CHAPTER 7

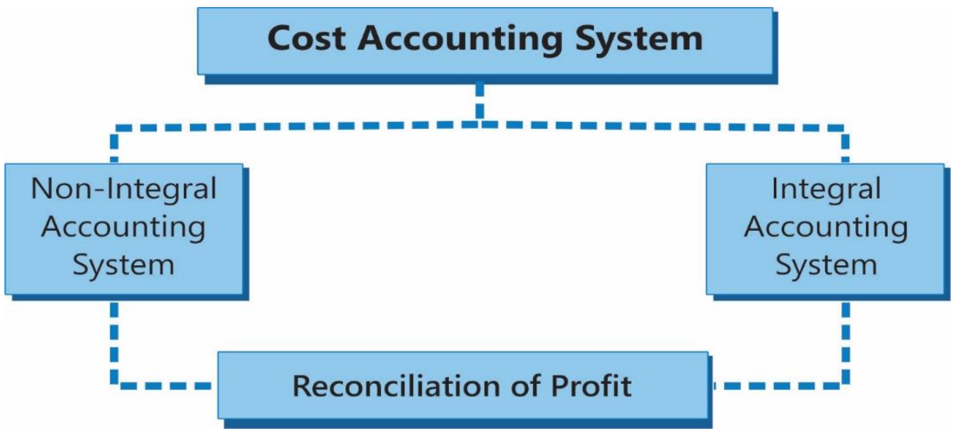
COST ACCOUNTING SYSTEMS

LEARNING OUTCOMES

After studying this chapter, you would be able to-

- 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



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.

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.

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.

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.

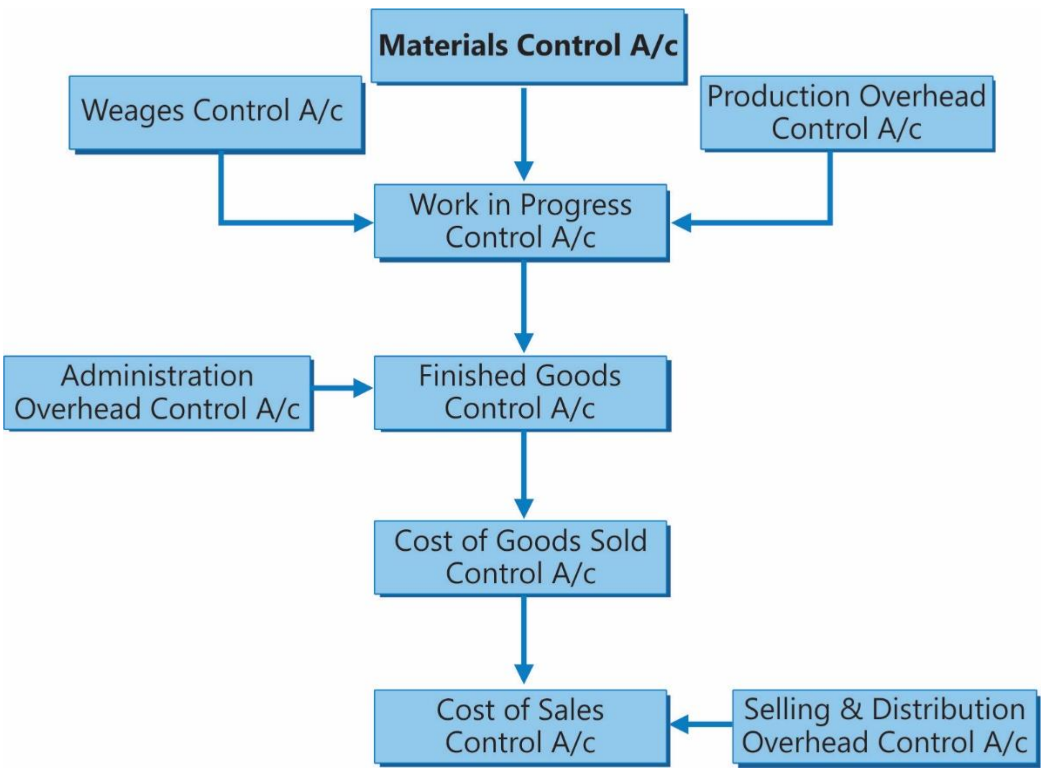
Material:			**(₹)**	**(₹)**
(a)	Purchase–₹ 5,000 (credit or cash)			
	(i) Material Control A/c	Dr.	5,000	
	To Cost Ledger Control A/c			5,000
	(ii) Stores Ledger Control A/c	Dr.	5,000	
	To Material Control A/c			5,000
	Note: Sometimes Material Control Account is dispensed with and entries are directly 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			
	Cost of Sales 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:

	Dr.	Cr.
	(₹)	(₹)
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	Dr.	2,10,835	
	To Work-in-Process Control A/c			2,10,835
2.	Manufacturing Overhead Control A/c	Dr.	91,510	
	To Cost Ledger Control A/c			91,510
3.	Stores Ledger Control A/c	Dr.	1,23,000	
	To Cost Ledger Control A/c			1,23,000
4.	(i) Wage Control A/c	Dr.	72,195	
	To Cost Ledger Control A/c			72,195
	(ii) Work-in-Process Control A/c	Dr.	50,530	
	To Wages Control A/c			50,530
	(iii) Manufacturing Overhead Control A/c	Dr.	21,665	
	To Wages Control A/c			21,665
5.	Cost of Sales A/c	Dr.	1,85,890	
	To Finished Stock Ledger A/c			1,85,890
6.	Work-in-Process Control A/c	Dr.	1,27,315	
	To Stores Ledger Control A/c			1,27,315
7.	Finished Stock Ledger Control A/c	Dr.	5,380	
	To Cost of Sales A/c			5,380
8.	Cost Ledger Control A/c	Dr.	2,900	
	To Stores Ledger Control A/c			2,900
9.	Work-in-Process Control A/c	Dr.	77,200	
	To Manufacturing Overhead Control A/c			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			
"	Material Control A/c	41,200	"	Balance c/d	6,150
		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 A/c (sales)	14,43,000
" Cost Ledger Control A/c (profit) (balancing figure)	3,68,900		
	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**

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.

3.1 Advantages

The main advantages of Integrated Accounts are as follows:

(a) ***No need for Reconciliation***- The question of reconciling costing profit and financial profit does not arise, as there is only one figure of profit.

(b) ***Less efforts***- Due to use of one set of books, there is a significant saving in efforts made.

(c) ***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".

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.

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:

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

SOLUTION

Journal entries are as follows:

	DR. (₹)	CR. (₹)
Stores Ledger Control A/c.................................. Dr. To Payables (Creditors)/ Bank A/c (Materials purchased)	2,00,000	 2,00,000
Work-in-Process Control A/c............................... Dr. To Stores Ledger Control A/c (Materials issued to production)	1,50,000	 1,50,000
Wages Control A/c.. Dr. To Bank A/c (Wages paid)	1,20,000	 1,20,000

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

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:

	(₹)	(₹)
Balances at the beginning of the month:		
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*
Materials Issued:		
To production	*30,000*	
To factory maintenance	*4,000*	34,000
Materials transferred between batches		*5,000*
Total wages paid:		
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 Cost Ledger Control A/c	32,000	By Work-in-process control A/c	53,000
" Payables (Creditors) A/c (Purchases)	92,000	" 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
		" 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
"	Wages Control A/c (₹10 × 7,000 hours)	70,000	"	Balance c/d:		
"	Overheads Control A/c (₹4 × 7,000 hours)	28,000		-Material	5,000	
				-Wages (₹10 × 300 hours)	3,000	
"	Materials Control A/c (Balancing figure)	53,000		- 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
"	Work-in-process Control A/c (as above)	1,51,000	"	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
"	Balance c/d	19,200	"	Material Control A/c (Purchases) (Balancing fig.)	92,000
		1,08,400			1,08,400

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:

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) Income tax, donations, subscriptions

(vi) 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 for inventory valuation is not recommended by Accounting Standards for Financial Reporting purpose but this method may be adopted for cost accounting purpose if management feels it suitable for making any decision. 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.

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

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*
Selling and Distribution Overheads	*1,80,000*
Finished goods (1,230 units)	*1,50,000*

	(₹)	(₹)
Work-in-Process:		
Materials	*30,000*	
Labour	*20,000*	
Factory overheads	*20,000*	*70,000*
Goodwill written off		*2,00,000*
Interest on loan taken		*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
"	Materials	10,00,000	"	Closing Stock:	
"	Wages	5,00,000		Finished goods (1,230 units)	1,50,000
"	Factory Overheads	4,50,000		Work-in-Process	70,000
"	Admn. Overheads	2,60,000			
"	S&D Overheads	1,80,000			
"	Goodwill written off	2,00,000			
"	Interest on loan	20,000			
"	**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.

	(₹)
Stores:	
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*
Work-in-Process:	
Opening inventory	*30,000*
Direct labour cost charged	*30,000*
Overhead cost charged	*1,20,000*
Closing Balance	*20,000*
Finished Products:	
Entire output is sold at 10% profit on actual cost from Work-in-Process.	
Others:	
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
"	Cost Ledger Control A/c (Purchases)	80,000	"	Overhead Control A/c (Issued for repairs)	10,000
"	Work-in-Process Control A/c (Return from WIP)	40,000	"	Cost Ledger Control A/c (Sold at cost)	5,000
			"	Overheads Control A/c* (Shortages)	3,000
			"	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
			"	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
"	Stores Ledger Control A/c	3,000			
"	Cost Ledger Control A/c	1,25,000			
"	Wages Control A/c	5,000	"	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
"	Stores Ledger Control A/c	80,000	"	Finished Goods Control A/c	2,00,000*
"	Wages Control A/c	30,000			
"	Overheads Control A/c	1,20,000	"	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
"	Opening WIP	30,000	"	Closing WIP	20,000
"	Wages for the period	35,000	"	Closing stock of Raw Material	37,000
"	Overheads expenses	1,25,000	**"**	**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
"	Direct Wages	30,00,000	"	Closing Stock	
"	Factory Overheads	16,00,000		Work-in-process	2,40,000
"	Gross Profit c/d	29,60,000		Finished Goods (4,000 units)	3,20,000
		1,25,60,000			1,25,60,000
"	General Administrative Overheads	7,00,000	"	Gross Profit b/d	29,60,000
"	Selling and Dist. OH	9,60,000	"	Dividend received	1,00,000

"	Bad debts	80,000	"	Interest received	20,000
"	Preliminary Expenses written off	40,000			
"	Legal Charges	10,000			
"	**Net Profit**	**12,90,000**			
		30,80,000			**30,80,000**

Statement of Cost and Profit

(*As per Cost Records*)

		(₹)
	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

		(₹)	(₹)
	Profit as per Cost Records		**5,65,160**
Add:	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
Less:	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**

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.

TEST YOUR KNOWLEDGE

Multiple Choice Questions (MCQs)

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, 2022.*

Stores Ledger Control Account		
1.10.2022	*To Balance*	*₹ 54,000*
Work in Process Control Account		
1.10. 2022	*To Balance*	*₹ 6,000*
Finished Goods Control Account		
1.10. 2022	*To Balance*	*₹ 75,000*
Factory Overheads Control Account		
Total debits for October, 2022		*₹ 45,000*
Factory Overheads Applied Account		
Cost of Goods Sold Account		
Creditors for Purchases Account		
1.10. 2022	*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 2022 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 31.10.2022 is ₹ 15,000 and the payments made to creditors in October, 2022 amount to ₹ 1,05,000.*

(iii) *The finished goods inventory as on 31st October, 2022 is ₹ 66,000.*

(iv) *The cost of goods sold during the month was ₹ 1,95,000.*

(v) *On 31st October, 2022 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, 2022. All factory workers earn same rate of pay.*

(vii) *All actual factory overheads incurred in October, 2022 have been posted.*

You are required to FIND:

(a) *Materials purchased during October, 2022.*

(b) *Cost of goods completed in October, 2022.*

(c) *Overheads applied to production in October, 2022.*

(d) *Balance of Work-in-Process Control A/c on 31st October, 2022.*

(e) *Direct Materials consumed during October, 2022.*

(f) *Balance of Stores Ledger Control Account on 31st October, 2022.*

(g) *Over absorbed or under absorbed overheads for October, 2022.*

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:*

	(₹ in lakhs)
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:

		(₹ 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 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 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.

5. *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 were 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

Answers to the MCQs

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

1. Please refer paragraph 3.2

2. Please refer paragraph 3.1

3. Please refer paragraph 4

4. Please refer paragraph 4.1

5. Please refer paragraph 4.1

6. Please refer paragraph 4.2

Answers 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

Overhead recovery rate $= \frac{\text{Budgeted Factory Overheads}}{\text{Budgeted Direct Labour hours}}$

$= \frac{₹\ 6,75,000}{4,50,000 \text{ hours}}$

= **₹ 1.50 per direct labour**

(ii) Direct Wage rate per hour:

Direct Labour cost of WIP = ₹ 3,000

(on 31st October 2022)

Direct labour hours of WIP = 1,200 hours

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

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

(iii) Total Direct Wages charged to production:

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

= 28,200 hours × ₹ 2.50 = **₹ 70,500**

(a) Material purchased during October, 2022

	(₹)
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, 2022

	(₹)
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, 2022

= 28,200 hours × ₹ 1.50 = ₹ 42,300

(d) Balance of Work-in-Process on 31st October, 2022

	(₹)
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, 2022 = ₹ 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
"	Wages Control A/c [Refer working note (iii)]	70,500	"	Balance c/d [Refer (d) above]	10,800

"	Factory OH Control A/c [Refer (c) above]	42,300			
"	Material consumed (Balancing fig.)	78,000			
		1,96,800			1,96,800

(f) Balance of Stores Control Account on 31st October, 2022 = ₹ 66,000

(Refer to following Account)

Stores Ledger Control Account

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

(g) Over-absorbed or under-absorbed overheads for October, 2022: 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
			"	Costing P/L A/c (Under-absorbed)	2,700
		45,000			45,000

2. Cost Ledger Control A/c

Amount (₹ in lakhs)

		(₹)			(₹)
To	Costing P&L A/c	450	By	Balance b/d	540
"	Building Construction A/c	44	"	Stores Ledger Control A/c	40
"	Balance c/d	483	"	Wages Control A/c	150
			"	Works OH Control A/c	160
			"	Royalty A/c	5
			"	Admn. OH and S&D OH A/c	25
			"	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
"	Cost Ledger Control A/c	40	"	Works OH Control A/c	6
			"	Building Const. A/c	4
			"	Works OH Control A/c (Bal. fig.) (loss)	5
			"	Balance c/d	55
		120			120

Wages Control A/c

		(₹)			(₹)
To	Cost Ledger Control A/c	150	By	Works OH Control A/c	40
			"	Building Const. A/c	10
			"	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
"	Wages Control A/c	40	"	Work-in-process Control A/c (Balancing figure)	183
"	Cost Ledger Control A/c	160	"	Costing P&L A/c (under-absorption)	8
"	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
"	Stores Ledger Control A/c	50			
"	Wages Control A/c	100			
"	Works OH Control A/c	183			
"	Royalty A/c	5	"	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
" Work-in-process Control A/c	333	" 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
" 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
" Works Overhead Control A/c	8		
" 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
" Stores Ledger Control A/c	4		
" Wages Control A/c	10		
" 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........................	Dr.	1,00,000	
To Factory Overhead Control A/c			1,00,000
Selling and Dist. Overhead Control A/c	Dr.	40,000	
To Bank A/c			40,000
Finished Goods Control A/c........................	Dr.	5,00,000	
To Work-in-Process Control A/c			5,00,000
Cost of Sales A/c...	Dr.	5,40,000	
To Finished Goods Control A/c			5,00,000
To Selling and Distribution Control A/c			40,000
Receivables (Debtors) A/c..................................	Dr.	3,75,000	
Bank or Cash A/c..	Dr.	3,75,000	
To Sales A/c			7,50,000
Bank A/c..	Dr.	2,00,000	
To Receivables (Debtors) A/c			2,00,000
Payables (Creditors) A/c....................................	Dr.	2,00,000	
To Bank A/c			2,00,000

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

		(₹)			(₹)
To	Direct Material	5,00,000	By	Sales (50,000 units)	10,00,000
"	Direct Wages	2,50,000	"	Interest and dividends	15,000
"	Factory expenses	1,50,000			
"	Administrative expenses	45,000			
"	Selling & Dist. Expenses	30,000			
"	**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**
Factory expenses:		
Variable (40% of ₹ 1,50,000)	60,000	
Fixed (₹ 90,000 × 50,000/60,000)	75,000	1,35,000
Works cost/ Cost of production		**8,85,000**

Administrative expenses: (₹ 45,000 × 50,000/60,000)		37,500
Selling & Distribution expenses:		
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**
Add : Income from interest and dividends		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**

5. Memorandum Reconciliation Account

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

NOTES