| 5. | Cost of Sales A/c To Finished Stock Ledger A/c | Dr. | 1,85,890 | 1,85,890 |
| 6. | Work-in-Process Control A/c To Stores Ledger Control A/c | Dr. | 1,27,315 | 1,27,315 |
| 7. | Finished Stock Ledger Control A/c To Cost of Sales A/c | Dr. | 5,380 | 5,380 |
| 8. | Cost Ledger Control A/c To Stores Ledger Control A/c | Dr. | 2,900 | 2,900 |
| 9. | Work-in-Process Control A/c To Manufacturing Overhead Control A/c | Dr. | 77,200 | 77,200 |

COST LEDGERS

Cost Ledger Control Account

| Particulars | | (₹) | Particulars | | (₹) |
|-------------|------------------------------------|----------|-------------|------------------------------|----------|
| To | Stores Ledger Control A/c (return) | 2,900 | By | Balance b/d | 6,65,220 |
| " | Balance c/d | 9,49,025 | " | Manufacturing OH Control A/c | 91,510 |
| | | | " | Stores Ledger Control A/c | 1,23,000 |
| | | | " | Wages Control A/c | 72,195 |
| | | 9,51,925 | | | 9,51,925 |

Stores Ledger Control Account

| Particulars | | (₹) | Particulars | | (₹) |
|-------------|-------------------------|----------|-------------|-----------------------------|----------|
| To | Balance b/d | 3,01,435 | By | Work in Process Control A/c | 1,27,315 |
| " | Cost Ledger Control A/c | 1,23,000 | " | Cost Ledger Control A/c | 2,900 |
| | | | " | Balance c/d | 2,94,220 |
| | | 4,24,435 | | | 4,24,435 |

Wages Control Account

| Particulars | (₹) | Particulars | (₹) |
|----------------------------|--------|--------------------------------|--------|
| To Cost Ledger Control A/c | 72,195 | By Work in Process Control A/c | 50,530 |
| | | " Manufacturing OH Control A/c | 21,665 |
| | 72,195 | | 72,195 |

Manufacturing Overhead Control Account

| Particulars | (₹) | Particulars | (₹) |
|----------------------------|----------|-------------------------------|----------|
| To Cost Ledger Control A/c | 91,510 | By Balance b/d | 10,525 |
| " Wages Control A/c | 21,665 | " Work in Process Control A/c | 77,200 |
| | | " Balance c/d | 25,450 |
| | 1,13,175 | | 1,13,175 |

Work-in-Process Control Account

| Particulars | (₹) | Particulars | (₹) |
|--------------------------------|----------|--------------------------------------|----------|
| To Balance b/d | 1,22,365 | By Finished Stock Ledger Control A/c | 2,10,835 |
| " Wages Control A/c | 50,530 | " Balance c/d | 1,66,575 |
| " Stores Ledger Control A/c | 1,27,315 | | |
| " Manufacturing OH Control A/c | 77,200 | | |
| | 3,77,410 | | 3,77,410 |

Finished Stock Ledger Control Account

| Particulars | (₹) | Particulars | (₹) |
|-------------------------------|----------|------------------------------|----------|
| To Balance b/d | 2,51,945 | By Cost of Sales Control A/c | 1,85,890 |
| " Work in Process Control A/c | 2,10,835 | " Balance c/d | 2,82,270 |

| | | | |
|---|----------|--|----------|
| " Cost of Sales Control A/c (Return at cost) | 5,380 | | |
| | 4,68,160 | | 4,68,160 |

Cost of Sales Account

| Particulars | | (₹) | Particulars | | (₹) |
|-------------|-------------------------------|----------|-------------|--|----------|
| To | Finished Stock Ledger Control | 1,85,890 | By | Finished Stock Ledger Control (Return) | 5,380 |
| | | | | " Balance c/d | 1,80,510 |
| | | 1,85,890 | | | 1,85,890 |

Trial Balance

| Particulars | Dr. | Cr. |
|------------------------------------|-----------------|-----------------|
| | (₹) | (₹) |
| Stores Ledger Control A/c | 2,94,220 | |
| Work-in-Process Control A/c | 1,66,575 | |
| Finished Stock Ledger Control A/c | 2,82,270 | |
| Manufacturing Overhead Control A/c | 25,450 | |
| Cost of Sales A/c | 1,80,510 | |
| Cost Ledger Control A/c | | 9,49,025 |
| | 9,49,025 | 9,49,025 |

ILLUSTRATION 2

Acme Manufacturing Co. Ltd. opens the costing records, with the balances as on 1st July as follows:

| | (₹) | (₹) |
|---|----------|--------|
| Material Control A/c | 1,24,000 | |
| Work-in-Process Control A/c | 62,500 | |
| Finished Goods Control A/c | 1,24,000 | |
| Production Overhead Control A/c | 8,400 | |
| Administrative Overhead Control A/c | | 12,000 |
| Selling & Distribution Overhead Control A/c | 6,250 | |

| | | |
|-------------------------|-----------------|-----------------|
| Cost Ledger Control A/c | | 3,13,150 |
| | 3,25,150 | 3,25,150 |

The following are the transactions for the quarter ended 30th September:

| | (₹) |
|--|-----------|
| Materials purchased | 4,80,100 |
| Materials issued to jobs | 4,77,400 |
| Materials to works maintenance | 41,200 |
| Materials to administrative office | 3,400 |
| Materials to sales department | 7,200 |
| Wages direct | 1,49,300 |
| Wages indirect | 65,000 |
| Transportation for indirect materials | 8,400 |
| Production overheads incurred | 2,42,250 |
| Absorbed production overheads | 3,59,100 |
| Administrative overheads incurred | 74,000 |
| Administrative overheads allocated to production | 52,900 |
| Administrative overheads allocated to sales department | 14,800 |
| Selling & Distribution overheads incurred | 64,200 |
| Selling & Distribution overheads absorbed | 82,000 |
| Finished goods produced | 9,58,400 |
| Finished goods sold | 9,77,300 |
| Sales | 14,43,000 |

Make up the various accounts as you envisage in the Cost Ledger and PREPARE a Trial Balance as at 30th September.

SOLUTION

Cost Ledgers Material Control A/c*

| Particulars | (₹) | Particulars | (₹) |
|----------------|----------|--------------------------------|----------|
| To Balance b/d | 1,24,000 | By Work-in-process Control A/c | 4,77,400 |

| | | | |
|--------------------------------------|----------|-----------------------------|----------|
| " Cost Ledger Control A/c (purchase) | 4,80,100 | " Production OH Control A/c | 41,200 |
| | | " Admn. OH Control A/c | 3,400 |
| | | " S&D OH Control A/c | 7,200 |
| | | " Balance c/d | 74,900 |
| | 6,04,100 | | 6,04,100 |

*Material Control A/c may also be written as Stores Ledger Control A/c

Wages Control A/c

| Particulars | (₹) | Particulars | (₹) |
|----------------------------|----------|--------------------------------|----------|
| To Cost Ledger Control A/c | 2,14,300 | By Work-in-process Control A/c | 1,49,300 |
| | | " Production OH Control A/c | 65,000 |
| | 2,14,300 | | 2,14,300 |

Production Overhead Control A/c

| Particulars | (₹) | Particulars | (₹) |
|----------------------------|----------|--------------------------------|----------|
| To Balance b/d | 8,400 | By Work-in-process Control A/c | 3,59,100 |
| " Cost Ledger Control A/c: | | | |
| - Transportation | 8,400 | | |
| - Production OH | 2,42,250 | | |
| " Wages Control A/c | 65,000 | " Balance c/d | 6,150 |
| " Material Control A/c | 41,200 | | |
| | 3,65,250 | | 3,65,250 |

Administrative Overhead Control A/c

| Particulars | (₹) | Particulars | (₹) |
|----------------------------|--------|----------------|--------|
| To Cost Ledger Control A/c | 74,000 | By Balance b/d | 12,000 |

| | | | |
|-------------------------|--------|------------------------------|--------|
| " Material Control A/c: | 3,400 | " Finished Goods Control A/c | 52,900 |
| " Balance c/d | 2,300 | " Cost of sales A/c | 14,800 |
| | 79,700 | | 79,700 |

Work-in-Process Control A/c

| Particulars | (₹) | Particulars | (₹) |
|-----------------------------|-----------|-------------------------------|-----------|
| To Balance b/d | 62,500 | By Finished goods Control A/c | 9,58,400 |
| " Material Control A/c | 4,77,400 | | |
| " Wages Control A/c | 1,49,300 | | |
| " Production OH Control A/c | 3,59,100 | " Balance c/d | 89,900 |
| | 10,48,300 | | 10,48,300 |

Finished Goods Control A/c

| Particulars | (₹) | Particulars | (₹) |
|---------------------------------------|-----------|----------------------|-----------|
| To Balance b/d | 1,24,000 | By Cost of Sales A/c | 9,77,300 |
| " Administrative Overhead Control A/c | 52,900 | | |
| " Work-in-process Control A/c | 9,58,400 | " Balance c/d | 1,58,000 |
| | 11,35,300 | | 11,35,300 |

Selling and Distribution Overhead Control A/c

| Particulars | (₹) | Particulars | (₹) |
|----------------------------|--------|----------------------|--------|
| To Balance b/d | 6,250 | By Cost of Sales A/c | 82,000 |
| " Cost Ledger Control A/c: | 64,200 | | |
| " Material Control A/c | 7,200 | | |
| " Balance c/d | 4,350 | | |
| | 82,000 | | 82,000 |

Cost of Sales A/c

| Particulars | (₹) | Particulars | (₹) |
|-------------------------------|-----------|--------------------|-----------|
| To Finished Goods Control A/c | 9,77,300 | By Costing P&L A/c | 10,74,100 |
| " Admn. OH Control A/c | 14,800 | | |
| " S&D OH Control A/c | 82,000 | | |
| | 10,74,100 | | 10,74,100 |

Cost Ledger Control A/c

| Particulars | (₹) | Particulars | (₹) |
|----------------------------|-----------|---|-----------|
| To Costing P&L A/c (Sales) | 14,43,000 | By Balance b/d | 3,13,150 |
| | | " Material Control A/c | 4,80,100 |
| | | " Wages Control A/c (₹1,49,300+₹65,000) | 2,14,300 |
| | | " Production OH Control A/c (₹8,400+₹2,42,250) | 2,50,650 |
| | | " Administrative OH A/c | 74,000 |
| | | " S&D OH Control A/c | 64,200 |
| " Balance c/d | 3,22,300 | " Costing P&L A/c | 3,68,900 |
| | 17,65,300 | | 17,65,300 |

Costing Profit & Loss A/c

| Particulars | (₹) | Particulars | (₹) |
|---|-----------|------------------------|-----------|
| To Cost of sales A/c | 10,74,100 | By Cost Ledger Control | 14,43,000 |
| " Cost Ledger Control A/c (profit) (balancing figure) | 3,68,900 | A/c (sales) | |
| | 14,43,000 | | 14,43,000 |

Trial Balance as at 30th September

| | Dr. (₹) | Cr. (₹) |
|---------------------------------------|-----------------|-----------------|
| Material Control A/c | 74,900 | |
| Production OH Control A/c | 6,150 | |
| Administrative OH Control A/c | | 2,300 |
| Selling & Distribution OH Control A/c | | 4,350 |
| Work-in-process Control A/c | 89,900 | |
| Finished Goods Control A/c | 1,58,000 | |
| Cost Ledger Control A/c | | 3,22,300 |
| | 3,28,950 | 3,28,950 |



7.3 INTEGRATED (OR INTEGRAL) ACCOUNTING SYSTEM

Integrated Accounts is the name given to a system of accounting, whereby **cost and financial accounts are kept in the same set of books**. Obviously, then there will be no separate sets of books for Costing and Financial records. Integrated accounts provide or meet out fully the information requirement for Costing as well as for Financial Accounts. For Costing it provides information useful for ascertaining the cost of each product, job, process and operation of any other identifiable activity and for carrying necessary analysis. **Integrated accounts provide relevant information which is necessary for preparing profit and loss account and the balance sheet** as per the requirement of law and also helps in exercising effective control over the liabilities and assets of its business.

7.3.1 Advantages

The main advantages of Integrated Accounts are as follows:

- No need for Reconciliation**- The question of reconciling costing profit and financial profit does not arise, as there is only one figure of profit.
- Less efforts**- Due to use of one set of books, there is a significant saving in efforts made.
- Less time consuming**- No delay is caused in obtaining information as it is provided from books of original entry.

- (d) **Economical process**- It is economical also as it is based on the concept of "Centralisation of Accounting function".

7.3.2 Essential pre-requisites for Integrated Accounts

The essential pre-requisites for integrated accounts include the following steps:

1. The management's decision about the extent of integration of the two sets of books. Some concerns find it useful to integrate up to the stage of prime cost or factory cost while other prefers full integration of the entire accounting records.
2. A suitable coding system must be made available so as to serve the accounting purposes of financial and cost accounts.
3. An agreed routine, with regard to the treatment of provision for accruals, prepaid expenses, other adjustment necessary for preparation of interim accounts.
4. Perfect coordination should exist between the staff responsible for the financial and cost aspects of the accounts and an efficient processing of accounting documents should be ensured.

Under this system there is no need for a separate cost ledger. Of course, there will be a number of subsidiary ledgers; in addition to the useful Customers' Ledger and the Purchase Ledger, there will be: (a) Stores Ledger; (b) Stock Ledger and (c) Job Ledger.

7.3.3 Features of Integrated Accounting System: Following are the main points of integrated accounting:

- (a) Complete analysis of cost and sales are kept.
- (b) Complete details of all payments in cash are kept
- (c) Complete details of all assets and liabilities are kept and this system does not use a notional account to represent all impersonal accounts

In non-integrated system, a cost ledger control account or general ledger adjustment account is used in cost ledger. But in the integrated accounting system, **general ledger adjustment account is eliminated** and detailed accounts for assets and liabilities are maintained. In other words, following accounts are used for "General Ledger Adjustment Account/ Cost Ledger Control Account" of non-integrated system:

- (a) Bank account

- (b) Receivables (Debtors) account
- (c) Payables (Creditors) account
- (d) Provision for depreciation account etc.

In integrated system, all accounts necessary for showing classification of cost will be used but **the cost ledger control account of non-integrated accounting is replaced by use of following accounts:**

- (a) Bank account
- (b) Receivables (Debtors) account
- (c) Payables (Creditors) account
- (d) Provision for depreciation account
- (e) Fixed assets account
- (f) Share capital account

If the illustration given below is to be worked out on integrated account basis, the journal entries would be as follows:

ILLUSTRATION 3

JOURNALISE the following transactions assuming that cost and financial transactions are integrated:

| | (₹) |
|---|----------|
| <i>Raw materials purchased</i> | 2,00,000 |
| <i>Direct materials issued to production</i> | 1,50,000 |
| <i>Wages paid (30% indirect)</i> | 1,20,000 |
| <i>Wages charged to production</i> | 84,000 |
| <i>Manufacturing expenses incurred</i> | 84,000 |
| <i>Manufacturing overhead charged to production</i> | 92,000 |
| <i>Selling and distribution costs</i> | 20,000 |
| <i>Finished products (at cost)</i> | 2,00,000 |
| <i>Sales</i> | 2,90,000 |
| <i>Closing stock</i> | Nil |
| <i>Receipts from debtors</i> | 69,000 |
| <i>Payments to creditors</i> | 1,10,000 |

SOLUTION**Journal entries are as follows:**

| | | DR. (₹) | CR. (₹) |
|--|-----|----------|----------|
| Stores Ledger Control A/c..... | Dr. | 2,00,000 | |
| To Payables (Creditors)/ Bank A/c | | | 2,00,000 |
| (Materials purchased) | | | |
| Work-in-Process Control A/c..... | Dr. | 1,50,000 | |
| To Stores Ledger Control A/c | | | 1,50,000 |
| (Materials issued to production) | | | |
| Wages Control A/c..... | Dr. | 1,20,000 | |
| To Bank A/c | | | 1,20,000 |
| (Wages paid) | | | |
| Factory Overhead Control A/c..... | Dr. | 36,000 | |
| To Wages Control A/c | | | 36,000 |
| (30% of wages paid being indirect charged to overhead) | | | |
| Work-in-Process Control A/c..... | Dr. | 84,000 | |
| To Wages Control A/c | | | 84,000 |
| (Direct wages charged to production) | | | |
| Factory Overhead Control A/c..... | Dr. | 84,000 | |
| To Bank A/c | | | 84,000 |
| (Manufacturing overhead incurred) | | | |
| Work-in-Process Control A/c..... | Dr. | 92,000 | |
| To Factory Overhead Control A/c | | | 92,000 |
| (Manufacturing overhead charged to production) | | | |
| Selling & Distribution Overhead Control A/c..... | Dr. | 20,000 | |
| To Bank A/c | | | 20,000 |
| (Selling and distribution costs incurred) | | | |
| Finished Goods Control A/c..... | Dr. | 2,00,000 | |
| To Work-in-Process Control A/c | | | 2,00,000 |
| (Cost of finished goods) | | | |
| Cost of Sales A/c..... | Dr. | 2,20,000 | |
| To Finished Goods Control A/c | | | 2,00,000 |

| | | | |
|---|-----|----------|----------|
| To Selling and Distribution Control A/c (Costs of sales) | | | 20,000 |
| Receivables (Debtors)/ Bank A/c..... | Dr. | 2,90,000 | |
| To Sales A/c (Finished goods sold) | | | 2,90,000 |
| Bank A/c..... | Dr. | 69,000 | |
| To Receivables (Debtors) A/c (Receipts from receivables) | | | 69,000 |
| Payables (Creditors) A/c..... | Dr. | 1,10,000 | |
| To Bank A/c (Payment made to payables) | | | 1,10,000 |

ILLUSTRATION 4

In the absence of the Chief Accountant, you have been asked to prepare a month's cost accounts for a company which operates a batch costing system fully integrated with the financial accounts. The following relevant information is provided to you:

| | (₹) | (₹) |
|--|--------|--------|
| <i>Balances at the beginning of the month:</i> | | |
| Stores Ledger Control Account | | 25,000 |
| Work-in-Process Control Account | | 20,000 |
| Finished Goods Control Account | | 35,000 |
| Prepaid Production Overheads brought forward from previous month | | 3,000 |
| Transactions during the month: | | |
| Materials Purchased | | 75,000 |
| <i>Materials Issued:</i> | | |
| To production | 30,000 | |
| To factory maintenance | 4,000 | 34,000 |
| Materials transferred between batches | | 5,000 |
| <i>Total wages paid:</i> | | |
| To direct workers | 25,000 | |
| To indirect workers | 5,000 | 30,000 |

| | |
|--|----------|
| Direct wages charged to batches | 20,000 |
| Recorded non-productive time of direct workers | 5,000 |
| Selling and Distribution Overheads Incurred | 6,000 |
| Other Production Overheads Incurred | 12,000 |
| Sales | 1,00,000 |
| Cost of Finished Goods Sold | 80,000 |
| Cost of Goods completed and transferred into finished goods during the month | 65,000 |
| Physical value of work-in-Process at the end of the month | 40,000 |

The production overhead absorption rate is 150% of direct wages charged to work-in-Process.

Required:

PREPARE the following accounts for the month:

- (a) Stores Ledger Control Account.
- (b) Work-in-Process Control Account.
- (c) Finished Goods Control Account.
- (d) Production Overhead Control Account.
- (e) Costing Profit and Loss Account.

SOLUTION

(a) Stores Ledger Control Account

| | (₹) | | (₹) |
|-----------------------|----------|--------------------------------|----------|
| To Balance b/d | 25,000 | By Work in Process Control A/c | 30,000 |
| " Creditors/ Bank A/c | 75,000 | " Production OH Control A/c | 4,000 |
| | | " Balance c/d | 66,000 |
| | 1,00,000 | | 1,00,000 |

(b) Wages Control Account

| | (₹) | | (₹) |
|--------------------------------------|--------|---|--------|
| To Bank A/c (Paid to direct workers) | 25,000 | By Work in Process Control A/c (Charged to batches) | 20,000 |

| | | | |
|---------------------------------------|--------|--|--------|
| " Bank A/c (Paid to indirect workers) | 5,000 | " Production OH Control A/c | 5,000 |
| | | " Production OH Control A/c (Non-productive wages) | 5,000 |
| | 30,000 | | 30,000 |

(c) **Production Overhead Control Account**

| | | (₹) | | | (₹) |
|----|---|--------|----|--|--------|
| To | Balance b/d (Prepaid amount) | 3,000 | By | Work-in-Process Control A/c (150% of direct wages) | 30,000 |
| " | Stores Ledger Control A/c | 4,000 | | | |
| " | Wages Control A/c (₹5,000 + ₹5,000) | 10,000 | | | |
| " | Bank A/c | 12,000 | | | |
| " | Costing P&L A/c (Over-absorption, balancing figure) | 1,000 | | | |
| | | 30,000 | | | 30,000 |

(d) **Work-in-Process Control Account**

| | | (₹) | | | (₹) |
|----|--|----------|----|------------------------------|----------|
| To | Balance b/d | 20,000 | By | Finished Goods Control A/c | 65,000 |
| " | Store Ledger Control A/c | 30,000 | " | Balance c/d (Physical value) | 40,000 |
| " | Wages Control A/c | 20,000 | | | |
| " | Production OH Control A/c (150% of direct wages) | 30,000 | | | |
| " | Costing P&L A/c (Stock Gains) | 5,000 | | | |
| | | 1,05,000 | | | 1,05,000 |

(e) Finished Goods Control Account

| | | (₹) | | | (₹) |
|----|-----------------------------|----------|----|-------------------------|----------|
| To | Balance b/d | 35,000 | By | Cost of Goods Sold* A/c | 80,000 |
| " | Work-in-Process Control A/c | 65,000 | " | Balance c/d | 20,000 |
| | | 1,00,000 | | | 1,00,000 |

* Alternatively, Costing Profit & Loss Account

(f) Costing Profit & Loss Account

| | | (₹) | | | (₹) |
|----|--|----------|----|--|----------|
| To | Finished goods control A/c or Cost of Goods Sold A/c | 80,000 | By | Sales A/c | 1,00,000 |
| " | Selling & distribution OH A/c | 6,000 | " | Production OH Control A/c | 1,000 |
| " | Balance c/d | 20,000 | " | Work-in-Process Control A/c (Stock gain) | 5,000 |
| | | 1,06,000 | | | 1,06,000 |

Notes:

- (1) Materials transferred between batches will not affect the Control Accounts.
- (2) Non-production time of direct workers is a production overhead and therefore will not be charged to work-in-Process control A/c.
- (3) Production overheads absorbed in work-in-Process Control A/c equals to ₹ 30,000 (150% of ₹ 20,000).
- (4) In the work-in-Process Control A/c the excess physical value of stock is taken resulting in stock gain. Stock gain is transferred to Profit & Loss A/c.

ILLUSTRATION 5

A fire destroyed some accounting records of a company. You have been able to collect the following from the spoilt papers/records and as a result of consultation with accounting staff for the month of January:

(i) *Incomplete Ledger Entries:*

Materials Control A/c

| | (₹) | | (₹) |
|----------------|--------|--|-----|
| To Balance b/d | 32,000 | | |
| | | | |

Work-in-Process Control A/c

| | (₹) | | (₹) |
|----------------|-------|-------------------------------|----------|
| To Balance b/d | 9,200 | By Finished Goods Control A/c | 1,51,000 |
| | | | |

Payables (Creditors) A/c

| | (₹) | | (₹) |
|----------------|--------|----------------|--------|
| To Balance c/d | 19,200 | By Balance b/d | 16,400 |
| | | | |

Manufacturing Overheads Control A/c

| | (₹) | | (₹) |
|----------------------------|--------|--|-----|
| To Bank A/c (Amount spent) | 29,600 | | |
| | | | |

Finished Goods Control A/c

| | (₹) | | (₹) |
|----------------|--------|----------------|--------|
| To Balance b/d | 24,000 | By Balance c/d | 30,000 |
| | | | |

(ii) *Additional Information:*

- (1) *The bank-book showed that ₹89,200 have been paid to creditors for raw-material.*

- (2) Ending inventory of work-in-process included materials of ₹ 5,000 on which 300 direct labour hours have been booked against wages and overheads.
- (3) The job card showed that workers have worked for 7,000 hours. The wage rate is ₹ 10 per labour hour.
- (4) Overhead recovery rate was ₹ 4 per direct labour hour.

You are required to COMPLETE the above accounts in the cost ledger of the company.

SOLUTION

Materials Control A/c

| | (₹) | | (₹) |
|---|----------|--------------------------------|----------|
| To Balance b/d | 32,000 | By Work-in-process control A/c | 53,000 |
| To Cost Ledger Control A/c | | | |
| To Payables (Creditors) A/c (Purchases) | 92,000 | By Balance c/d | 71,000 |
| | 1,24,000 | | 1,24,000 |

Manufacturing Overheads A/c

| | (₹) | | (₹) |
|----------------------------|--------|---|--------|
| To Bank A/c (amount spent) | 29,600 | By Work-in-process control A/c (₹4 × 7,000 hours) | 28,000 |
| | | By Costing P/L A/c (Under-absorbed OH) | 1,600 |
| | 29,600 | | 29,600 |

Work-in-Process Control A/c

| | (₹) | | (₹) |
|---|--------|-------------------------------|----------|
| To Balance b/d | 9,200 | By Finished Goods Control A/c | 1,51,000 |
| To Wages Control A/c (₹10 × 7,000 hours) | 70,000 | By Balance c/d: | |
| To Overheads Control A/c (₹4 × 7,000 hours) | 28,000 | -Material | 5,000 |

| | | | |
|--|----------|------------------------------------|----------|
| To Materials Control A/c (Balancing figure) | 53,000 | -Wages (₹10 × 300 hours) 3,000 | |
| | | - Overheads (₹4 × 300 hours) 1,200 | 9,200 |
| | 1,60,200 | | 1,60,200 |

Finished Goods Control A/c

| | (₹) | | (₹) |
|---|----------|----------------------------------|----------|
| To Balance b/d | 24,000 | By Cost of sales A/c (Bal. fig.) | 1,45,000 |
| To Work-in-process Control A/c (as above) | 1,51,000 | By Balance c/d | 30,000 |
| | 1,75,000 | | 1,75,000 |

Payables (Creditors) A/c

| | (₹) | | (₹) |
|----------------|----------|--|----------|
| To Bank A/c | 89,200 | By Balance b/d | 16,400 |
| To Balance c/d | 19,200 | By Material Control A/c (Purchases) (Balancing fig.) | 92,000 |
| | 1,08,400 | | 1,08,400 |

7.4 RECONCILIATION OF COST AND FINANCIAL ACCOUNTS

When the cost and financial accounts are kept separately, it is imperative that these should be reconciled to make the cost accounts reliable. It is necessary for reconciliation of the two sets of accounts that sufficient details are available to locate the differences and the reasons for the same. It is, therefore, important that in the financial accounts, the expenses should be analysed in the same way as in the cost accounts.

The General Ledger Adjustment Account in the Cost Ledger may be studied to know the items which are included here and how differently these are presented in the financial accounts. **The reconciliation of the balances of two sets of accounts is possible by preparing a Memorandum Reconciliation Account.** In this account, the items charged in one set of accounts but not in the other or those charged in

excess as compared to the other are identified and collected. These items of differences are either added or subtracted from the profit as shown by one of the accounts. Finally the profits from two sets of accounts are reconciled. The procedure is similar to those which are followed for reconciling bank balance as per bank ledger with the balance as shown in bank statement.

It is important, however, to know the causes which, generally, give rise to differences in the Cost and Financial Accounts. These are briefly summarised below:

7.4.1 Causes of differences in Financial and Cost Accounts:

1. Items included in Financial Accounts only-

(a) Purely Financial Expenses:

- (i) Interest on loans or bank mortgages.
- (ii) Expenses and discounts on issue of shares, debentures etc.
- (iii) Other capital losses i.e., loss by fire not covered by insurance etc.
- (iv) Losses on the sales of fixed assets and investments
- (v) Goodwill written off
- (vi) Preliminary expenses written off
- (vii) Income tax, donations, subscriptions
- (viii) Expenses of the company's share transfer office, if any.

(b) Purely Financial Income

- (i) Interest received on bank deposits, loans and investments
- (ii) Dividends received
- (iii) Profits on the sale of fixed assets and investments
- (iv) Transfer fee received.
- (v) Rent receivables

2. Item included in Cost Accounts only (notional expenses):

- (i) Charges in lieu of rent where premises are owned
- (ii) Interest on capital at notional figure though not incurred
- (iii) Salary for the proprietor at notional figure though not incurred
- (iv) Notional Depreciation on the assets fully depreciated for which book value is nil.

3. **Items whose treatment is different in the two sets of accounts:** The objective of cost accounting is to provide information to management for decision making and control purposes while financial accounting conforms to external reporting requirements. Hence there are chances that certain items are treated differently in the two sets of accounts. For example, LIFO method is not allowed for inventory valuation in India as per the Accounting Standard 2 issued by the Council of the ICAI. However, this method may be adopted for cost accounts as it is more suitable for arriving at costs which may be used as a base for deciding selling prices. Similarly cost accounting may use a different method of depreciation than what is allowed under financial accounting.
4. **Varying basis of valuation:** It is another factor which sometimes is responsible for the difference. It is well known that in financial accounts stock are valued either at cost or market price, whichever is lower. But in Cost Accounts, stocks are only valued at cost.

7.4.2 Procedure for reconciliation: There are 3 steps involved in the procedure for reconciliation.

1. Ascertainment of profit as per financial accounts
2. Ascertainment of profit as per cost accounts
3. Reconciliation of both the profits (*similar to the bank reconciliation statement*)

Circumstances where reconciliation statement can be avoided: When the Cost and Financial Accounts are integrated - there is no need to have a separate reconciliation statement between the two sets of accounts. Integration means that the same set of accounts fulfil the requirement of both i.e., Cost and Financial Accounts.

ILLUSTRATION 6

The following figures are available from the financial records of ABC Manufacturing Co. Ltd. for the year ended 31st March.

| | (₹) |
|--|-----------|
| Sales (20,000 units) | 25,00,000 |
| Materials | 10,00,000 |
| Wages | 5,00,000 |
| Factory Overheads | 4,50,000 |
| Administrative Overhead (production related) | 2,60,000 |

| | |
|---|----------|
| <i>Selling and distribution Overheads</i> | 1,80,000 |
| <i>Finished goods (1,230 units)</i> | 1,50,000 |

| | (₹) | (₹) |
|-------------------------------|--------|----------|
| <i>Work-in-Process:</i> | | |
| <i>Materials</i> | 30,000 | |
| <i>Labour</i> | 20,000 | |
| <i>Factory overheads</i> | 20,000 | 70,000 |
| <i>Goodwill written off</i> | | 2,00,000 |
| <i>Interest on loan taken</i> | | 20,000 |

In the Costing records, factory overhead is charged at 100% of wages, administrative overhead 10% of factory cost and selling and distribution overhead at the rate of ₹ 10 per unit sold.

PREPARE a statement reconciling the profit as per cost records with the profit as per financial records.

SOLUTION

Profit & Loss Account of ABC Manufacturing Co. Ltd. (for the year ended 31st March)

| | (₹) | | (₹) |
|-------------------------|------------------|-------------------------|------------------|
| To Opening Stock | - | By Sales (20,000 units) | 25,00,000 |
| To Materials | 10,00,000 | By Closing Stock: | |
| To Wages | 5,00,000 | Finished goods | 1,50,000 |
| To Factory Overheads | 4,50,000 | (1,230 units) | |
| To Admn. Overheads | 2,60,000 | Work-in-Process | 70,000 |
| To S&D Overheads | 1,80,000 | | |
| To Goodwill written off | 2,00,000 | | |
| To Interest on loan | 20,000 | | |
| To Net Profit | 1,10,000 | | |
| | 27,20,000 | | 27,20,000 |

Cost Sheet

| | (₹) |
|---|------------------|
| Materials | 10,00,000 |
| Wages | 5,00,000 |
| Direct Expenses | Nil |
| Prime Cost | 15,00,000 |
| Add: Factory overhead @ 100% of wages | 5,00,000 |
| Gross Factory Cost | 20,00,000 |
| Less: Closing WIP | (70,000) |
| Factory Cost of (20,000 + 1,230) units | 19,30,000 |
| Add: Admn. Overhead @ 10% of Factory cost | 1,93,000 |
| | 21,23,000 |
| Less: Closing Stock of finished goods (1,230 units) | (1,23,000)* |
| Cost of Goods sold (20,000 units) | 20,00,000 |
| Add: Selling & Dist. Overhead @ ₹ 10 per unit | 2,00,000 |
| Cost of sales (20,000 units) | 22,00,000 |
| Sales of 20,000 units | 25,00,000 |
| Profit | 3,00,000 |

* (₹21,23,000 × 1,230 units/ 21,230 units)

Reconciliation Statement

| | (₹) | (₹) |
|---|----------|-----------------|
| Profit as per Cost Accounts | | 3,00,000 |
| Add: Factory overheads over-absorbed (₹ 5,00,000 – ₹ 4,50,000) | 50,000 | |
| Selling & Dist. Overhead over-absorbed (₹ 2,00,000 – ₹ 1,80,000) | 20,000 | |
| Difference in the valuation of closing stock of finished goods (₹ 1,50,000 – ₹ 1,23,000) | 27,000 | 97,000 |
| | | 3,97,000 |
| Less: Admn. overhead under-absorbed (₹ 2,60,000 – ₹ 1,93,000) | 67,000 | |
| Goodwill written off | 2,00,000 | |
| Interest on loan | 20,000 | 2,87,000 |
| Profit as per financial accounts | | 1,10,000 |

ILLUSTRATION 7

Following are the figures extracted from the Cost Ledger of a manufacturing unit.

| | (₹) |
|--|----------|
| <i>Stores:</i> | |
| Opening balance | 15,000 |
| Purchases | 80,000 |
| Transfer from WIP | 40,000 |
| Issue to WIP | 80,000 |
| Issue to repairs and maintenance | 10,000 |
| Sold as a special case at cost | 5,000 |
| Shortage in the year | 3,000 |
| <i>Work-in-Process:</i> | |
| Opening inventory | 30,000 |
| Direct labour cost charged | 30,000 |
| Overhead cost charged | 1,20,000 |
| Closing Balance | 20,000 |
| <i>Finished Products:</i> | |
| Entire output is sold at 10% profit on actual cost from work-in-process. | |
| <i>Others:</i> | |
| Wages for the period | 35,000 |
| Overhead Expenses | 1,25,000 |

ASCERTAIN the profit or loss as per financial account and cost accounts and reconcile them.

SOLUTION

Stores Ledger Control A/c

| | (₹) | | (₹) |
|--|--------|--|--------|
| To Balance b/d | 15,000 | By Work-in-process Control A/c (Issued to WIP) | 80,000 |
| To Cost Ledger Control A/c (Purchases) | 80,000 | By Overhead Control A/c (Issued for repairs) | 10,000 |

| | | | |
|---|----------|--|----------|
| To Work-in-process Control A/c (Return from WIP) | 40,000 | By Cost Ledger Control A/c (Sold at cost) | 5,000 |
| | | By Overheads Control A/c* (Shortages) | 3,000 |
| | | By Balance c/d | 37,000 |
| | 1,35,000 | | 1,35,000 |

* Assumed normal

Wages Control A/c

| | (₹) | | (₹) |
|----------------------------|--------|--------------------------------|--------|
| To Cost Ledger Control A/c | 35,000 | By Work-in-process Control A/c | 30,000 |
| | | By Overhead Control A/c | 5,000 |
| | 35,000 | | 35,000 |

Overhead Control A/c

| | (₹) | | (₹) |
|------------------------------|----------|--------------------------------|----------|
| To Stores Ledger Control A/c | 10,000 | By Work-in-process Control A/c | 1,20,000 |
| To Stores Ledger Control A/c | 3,000 | | |
| To Cost Ledger Control A/c | 1,25,000 | | |
| To Wages Control A/c | 5,000 | By Balance c/d | 23,000 |
| | 1,43,000 | | 1,43,000 |

WIP Control A/c

| | (₹) | | (₹) |
|------------------------------|----------|-------------------------------|-----------|
| To Balance b/d | 30,000 | By Stores Ledger Control A/c | 40,000 |
| To Stores Ledger Control A/c | 80,000 | By Finished goods Control A/c | 2,00,000* |
| To Wages Control A/c | 30,000 | | |
| To Overheads Control A/c | 1,20,000 | By Balance c/d | 20,000 |
| | 2,60,000 | | 2,60,000 |

* Finished output at cost 2,00,000

Profit at 10% on actual cost from WIP Sales 20,000
2,20,000

Statement of Profit as per Costing Records

| | (₹) |
|--|-----------------|
| Direct material Cost (₹80,000 – ₹40,000) | 40,000 |
| Direct wages | 30,000 |
| Prime Cost | 70,000 |
| Production Overheads | 1,20,000 |
| Works Cost | 1,90,000 |
| Add: Opening WIP | 30,000 |
| | 2,20,000 |
| Less: Closing WIP | (20,000) |
| Cost of finished goods | 2,00,000 |
| Profit (10% of cost) | 20,000 |
| Sales | 2,20,000 |

Profit & Loss A/c

| | (₹) | | (₹) |
|---|-----------------|----------------------------------|-----------------|
| To Material (Op. bal. + Purchases - Sale) | 90,000 | By Sales A/c | 2,20,000 |
| To Opening WIP | 30,000 | By Closing WIP | 20,000 |
| To Wages for the period | 35,000 | By Closing stock of Raw Material | 37,000 |
| To Overheads expenses | 1,25,000 | By Net loss | 3,000 |
| | 2,80,000 | | 2,80,000 |

Reconciliation Statement

| | (₹) |
|---|----------------|
| Profit (loss) as per Financial Accounts | (3,000) |
| Add: Overheads over absorbed (refer Overhead control A/c) | 23,000 |
| Net Profit as per Cost Accounts | 20,000 |

ILLUSTRATION 8

The following figures have been extracted from the Financial Accounts of a manufacturing firm for the first year of its operation:

| | (₹) |
|------------------------------------|-------------|
| Direct Material Consumption | 50,00,000 |
| Direct Wages | 30,00,000 |
| Factory Overheads | 16,00,000 |
| General administrative overheads | 7,00,000 |
| Selling and Distribution Overheads | 9,60,000 |
| Bad debts | 80,000 |
| Preliminary expenses written off | 40,000 |
| Legal charges | 10,000 |
| Dividends received | 1,00,000 |
| Interest received on deposits | 20,000 |
| Sales (1,20,000 units) | 1,20,00,000 |
| Closing stock: | |
| Finished goods (4,000 units) | 3,20,000 |
| Work-in-Process | 2,40,000 |

The cost accounts for the same period reveal that the direct material consumption was ₹ 56,00,000. Factory overhead is recovered at 20% on prime cost. Administration overhead is recovered at ₹ 6 per unit of goods sold. Selling and distribution overheads are recovered at ₹ 8 per unit sold.

PREPARE the Profit and Loss Accounts both as per financial records and as per cost records. RECONCILE the profits as per the two records.

SOLUTION**Profit and Loss Account**

(As per financial records)

| | (₹) | | (₹) |
|----------------------|-----------|---------------------------|-------------|
| To Direct Material | 50,00,000 | By Sales (1,20,000 units) | 1,20,00,000 |
| To Direct Wages | 30,00,000 | By Closing Stock | |
| To Factory Overheads | 16,00,000 | By Work-in-process | 2,40,000 |

| | | | | |
|----|--|------------------|---------------------------------|-------------------|
| To | Gross Profit c/d | 29,60,000 | Finished Goods (4,000 units) | 3,20,000 |
| | | 1,25,60,000 | | 1,25,60,000 |
| To | General Administrative Overheads | 7,00,000 | By | Gross Profit b/d |
| To | Selling and Dist. OH | 9,60,000 | By | Dividend received |
| To | Bad debts | 80,000 | By | Interest received |
| To | Preliminary Expenses written off | 40,000 | | |
| To | Legal Charges | 10,000 | | |
| To | Net Profit | 12,90,000 | | |
| | | 30,80,000 | | 30,80,000 |

Statement of Cost and Profit

(As per Cost Records)

| | Total (₹) |
|--|--------------------|
| Direct Material | 56,00,000 |
| Direct Wages | 30,00,000 |
| Prime Cost | 86,00,000 |
| Factory Overhead (20% of ₹86,00,000) | 17,20,000 |
| | 1,03,20,000 |
| Less: Closing Stock (WIP) | (2,40,000) |
| Works Cost or Cost of production (1,24,000 units) | 1,00,80,000 |
| Less: Finished Goods (4,000 units @ ₹81.29) | (3,25,160) |
| Cost of goods sold (1,20,000 units) | 97,54,840 |
| Administrative overhead (1,20,000 units @ ₹ 6 p.u.) | 7,20,000 |
| Selling and Distribution Overhead (1,20,000 @ ₹ 8 p.u.) | 9,60,000 |
| Cost of Sales | 1,14,34,840 |
| Net profit (Balancing figure) | 5,65,160 |
| Sales Revenue | 1,20,00,000 |

Statement of Reconciliation of profit as obtained under Cost and Financial Accounts

| | (₹) | Total (₹) |
|---|----------|------------------|
| Profit as per Cost Records | | 5,65,160 |
| <i>Add:</i> Excess of Material Consumption | 6,00,000 | |
| Factory Overhead | 1,20,000 | |
| Administrative Overhead | 20,000 | |
| Dividend Received | 1,00,000 | |
| Interest Received | 20,000 | 8,60,000 |
| | | 14,25,160 |
| <i>Less:</i> Bad debts | 80,000 | |
| Preliminary expenses written off | 40,000 | |
| Legal Charges | 10,000 | |
| Over-valuation of stock in cost book (₹ 3,25,160 – ₹ 3,20,000) | 5,160 | (1,35,160) |
| Profit as per Financial Records | | 12,90,000 |

7.5 ACCOUNTING FOR MANAGEMENT INFORMATION AND COST CONTROL

With a view to control costs, standard cost for each element of cost is set. The standard costs so set are used to measure and compare the actual costs. This enables the management to trace cost variances from the standard cost. The variances so obtained are analysed and necessary actions are taken. This ensures that standard costs are adhered.

For cost control purpose, the management needs specific accounting system which fulfils the management objective of controlling costs. On the basis of timing of variance analysis, **two main types of management accounting systems are followed:**

(I) SINGLE PLAN:

Under this system of management accounting, the variances in costs from the set standards are reported at its happenings without waiting for books closing. Timely analysis is done so that much time is not lost in taking corrective action wherever needed.

The single plan system envisages the posting of all items in the debit side of the work-in-process account at the standard cost leaving the credit side to represent

the standard cost of finished production and work-in-progress.

This system enables the **ascertainment of variances as and when the transaction is posted to work-in-process account**. In other words, the analysis of variances is done from the original documents like invoices, labour sheets, etc., and this method of analysis is known as **analysis at source**.

Since, the single plan system contemplates the analysis of variances at source, the installation of this system requires more planning so that effective documentation at each stage is introduced for proper recording and analysis of variance.

Thus for example, the issue of bill of materials to the stores enables the storekeeper to calculate the standard value of materials. If any material is requisitioned beyond the standard, he can mark the same for material usage variance account. In the production department, as and when the finished output is recorded, the standard waste and actual waste can be compared and necessary entries can be made by the shop supervisors for posting the excessive usage to appropriate variance accounts.

Scheme of entries: So far as materials are concerned, **material price variances are recorded at the time of receipt of the material and the material quantity variances are recorded as far as possible when excess materials are used**. The entries will be as illustrated below:

1. Material Control A/cDr.
 Material Price Variance A/cDr.
 (Actual Cost > Standard Cost)
 To Creditors/ Cost Ledger Control A/c.
 To Material Price Variance A/c
 (Actual Cost < Standard Cost)

This entry enables the firm to debit the material control account with the actual purchases at standard cost and credit the creditor's account at the actual cost of actual prices thereby transferring the variances to price variance account.

2. Work-in-process Control A/cDr.
 Material Usage Variances A/c.....Dr.
 (Actual usage > Standard usage)
 To Material Control A/c

To Material Usage Variances A/c

(Actual usage < Standard usage)

This entry charges the work-in-progress control account with the standard cost of standard quantity and credit the material control account at the standard cost of actual issue, the variance being transferred to usage variance account.

3. Wages Control A/cDr.

Labour Rate Variances A/cDr.

(Actual wage rate > Standard wage rate)

To Cash (or Bank) / Cost Ledger Control A/c

To Labour Rate Variances A/c

(Actual wage rate < Standard wage rate)

This entry is passed to record the wages at standard rate thereby transferring rate variances to the appropriate account.

4. Work-in-process Control A/cDr.

Overhead Expense Variances A/cDr.

(Actual OH > Standard OH)

To Overhead Expense Control A/c.

To Overhead Expense Variances A/c

(Actual OH < Standard OH)

(II) PARTIAL PLAN:

In the partial plan, **variances are analysed at the end of period**. Under this method the work-in-process account is charged at the actual cost of production for the period and is credited with the standard cost of the period's production of finished product.

The **closing balance of work-in-process** is also shown at **standard cost**. The balance after making the credit entries represents the variance from standard for the period. The analysis of the variances is done after the end of the period. This method is simple in operation because variances are analysed after the end of period but may present difficulties if the firm makes a variety of products.

Recapitulation:

(1) Current standards are used in both the systems.

- (2) Under the partial plan, material stocks are carried at actual cost whereas the same are carried out at standard cost under the single plan.
- (3) The work-in-process and finished goods are valued at standard cost under both the methods.
- (4) **Computation of variances :**
 - (a) *In partial plan*, material price variance is computed on material used in finished goods and work-in-process whereas *in single plan* it is computed on the material quantity purchased.
 - (b) The *partial plan* is suitable where simple analysis of variance is sufficient at the end of the period whereas the *single plan* is preferred if frequent detailed analysis of variance is desired, as (a) the comparison of actual with standard cost of each operation or operator or (b) the daily reporting of standard cost of excess material used.

SUMMARY

- ◆ **Cost Control Accounts:** These are accounts maintained for the purpose of exercising control over the costing ledgers and also to complete the double entry in cost accounts.
- ◆ **Integral System of Accounting:** A system of accounting where both costing and financial transactions are recorded in the same set of books.
- ◆ **Non- Integral System of Accounting:** A system of accounting where two sets of books are maintained- (i) for costing transactions; and (ii) for financial transactions
- ◆ **Reconciliation:** In the Non-Integral System of Accounting, since the cost and financial accounts are kept separately, it is imperative that those should be reconciled; otherwise the cost accounts would not be reliable. The reason for differences in the cost & financial accounts can be of purely financial nature (Income and expenses) and notional nature.
- ◆ **On the basis of timing of variance analysis:**
 - **Single Plan-** Under this system of management accounting, the variances in costs from the set standards are reported at its happenings without waiting for books closing.
 - **Partial Plan-** In this pan, variances are analysed at the end of period.

TEST YOUR KNOWLEDGE

MCQS BASED QUESTIONS

1. Under the Non-integrated accounting system
 - (a) Same ledger is maintained for cost and financial accounts by accountants
 - (b) Separate ledgers are maintained for cost and financial accounts
 - (c) (a) and (b) both
 - (d) None of the above
2. Notional costs
 - (a) May be included in Integrated accounts
 - (b) May be included in Non- integrated accounts
 - (c) Cannot be included in Non-integrated accounts
 - (d) None of the above
3. Under Non-integrated accounting system, the account made to complete double entry is
 - (a) Stores ledger control account
 - (b) Work in progress control account
 - (c) Finished goods control account
 - (d) General ledger adjustment account
4. Integrated systems of accounts are maintained
 - (a) In separate books of accounts for costing and financial accounting purposes
 - (b) In same books of accounts
 - (c) Both (a) & (b)
 - (d) None of the above
5. Under Non-integrated system of accounting, purchase of raw material is debited to which account
 - (a) Material control account / stores ledger control account
 - (b) General ledger adjustment account

- (c) Purchase account
 - (d) None of the above
6. Under Non-integrated accounts, if materials worth ₹ 1,500 are purchased for a special job, then which account will be debited:
- (a) Special job account / work in process account
 - (b) Material control account
 - (c) Cost control account
 - (d) None of the above
7. Which account is to be debited if materials worth ₹ 500 are returned to vendor under Non-integrated accounts:
- (a) Cost ledger control account
 - (b) Finished goods control account
 - (c) WIP control account
 - (d) None of the above
8. Which of the following items is included in cost accounts?
- (a) Notional rent
 - (b) Donations
 - (c) Transfer to general reserve
 - (d) Rent receivable
9. When costing loss is ₹ 5,600, administrative overhead under-absorbed being ₹ 600, the loss as per financial accounts should be
- (a) ₹ 5,600
 - (b) ₹ 6,200
 - (c) ₹ 5,000
 - (d) None of the above
10. Which of the following items should be added to costing profit to arrive at financial profit?
- (a) Over-absorption of works overhead
 - (b) Interest paid on debentures

- (c) Income tax paid
- (d) All of the above

Theoretical Questions

1. EXPLAIN what are the essential pre-requisites of Integrated accounting system?
2. STATE what are the advantages of Integrated accounting?
3. EXPLAIN why is it necessary to reconcile the Profits between the Cost Accounts and Financial Accounts?
4. STATE what are the reasons for disagreement of profits as per cost accounts and financial accounts? Discuss.
5. LIST the Financial expenses which are not included in cost.
6. STATE when is the reconciliation statement of Cost and Financial accounts not required?

Practical Problems

1. The following incomplete accounts are furnished to you for the month ended 31st October, 2021.

Stores Ledger Control Account

1.10.2021 To Balance ₹ 54,000

Work in Process Control Account

1.10. 2021 To Balance ₹ 6,000

Finished Goods Control Account

1.10. 2021 To Balance ₹ 75,000

Factory Overheads Control Account

Total debits for October, 2021 ₹ 45,000

Factory Overheads Applied Account

Cost of Goods Sold Account

Creditors for Purchases Account

1.10. 2021 By Balance ₹ 30,000

Additional information:

- (i) The factory overheads are applied by using a budgeted rate based on direct labour hours. The budget for overheads for 2021 is ₹ 6,75,000 and the budget of direct labour hours is 4,50,000.
- (ii) The balance in the account of creditors for purchases on 31.10.2021 is ₹ 15,000 and the payments made to creditors in October, 2021 amount to ₹ 1,05,000.
- (iii) The finished goods inventory as on 31st October, 2021 is ₹ 66,000.
- (iv) The cost of goods sold during the month was ₹ 1,95,000.
- (v) On 31st October, 2021 there was only one unfinished job in the factory. The cost records show that ₹ 3,000 (1,200 direct labour hours) of direct labour cost and ₹ 6,000 of direct material cost had been charged.
- (vi) A total of 28,200 direct labour hours were worked in October, 2021. All factory workers earn same rate of pay.
- (vii) All actual factory overheads incurred in October, 2021 have been posted.

You are required to FIND:

- (a) Materials purchased during October, 2021.
 - (b) Cost of goods completed in October, 2021.
 - (c) Overheads applied to production in October, 2021.
 - (d) Balance of Work-in-process Control A/c on 31st October, 2021.
 - (e) Direct materials consumed during October, 2021.
 - (f) Balance of Stores Ledger Control Account on 31st October, 2021.
 - (g) Over absorbed or under absorbed overheads for October, 2021.
2. A company operates on historic job cost accounting system, which is not integrated with the financial accounts. At the beginning of a month, the opening balances in cost ledger were:

| | <i>(₹ in lakhs)</i> |
|---------------------------------|---------------------|
| Stores Ledger Control Account | 80 |
| Work-in-Process Control Account | 20 |
| Finished Goods Control Account | 430 |

| | |
|-------------------------------|-----|
| Building Construction Account | 10 |
| Cost Ledger Control Account | 540 |

During the month, the following transactions took place:

| | | (Amounts in lakh) |
|--|-----------------------------------|-------------------|
| Materials | – Purchased | 40 |
| | Issued to production | 50 |
| | Issued to factory maintenance | 6 |
| | Issued to building construction | 4 |
| Wages | – Gross wages paid | 150 |
| | Indirect wages | 40 |
| | For building construction | 10 |
| Works Overheads | – Actual amount incurred | 160 |
| | (excluding items shown above) | |
| | Absorbed in building construction | 20 |
| | Under absorbed | 8 |
| Royalty paid | (related to production) | 5 |
| Selling, distribution and administration overheads | | 25 |
| Sales | | 450 |

At the end of the month, the stock of raw material and work-in-Process was ₹ 55 lakhs and ₹ 25 lakhs respectively. The loss arising in the raw material accounts is treated as factory overheads. The building under construction was completed during the month. Company's gross profit margin is 20% on sales.

PREPARE the relevant control accounts to record the above transactions in the cost ledger of the company.

3. Dutta Enterprises operates an Integral system of accounting. You are required to PASS the Journal Entries for the following transactions that took place for the year ended 31st March.

(Narrations are not required.)

| | (₹) |
|---|----------|
| Raw materials purchased (50% on Credit) | 6,00,000 |
| Materials issued to production | 4,00,000 |
| Wages paid (50% Direct) | 2,00,000 |
| Wages charged to production | 1,00,000 |

| | |
|---|----------|
| Factory overheads incurred | 80,000 |
| Factory overheads charged to production | 1,00,000 |
| Selling and distribution overheads incurred | 40,000 |
| Finished goods at cost | 5,00,000 |
| Sales (50% Credit) | 7,50,000 |
| Closing stock | Nil |
| Receipts from debtors | 2,00,000 |
| Payments to creditors | 2,00,000 |

4. The following figures are extracted from the Trial Balance of Go-getter Co. on 31st March:

| | Dr. | Cr. |
|---|----------|----------|
| | (₹) | (₹) |
| Inventories: | | |
| Finished Stock | 80,000 | |
| Raw Materials | 1,40,000 | |
| Work-in-Process | 2,00,000 | |
| Office Appliances | 17,400 | |
| Plant & Machinery | 4,60,500 | |
| Building | 2,00,000 | |
| Sales | | 7,68,000 |
| Sales Return and Rebates | 14,000 | |
| Materials Purchased | 3,20,000 | |
| Freight incurred on Materials | 16,000 | |
| Purchase Returns | | 4,800 |
| Direct employee cost | 1,60,000 | |
| Indirect employee cost | 18,000 | |
| Factory Supervision | 10,000 | |
| Repairs and factory up-keeping expenses | 14,000 | |
| Heat, Light and Power | 65,000 | |

| | | |
|---|--------|--|
| Rates and Taxes | 6,300 | |
| Miscellaneous Factory Expenses | 18,700 | |
| Sales Commission | 33,600 | |
| Sales Travelling | 11,000 | |
| Sales Promotion | 22,500 | |
| Distribution Deptt.—Salaries and Expenses | 18,000 | |
| Office Salaries and Expenses | 8,600 | |
| Interest on Borrowed Funds | 2,000 | |

Further details are available as follows:

- (i) Closing Inventories:
- | | |
|-----------------|----------|
| Finished Goods | 1,15,000 |
| Raw Materials | 1,80,000 |
| Work-in-Process | 1,92,000 |
- (ii) Outstanding expenses on:
- | | |
|----------------------------|-------|
| Direct employee cost | 8,000 |
| Indirect employee cost | 1,200 |
| Interest on Borrowed Funds | 2,000 |
- (iii) Depreciation to be provided on:
- | | |
|---------------------|-----|
| Office Appliances | 5% |
| Plant and Machinery | 10% |
| Buildings | 4% |
- (iv) Distribution of the following costs:
- Heat, Light and Power to Factory, Office and Distribution in the ratio 8 : 1 : 1.
- Rates and Taxes two-thirds to Factory and one-third to Office.
- Depreciation on Buildings to Factory, Office and Selling in the ratio 8 : 1 : 1.

With the help of the above information, you are required to PREPARE a condensed Profit and Loss Statement of Go-getter Co. for the year ended 31st March along with supporting schedules of:

- (i) Cost of Sales.

- (ii) Selling and Distribution Expenses.
- (iii) Administration Expenses.
5. The following information is available from the financial books of a company having a normal production capacity of 60,000 units for the year ended 31st March:
- (i) Sales ₹ 10,00,000 (50,000 units).
- (ii) There was no opening and closing stock of finished units.
- (iii) Direct material and direct wages cost were ₹ 5,00,000 and ₹ 2,50,000 respectively.
- (iv) Actual factory expenses were ₹ 1,50,000 of which 60% are fixed.
- (v) Actual administrative expenses related with production activities were ₹ 45,000 which are completely fixed.
- (vi) Actual selling and distribution expenses were ₹ 30,000 of which 40% are fixed.
- (vii) Interest and dividends received ₹ 15,000.
- You are required to:
- (a) FIND OUT profit as per financial books for the year ended 31st March;
- (b) PREPARE the cost sheet and ascertain the profit as per cost accounts for the year ended 31st March assuming that the indirect expenses are absorbed on the basis of normal production capacity; and
- (c) PREPARE a statement reconciling profits shown by financial and cost books.
6. M/s. H.K. Piano Company showed a net loss of ₹ 4,16,000 as per their financial accounts for the year ended 31st March. The cost accounts, however, disclosed a net loss of ₹ 3,28,000 for the same period. The following information was revealed as a result of scrutiny of the figures of both the sets of books:

| | (₹) |
|--|----------|
| (i) Factory overheads under-recovered | 6,000 |
| (ii) Administration overheads over-recovered | 4,000 |
| (iii) Depreciation charged in financial accounts | 1,20,000 |
| (iv) Depreciation recovered in costs | 1,30,000 |

| | |
|--|----------|
| (v) Interest on investment not included in costs | 20,000 |
| (vi) Income-tax provided | 1,20,000 |
| (vii) Transfer fees (credit in financial books) | 2,000 |
| (viii) Stores adjustment (credit in financial books) | 2,000 |

PREPARE a Memorandum reconciliation account.

ANSWERS/ SOLUTIONS

Answers to the MCQs Based Questions

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

Answers to the Theoretical Questions

- Please refer paragraph 7.3
- Please refer paragraph 7.3
- Please refer paragraph 7.4
- Please refer paragraph 7.4
- Please refer paragraph 7.4
- Please refer paragraph 7.4
- Please refer paragraph 7.4

Answer to the Practical Problems

1. Working Notes:

- (i) Overhead recovery rate per direct labour hour:

Budgeted factory overheads : ₹ 6,75,000

Budgeted direct labour hours : 4,50,000

$$\begin{aligned} \text{Overhead recovery rate} &= \frac{\text{Budgeted factory overheads}}{\text{Budgeted direct labour hours}} \\ &= \frac{\text{₹ 6,75,000}}{4,50,000 \text{ hours}} \\ &= \text{₹ 1.50 per direct labour} \end{aligned}$$

(ii) Direct wage rate per hour:

Direct labour cost of WIP : ₹ 3,000

(on 31st October 2021)

Direct labour hours of WIP : 1,200 hours

Direct wage rate per hour = $\frac{\text{Direct labour cost on WIP}}{\text{Direct labour hours on WIP}}$

$$= \frac{\text{₹ 3,000}}{1,200 \text{ hours}} = \text{₹ 2.50}$$

(iii) Total direct wages charged to production:

Total direct labour hours spent on production × Direct wage rate per hour

$$= 28,200 \text{ hours} \times \text{₹ 2.50} = \text{₹ 70,500}$$

(a) **Material purchased during October, 2021**

| | (₹) |
|---|---------------|
| Payment made to creditors | 1,05,000 |
| Add: Closing balance in the account of creditors for purchase | 15,000 |
| Less: Opening balance | (30,000) |
| Material Purchased | 90,000 |

(b) **Cost of finished goods in October, 2021**

| | (₹) |
|---|-----------------|
| Cost of goods sold during the month | 1,95,000 |
| Add: Closing finished goods inventory | 66,000 |
| Less: Opening finished goods inventory | (75,000) |
| Cost of goods completed during the month | 1,86,000 |

(c) **Overhead applied to production in October, 2021**

$$= 28,200 \text{ hours} \times \text{₹ 1.50} = \text{₹ 42,300}$$

(d) Balance of Work-in-Process on 31st October, 2021

| | (₹) |
|----------------------------------|---------------|
| Direct material cost | 6,000 |
| Direct labour cost | 3,000 |
| Overheads (₹ 1.50 × 1,200 hours) | 1,800 |
| | 10,800 |

(e) Direct material consumed during October, 2021 = ₹ 78,000*(Refer to following Accounts)***Work in Process Control A/c**

| | | (₹) | | | (₹) |
|----|---|----------|----|---|----------|
| To | Balance b/d | 6,000 | By | Finished goods control A/c [Refer (b) above] | 1,86,000 |
| To | Wages Control A/c [Refer working note (iii)] | 70,500 | By | Balance c/d [Refer (d) above] | 10,800 |
| To | Factory OH Control A/c [Refer (c) above] | 42,300 | | | |
| To | Material consumed (Balancing fig.) | 78,000 | | | |
| | | | | | |
| | | 1,96,800 | | | 1,96,800 |

(f) Balance of Stores Control Account on 31st October, 2021 = ₹ 66,000*(Refer to following Account)***Stores Ledger Control Account**

| | | (₹) | | | (₹) |
|----|---|----------|----|--|----------|
| To | Balance b/d | 54,000 | By | Work-in-process Control A/c [Refer (e) above] | 78,000 |
| To | Payables(Creditors) A/c [Refer (a) above] | 90,000 | By | Balance c/d (Balancing fig.) | 66,000 |
| | | 1,44,000 | | | 1,44,000 |

- (g) **Over-absorbed or under-absorbed overheads for October, 2021:**
Balance in Factory Overhead Account below showing that ₹ 2,700 is under-absorbed.

Factory Overhead Account

| | | (₹) | | | (₹) |
|----|----------|--------|----|--|--------|
| To | Bank A/c | 45,000 | By | Work-in-process Control A/c (Factory OH applied) | 42,300 |
| | | | By | Costing P/L A/c (Under-absorbed) | 2,700 |
| | | 45,000 | | | 45,000 |

2.

Amount (₹ in lakhs)

Cost Ledger Control A/c

| | | (₹) | | | (₹) |
|----|---------------------------|-----|----|---------------------------|-----|
| To | Costing P&L A/c | 450 | By | Balance b/d | 540 |
| To | Building Construction A/c | 44 | By | Stores Ledger Control A/c | 40 |
| To | Balance c/d | 483 | By | Wages Control A/c | 150 |
| | | | By | Works OH Control A/c | 160 |
| | | | By | Royalty A/c | 5 |
| | | | By | Admn. OH and S&D OH A/c | 25 |
| | | | By | Costing P&L A/c | 57 |
| | | 977 | | | 977 |

Stores Ledger Control A/c

| | | (₹) | | | (₹) |
|----|-------------------------|-----|----|---|-----|
| To | Balance b/d | 80 | By | Work-in-process A/c | 50 |
| To | Cost Ledger Control A/c | 40 | By | Works OH Control A/c | 6 |
| | | | By | Building Const. A/c | 4 |
| | | | By | Works OH Control A/c (Bal. fig.) (loss) | 5 |
| | | | By | Balance c/d | 55 |
| | | 120 | | | 120 |

Wages Control A/c

| | | (₹) | | | (₹) |
|----|-------------------------|-----|----|---|-----|
| To | Cost Ledger Control A/c | 150 | By | Works OH Control A/c | 40 |
| | | | By | Building Const. A/c | 10 |
| | | | By | Work-in-process Control A/c (Balancing figure) | 100 |
| | | | | | |
| | | 150 | | | 150 |

Works Overhead Control A/c

| | | (₹) | | | (₹) |
|----|------------------------------------|-----|----|---|-----|
| To | Stores Ledger Control A/c | 6 | By | Building Const. A/c | 20 |
| To | Wages Control A/c | 40 | By | Work-in-process Control A/c (Balancing figure) | 183 |
| To | Cost Ledger Control A/c | 160 | By | Costing P&L A/c (under-absorption) | 8 |
| To | Store Ledger Control A/c (loss) | 5 | | | |
| | | 211 | | | 211 |

Royalty A/c

| | | (₹) | | | (₹) |
|----|-------------------------|-----|----|-----------------------------|-----|
| To | Cost Ledger Control A/c | 5 | By | Work-in-process Control A/c | 5 |
| | | 5 | | | 5 |

Work-in-Process Control A/c

| | | (₹) | | | (₹) |
|----|---------------------------|-----|----|--|-----|
| To | Balance b/d | 20 | By | Finished Goods Control A/c (Balancing figure) | 333 |
| To | Stores Ledger Control A/c | 50 | | | |
| To | Wages Control A/c | 100 | | | |
| To | Works OH Control A/c | 183 | | | |
| To | Royalty A/c | 5 | By | Balance c/d | 25 |
| | | 358 | | | 358 |

Finished Goods Control A/c

| | | (₹) | | | (₹) |
|----|-----------------------------|-----|----|--|-----|
| To | Balance b/d | 430 | By | Cost of Goods Sold A/c (80% of ₹ 450) | 360 |
| To | Work-in-process Control A/c | 333 | By | Balance c/d | 403 |
| | | 763 | | | 763 |

Cost of Goods Sold A/c

| | | (₹) | | | (₹) |
|----|----------------------------|-----|----|-------------------|-----|
| To | Finished Goods Control A/c | 360 | By | Cost of sales A/c | 360 |
| | | 360 | | | 360 |

Selling, Distribution and Administration Overhead A/c

| | | (₹) | | | (₹) |
|----|-------------------------|-----|----|-------------------|-----|
| To | Cost Ledger Control A/c | 25 | By | Cost of sales A/c | 25 |
| | | 25 | | | 25 |

Cost of Sales A/c

| | | (₹) | | | (₹) |
|----|-------------------------|-----|----|-----------------|-----|
| To | Cost of Goods Sold | 360 | By | Costing P&L A/c | 385 |
| To | Admn. OH and S&D OH A/c | 25 | | | |
| | | 385 | | | 385 |

Costing P & L A/c

| | | (₹) | | | (₹) |
|----|---|-----|----|---------------------------------|-----|
| To | Cost of Sales A/c | 385 | By | Cost Ledger Control A/c (Sales) | 450 |
| To | Works Overhead Control A/c | 8 | | | |
| To | Cost Ledger Control A/c (Profit) (Balancing figure) | 57 | | | |
| | | 450 | | | 450 |

Building Construction A/c

| | | (₹) | | | (₹) |
|----|---------------------------|-----|----|-------------------------|-----|
| To | Balance b/d | 10 | By | Cost Ledger Control A/c | 44 |
| To | Stores Ledger Control A/c | 4 | | | |
| To | Wages Control A/c | 10 | | | |
| To | Works OH Control A/c | 20 | | | |
| | | 44 | | | 44 |

Trial Balance*(₹ in lakhs)*

| | DR. (₹) | CR. (₹) |
|----------------------------|------------|------------|
| Stores control A/c | 55 | |
| Work-in-Process A/c | 25 | |
| Finished goods A/c | 403 | |
| Cost Ledger Adjustment A/c | | 483 |
| | 483 | 483 |

3. Journal entries are as follows:

| | | DR. (₹) | CR. (₹) |
|-----------------------------------|-----|----------|----------|
| Stores Ledger Control A/c..... | Dr. | 6,00,000 | |
| To Payables (Creditors) A/c | | | 3,00,000 |
| To Cash or Bank | | | 3,00,000 |
| Work-in-Process Control A/c..... | Dr. | 4,00,000 | |
| To Stores Ledger Control A/c | | | 4,00,000 |
| Wages Control A/c..... | Dr. | 2,00,000 | |
| To Bank A/c | | | 2,00,000 |
| Factory Overhead Control A/c..... | Dr. | 1,00,000 | |
| To Wages Control A/c | | | 1,00,000 |
| Work-in-Process Control A/c..... | Dr. | 1,00,000 | |
| To Wages Control A/c | | | 1,00,000 |
| Factory Overhead Control A/c..... | Dr. | 80,000 | |
| To Bank A/c | | | 80,000 |

| | | | |
|--|------------|----------------------|--------------------|
| Work-in-Process Control A/c..... To Factory Overhead Control A/c | Dr. | 1,00,000 | 1,00,000 |
| Selling and Dist. Overhead Control A/c To Bank A/c | Dr. | 40,000 | 40,000 |
| Finished Goods Control A/c..... To Work-in-Process Control A/c | Dr. | 5,00,000 | 5,00,000 |
| Cost of Sales A/c..... To Finished Goods Control A/c To Selling and Distribution Control A/c | Dr. | 5,40,000 | 5,00,000 40,000 |
| Receivables (Debtors) A/c..... Bank or Cash A/c..... To Sales A/c | Dr. Dr. | 3,75,000 3,75,000 | 7,50,000 |
| Bank A/c..... To Receivables (Debtors) A/c | Dr. | 2,00,000 | 2,00,000 |
| Payables (Creditors) A/c..... To Bank A/c | Dr. | 2,00,000 | 2,00,000 |

**4. Profit and Loss Statement of Go-getter Company
for the year ended 31st March**

| | (₹) | (₹) |
|---|----------|---------------|
| Gross Sales | 7,68,000 | |
| Less: Returns and rebates | (14,000) | 7,54,000 |
| Less: Cost of Sales [Refer to Schedule (i)] | | (7,14,020) |
| Net Operating Profit | | 39,980 |
| Less: Interest on borrowed funds (2,000+2,000) | | (4,000) |
| Net Profit | | 35,980 |

(i) Schedule of Cost of Sales

| | (₹) | (₹) |
|--|----------|----------|
| Raw Material (Inventory opening balance) | | 1,40,000 |
| Add: Material Purchased | 3,20,000 | |

| | | |
|--|---------|-----------------|
| Add: Freight on Material | 16,000 | |
| Less: Purchase Returns | (4,800) | 3,31,200 |
| | | 4,71,200 |
| Less: Closing Raw Material Inventory | | (1,80,000) |
| Materials consumed in Production | | 2,91,200 |
| Direct employee cost (₹1,60,000 + ₹8,000) | | 1,68,000 |
| Prime Cost | | 4,59,200 |
| <u>Factory Overheads:</u> | | |
| Indirect employee cost (₹18,000 + ₹1,200) | 19,200 | |
| Factory Supervision | 10,000 | |
| Repairs and factory up-keeping expenses | 14,000 | |
| Heat, Light and Power (₹65,000 × 8/10) | 52,000 | |
| Rates and Taxes (₹6,300 × 2/3 rd) | 4,200 | |
| Miscellaneous Factory Expenses | 18,700 | |
| Depreciation of Plant (10% of ₹4,60,500) | 46,050 | |
| Depreciation of Buildings (4% of ₹2,00,000 × 8/10) | 6,400 | 1,70,550 |
| Gross Works Cost | | 6,29,750 |
| Add: Opening Work-in-Process inventory | | 2,00,000 |
| Less: Closing Work-in-Process inventory | | (1,92,000) |
| Cost of production | | 6,37,750 |
| Add: Opening Finished Goods inventory | | 80,000 |
| Less: Closing Finished Goods inventory | | (1,15,000) |
| Cost of Goods Sold | | 6,02,750 |
| Add: Administration Expenses [See Schedule (iii)] | | 18,870 |
| Add: Selling and Distribution Expenses [See Schedule (ii)] | | 92,400 |
| Cost of Sales | | 7,14,020 |

(ii) **Schedule of Selling and Distribution Expenses**

| | (₹) |
|---|---------------|
| Sales Commission | 33,600 |
| Sales Travelling | 11,000 |
| Sales Promotion | 22,500 |
| Distribution Deptt.—Salaries and Expenses | 18,000 |
| Heat, Light and Power | 6,500 |
| Depreciation of Buildings | 800 |
| | 92,400 |

(iii) **Schedule of Administration Expenses**

| | (₹) |
|-----------------------------------|---------------|
| Office Salaries and Expenses | 8,600 |
| Depreciation of Office Appliances | 870 |
| Depreciation of Buildings | 800 |
| Heat, Light and Power | 6,500 |
| Rates and Taxes | 2,100 |
| | 18,870 |

5. (a)

**Profit & Loss Account
(for the year ended 31st March)**

| | | (₹) | | | (₹) |
|----|--------------------------|----------|----|------------------------|-----------|
| To | Direct Material | 5,00,000 | By | Sales (50,000 units) | 10,00,000 |
| To | Direct Wages | 2,50,000 | By | Interest and dividends | 15,000 |
| To | Factory expenses | 1,50,000 | | | |
| To | Administrative expenses | 45,000 | | | |
| To | Selling & Dist. Expenses | 30,000 | | | |

| | | | | | |
|----|-------------------|---------------|--|--|-----------|
| To | Net Profit | 40,000 | | | |
| | | 10,15,000 | | | 10,15,000 |

(b)

Cost Sheet**(for the year ended 31st March)**

| | (₹) | (₹) |
|---|--------|------------------|
| Direct material | | 5,00,000 |
| Direct wages | | 2,50,000 |
| Prime cost | | 7,50,000 |
| <i>Factory expenses:</i> | | |
| Variable (40% of ₹ 1,50,000) | 60,000 | |
| Fixed (₹ 90,000 × 50,000/60,000) | 75,000 | 1,35,000 |
| Works cost | | 8,85,000 |
| Administrative expenses: (₹ 45,000 × 50,000/60,000) | | 37,500 |
| Cost of production | | 9,22,500 |
| <i>Selling & distribution expenses:</i> | | |
| Variable (60% of ₹ 30,000) | 18,000 | |
| Fixed* (₹ 12,000 × 50,000/60,000) | 10,000 | 28,000 |
| Cost of Sales | | 9,50,500 |
| Profit (Balancing figure) | | 49,500 |
| Sales revenue | | 10,00,000 |

*It is assumed that the company sells what it generally produces i.e. normal production.

(c)

Statement of Reconciliation**(Reconciling profit shown by Financial and Cost Accounts)**

| | (₹) | (₹) |
|---|-----|---------------|
| Profit as per Cost Account | | 49,500 |
| <i>Add : Income from interest and dividends</i> | | 15,000 |
| | | 64,500 |

| | | |
|--|--------|---------------|
| Less: Factory expenses under-charged in Cost Accounts (₹ 1,50,000 – ₹ 1,35,000) | 15,000 | |
| Administrative expenses under-charged in Cost Accounts (₹ 45,000 – ₹ 37,500) | 7,500 | |
| Selling & distribution expenses under—charged in Cost Accounts (₹ 30,000 – ₹ 28,000) | 2,000 | (24,500) |
| Profit as per Financial Accounts | | 40,000 |

6.

Memorandum Reconciliation Account

| | | (₹) | | | (₹) |
|----|--|-----------------|----|--|-----------------|
| To | Net loss as per costing books | 3,28,000 | By | Administration overhead- over-recovered in costs | 4,000 |
| To | Factory overheads under-recovered in costs | 6,000 | By | Depreciation overcharged in costs | 10,000 |
| To | Income-tax not provided in costs | 1,20,000 | By | Interest on investments not included in costs | 20,000 |
| | | | By | Transfer fees in financial books | 2,000 |
| | | | By | Stores adjustment | 2,000 |
| | | | By | Net loss as per financial books | 4,16,000 |
| | | 4,54,000 | | | 4,54,000 |