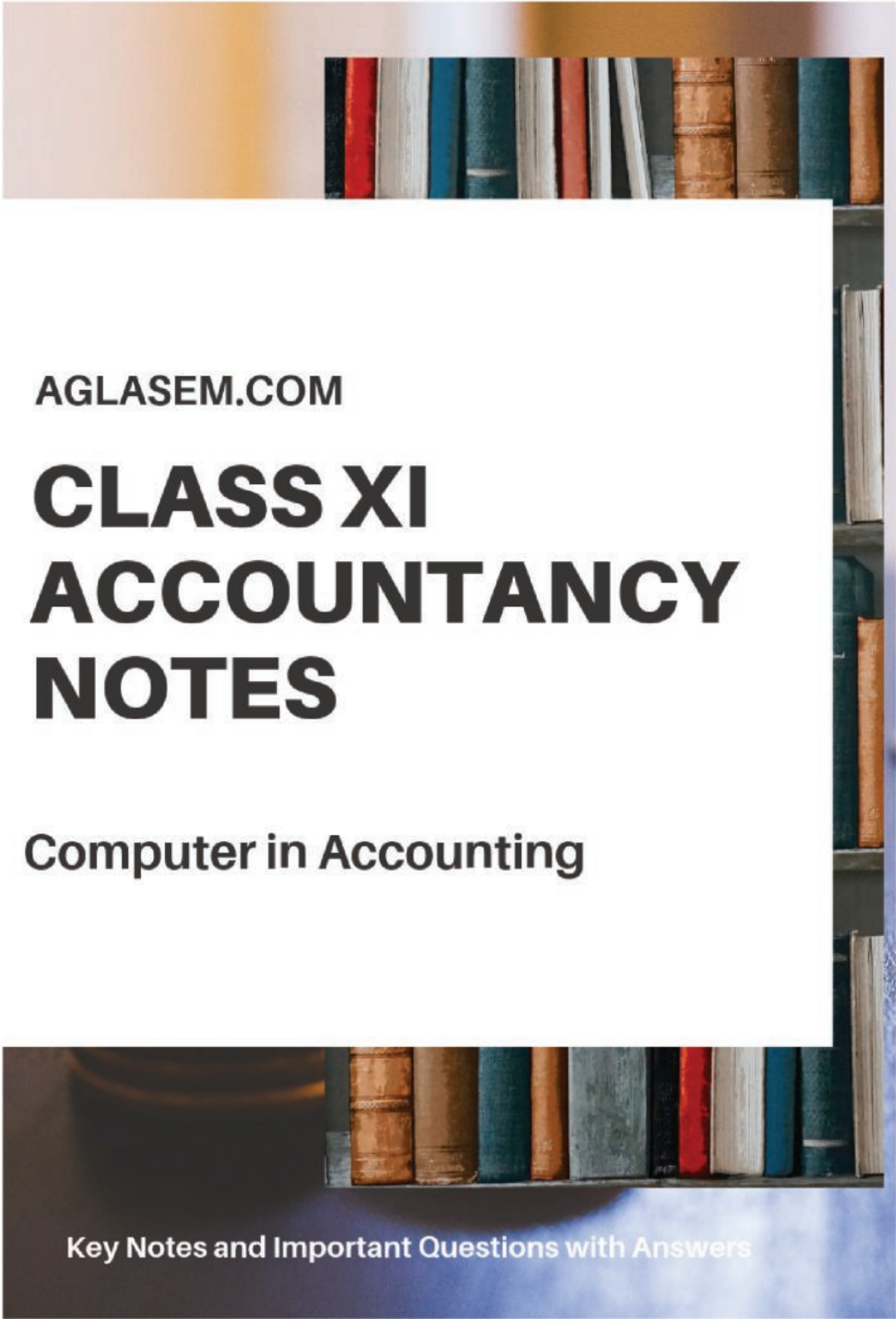


The background of the cover features a blurred image of a bookshelf filled with books of various colors (red, blue, green, brown). The books are arranged on shelves, and the focus is soft, creating a scholarly atmosphere.

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CLASS XI ACCOUNTANCY NOTES

Computer in Accounting

Key Notes and Important Questions with Answers

COMPUTERS IN ACCOUNTING

- Classify the elements/Components of Computer system.
- Understand the characteristics/utilities of a computer system.
- Acquire knowledge about management information system & Accounting Information System.
- Apply Accounting Software in report generation.
- Develop the skill of different styles of computerized accounting.

Elements of Computer System

1. Hardware
 2. Software
 3. People
 4. Procedure
 5. Data
 6. Connectivity
1. **Hardware** : Hardware of computers consists of physical components such as keyboard, mouse, monitor, processor etc. These are electronic and electro mechanical components.
 2. **Software** : In order to solve a particular problem with the help of computers, a sequence of instructions written in proper language will have to be feed into the computers. A set of such instructions is called a 'Program' and the set of programs is called 'Software'.

For example, a computer by feeding a particular software can

be used to prepare pay-roll, whereas by feeding a second software it can be used to prepare accounts, by feeding a third software it can be used for inventory control and so on.

3. **People** : People are basically those individuals who use hardware and software to develop, maintain and use the information system residing in the computer memory. They constitute the most important part of the computer System. The main categories of people involved with the computer system are :

- (a) System Analysts
- (b) Operators
- (c) Programmers

4. **Procedures** : Procedure means a series of operations in a certain order or manner to achieve desired results. These are of three types :

- (a) Software-Oriented : Provides a set of instructions required for using the software of a computer system.
- (b) Hardware-Oriented : Provides details about the components and their methods of operations.
- (c) Internal Procedure : Helps to ensure smooth flow of data to computers sequencing the operations of each sub-system of over all computer system.

5. **Data** : These are facts (may consist of numbers, text etc.) gathered and entered into a computer system. The computers system in turn stores, retrieves, classifies, organizes and synthesis the data to produce information when desired.

Examples :

1. Bio-data of various applicants when the computer is used for recruitment of staff.
 2. Marks obtained by various students in various subjects when the computer is used to prepare results,
6. **Connectivity** : the manner in which a particular computer system is connected to others (say through telephone lines, microwave transmission satellite link etc.) is called element of connectivity.

Capabilities or Advantage of Computer system

A Computer system possesses the following advantages in comparison of human beings.

1. **High Speed** : computers are known for their high speed of operations and requires less time in comparison to human beings in performing a task. Most of modern computer perform millions of operations in one second.
2. **Accuracy** : Computers are extremely accurate. Their operations are error free and as such the information obtained from it is highly reliable. But sometimes errors occur due to bad programming or inaccurate data feeding. In computer terminology. It is called Garbage in garbage out (GIGO).
3. **Reliability** : Its reliability refers to the ability with which computer remains functional to serve the user. Unlike human beings these are immune to tiredness, boredom or fatigue, and can perform jobs of repetitive nature any number of times.
4. **Versatility** : It refers to the ability of computers to perform a variety of tasks. It can switch over from one programme to another. The same computer can be used for accounting work, stock control, sales analysis and even for playing games by the use of different software.
5. **Storage** : Memory or Storage capacity of a computer is so large that it can store any volume of information or data. Such data can be stored in it on magnetic discs, floppy discs, punched cards or microfilms etc. The Information stored can be recalled at any time and also correction can be done within no time.

Limitations : In spite of so many qualities, computers suffer from the following limitations.

- (1) **Lack of Common Sense** : Since computers work according to their stored programme, they don't have common sense.
- (2) **Zero I.Q.** : Computers are dumb devices with zero intelligence Quotient (IQ). They can't visualize and think what exactly to do under a particular situation unless they are programmed to tackle that situation.
- (3) **Lack of Feeling** : Computers lack feelings unlike human beings because they are machines. No computer possesses the equivalent of a human heart and soul.

- (4) **Lack of Decision-making** : Decision making is a complex process involving information, knowledge, intelligence, wisdom & ability to judge, Computers cannot make decision on their own.

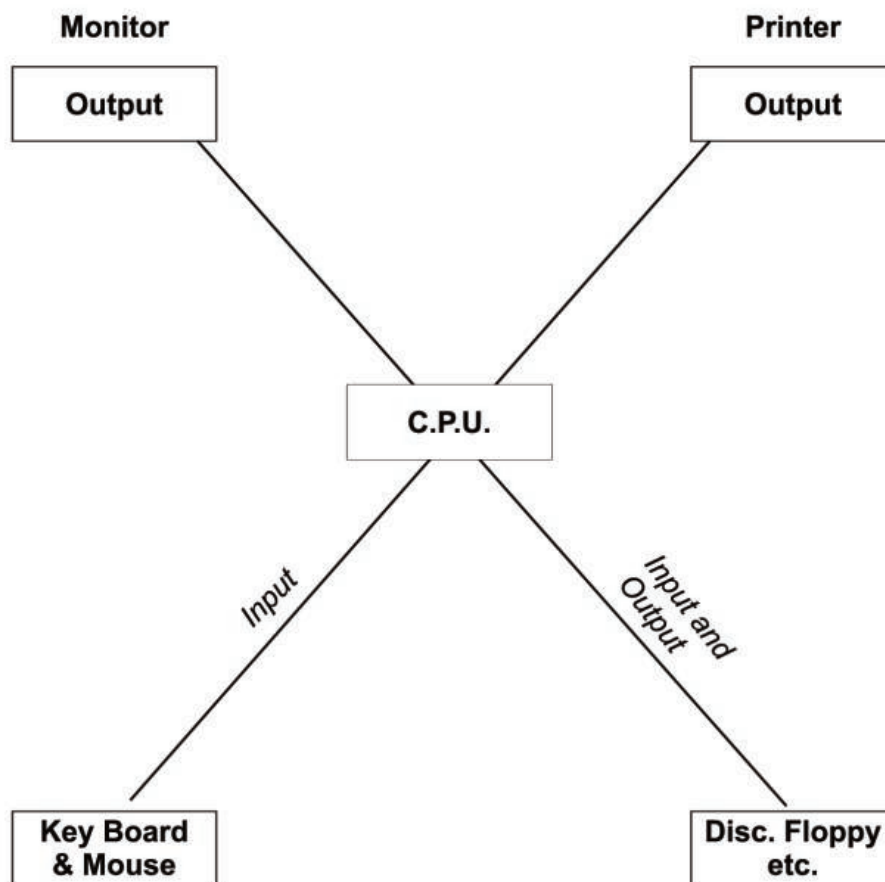
Some more limitations related to computerized System in Accounting

- (1) **High Cost of Training** : Besides the high cost of computers system, huge money is required to get the trained specialized staff to ensure efficient and effective use of computerized systems.
- (2) **Danger of System Failure** : The danger of system crashing due to hardware failure and the subsequent loss of work is a serious limitation of this system.
- (4) **Staff Opposition** : Whenever the Accounting System is computerized, there is a significant degree of resistance from the existing staff because of the fear that they shall be less important to the organisation.
- (5) **Disruption** : The accounting process suffer a significant loss of work and time when an organisation switches over to this system. This is due to the changes in the working environment that requires accounting staff to adapt to new system and procedures.

COMPONENTS OF COMPUTERS

The functional components consists of input Unit, Central processing Unit (CPU) and the output unit described as follows

- (1) **Input Unit** : It is for entering the data into the computer system. Keyboard and Mouse are the most commonly used input devices. Other such devices are magnetic tapes, disc, light pen, optical scanner, smart card reader etc. Besides there are some devices which respond to voice and physical touch.
- (2) **Central Processing Unit (CPU)** : It is the main part of computer hardware that actually processes the data according to the instructions it receives. It has three units:



- (a) **Arithmetic and Logic Unit (ALU)** : Responsible for performing all the arithmetic calculations such as addition, subtraction etc. and logical operations involving comparison among variables.
- (b) **Memory Unit**: For storing the data.
- (c) **Control Unit** : Responsible for controlling and co-ordinating the activities of all other units of the computer system.
- (3) **Output Unit** : After processing the data, the information produced is required in human readable and understandable form. Output devices perform this function. The Commonly used devices are monitor, printer, graphic plotter (external) and magnetic stage devices (internal). A new device which is capable of producing verbal output that sound in human speech is also developed.

Operating Software

Operating Software is a set of programmes that is used by computers for various purposes. Operating Software is essential part of computer system. In absence of operating software computer can not operate. There are many operating software like Windows, Excel etc.

Utility Software

Utility Software is a set of computer programmes used to perform supporting operations in a computer. Utility Software are highly specialized and designed to perform only a single task or a small range of tasks.

Application Software

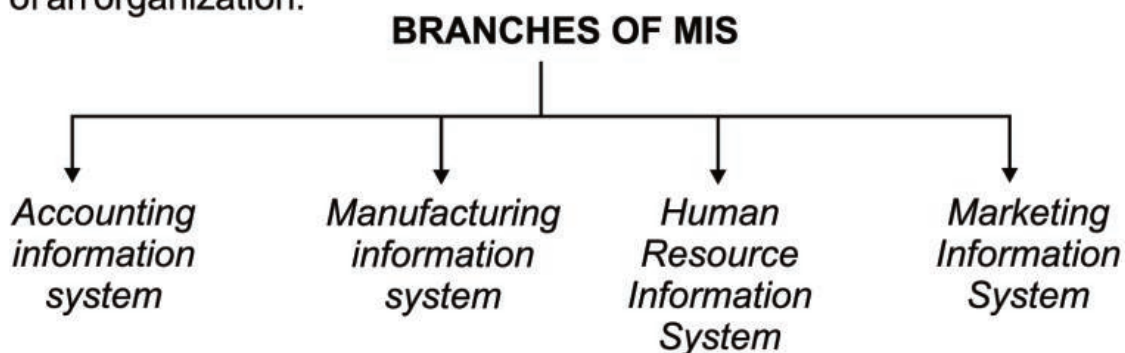
Application Software is a set of programmes which is designed and developed for performing certain task like accounting, work processing etc. for example Tally is the application software.

Accounting Information System (AIS)

Accounting Information System is a system of collecting, processing, summarizing and reporting information about a business organisation in monetary terms. It maintains a detailed financial record of the business operation and transfer the data into valuable information.

So, Accounting Information System (AIS) is a sub-system of MIS (Management Information System). AIS is a structure that allow its user to collect and use business data.

Management Information System (MIS) : It is a planned System of collecting , processing, storing & disseminating the data in the form of Information to perform the task of decision making and management of an organization.



Application of Computers in Accounting

1. **Recording of transaction :** Record the all business transaction properly and timely.
2. **Preparation of ledger account :** Computers prepares all ledger account on the basis of given transactions, like cash, debtors, sales a/c etc.

- 3 **Preparation of Trial Balance** : It prepares the Trial Balance according to ledger accounts.
4. **Preparation of Final A/c** : It has utility to prepare Trading A/c, P&L A/c and Balance Sheet.

Features of Computerised Accounting System

Computerised accounting system is based on the concept of database.

This system offers the following features :

- 1) Online input and storage of accounting data.
- 2) Printout of purchases and sales invoices.
- 3) Every account and transaction is assigned a unique code.
- 4) Grouping of accounts is done from the beginning.
- 5) Instant reports for management, for example. Stock Statement, Trial Balance, Income Statement, Balance Sheet, Payroll Reports, Tax Reports etc.

Automation of Accounting Process

When accounting functions are done by computerized accounting software that is known as automation of accounting process. Under the automation of accounting process human activity is less than that of accounting software which is more used.

So, accounting functions like posting into ledger, Balancing. Trial Balance and Final Accounts are prepared by computer.

Stages of Automation

There are different stages of automation as:

- (I) **Planning** : Under this stage the assessment of size, and business transactions is done for which automation has to be made.
- (ii) **Selection of Accounting Software** : As there are many accounting software available in the market. So, in this stage appropriate accounting software is to be selected according to company's need.
- (iii) **Selection of Accounting Hardware** : Under this stage of automation the computer hardware is selected. This hardware should be such which can fulfill the accounting requirements and support the accounting software.
- (iv) **Chart of Accounts** : Under this stage list of required heads of accounts is prepared.

and ready to use. Such software do not fulfill the requirement of every user.

- (2) **Customized Software** : Customized Software means modifying the Ready-made software to suit the specific requirements of the user. Ready-made software are modified according to the need of the business. Cost of installation, maintenance and training is relatively higher than that of Ready-made software. These packages are used by those medium or large business enterprises in which financial transactions are some what peculiar in nature.
- (3) **Tailor-made Software** : The software which are developed to meet the requirements of the user on the basis of discussion between the user and developers. Such software help in maintaining effective management information system. The cost of these software is very high and specific training is required for using these packages.

Generic Consideration Before Sourcing Accounting Software

- (I) **Flexibility** : A computer software system must be flexible in respect of data handling and report preparing.
- (ii) **Maintenance cost** : The accounting software must be such which has less Maintenance cost.
- (iii) **Size of Organisation** : The accounting software must be according to need and size of organisation.
- (iv) **Easy to adaptation** : The accounting software must be such which is easily applicable in any organization.
- (IV) **Secrecy of data** : The accounting software must be such which provide the secrecy of business data, from others.

Preparation of Accounts Groups

Groups of accounts means classifying the accounting transactions into different heads like assets Group, Liabilities Group, Income Group and Expenses group. By these grouping of accounts the final Accounts are meaningful for its users.

Generation of Accounting Reports

After collecting business data, it is converted into meaningful information. Such summarized and converted information is known as a report.

The report is more effective if it is based on accurate and timely data.

A report must be relevant to users and contain all relevant information like Debtor's Report, Creditor's Report, Trial Balance and financial Statement Report and others.

Only for Teachers

Scope

- (i) The scope of this unit is to understand accounting as an information system for the generation of accounting information and preparation of accounting reports.
- (ii) It is advised that the working knowledge of Tally software will be given to the students for generation of accounting software. For this, the teachers may refer chapter 4 of Class XII text book on Computerised Accounting System.

PROJECT

COMPREHENSIVE PROJECT

Mr. Ravi after completing his graduation wants to start his own business but he was little bit confused which business to start. Moreover, he was short of funds also as only R 2,00,000 (to be used in business) were available with him, which he saved by doing part time jobs during his graduation. He discussed the matter with his father, Mr. Vinod a Bank Manager and decided to start a shop dealing in man's wear from 1 st April 2014. His father also help him in raising loan of R10,00,000 from xyz Bank against his personal guarantee. On 5th April 2014, Mr. Ravi open a Bank A/c with R 5,000 in xyz Bank. Bank also credited his Bank A/c with the amount of loan on 1st June 2014, after completing all formalities, which is to be repaid in ten equal yearly installments alongwith with interest @ 12% p.a. on 31st March every

year. Same day he purchased a computer for R 50,000 to maintain all the records regarding purchase, sales and stock and make the payment by cheque. He also deposited R 45,000 in Bank.

It was also decided that all the purchases are to be made by cheques and all receipts on account of sales were to be deposited into Bank. He named his business as M/s Rajasthan Man's wear and entered into a contract with a distributor of Man's wear on 15th June 2014. The distributor want him to make all the payment with regard to the orders in advance. Mr. Ravi transactions for the year ending on 31st March 2015 were as follows.

	₹
Purchases (on 15 June 2014)	15,00,000
Sales	25,00,000
Staff Salary	2,00,000
Telephone Expenses	50,000
Electricity Charges	1,00,000
Packing Charges	25,000
Insurance	1,00,000
Rent (R 10,000 p.m.)	1,20,000
Carriage Inward.	55,000
Furniture purchased (on 1st June 14)	1,00,000

25% payment for furniture was made by cash and rest by cheque. All the expenses were paid by cheque. Furniture and computer were depreciated @12% p.a. The closing Stock on 31st March 2015 was valued at Rs. 1,00,000. Plot/Land for Rs.10,00,000 was also purchased on that day to construct shop in future. You are required to:

- (i) Journalise the transactions.
- (2) Post all the items to the relevant Leger Accounts.
- (3) Prepare Trial Balance.
- (4) Prepare Trading and profit & Loss A/c. and Balance Sheet at the end of the year.

Journal

<i>Date</i>	<i>Particulars</i>	<i>C.F.</i>	<i>Dr. (₹)</i>	<i>Cr. (₹)</i>
Apr. 1	Cash A/c Dr. To Capital A/c. (Being business commenced)		2,00,000	2,00,00
Apr. 5	Bank A/c. Dr. To Cash A/c (Being Bank A/c opened)		5,000	5,000
June 1	Bank A/c Dr. To Bank Loan A/c. (Being Bank Loan raised)		10,00,000	10,00,000
June 1	Computer A/c Dr. To Bank A/c (Being Computer Purchased)		50,000	50,000
June 1	Bank A/c Dr. To Cash A/c. (Being cash deposited into Bank)		45,000	45,000
June 1	Furniture A/c Dr. To Cash A/c To Bank A/c (Being furniture purchased & payment made in cash & by cheque)		1,00,000	25,000 75,000
June 15	Purchases A/c Dr. To Bank A/c (Being purchase made)		15,00,000	15,00,000
Mar. 31	Bank A/c Dr. To Sales A/c (Being sales made)		25,00,000	25,00,000
Mar. 31	Staff Salary A/c. Dr. To Bank A/c (Being staff salary paid)		2,00,000	2,00,000
Mar. 31	Telephone expenses A/c Dr. To Bank A/c (Being Telephone Expenses Paid)		50,000	50,000

Mar. 31	Electricity Charges A/c To Bank A/c (Being electricity charges paid)	Dr.	1,00,000	1,00,000
Mar. 31	Packing charges A/c To Bank A/c. (Being packing charges paid)	Dr.	25,000	25,000
Mar. 31	Insurance A/c To Bank A/c. (Being Insurance Paid)	Dr.	1,00,000	1,00,000
Mar. 31	Rent A/c To Bank A/c. (Being rent Paid)	Dr.	1,20,000	1,20,000
Mar. 31	Carriage Inward A/c To Bank A/c. (Being carriage inward Paid)	Dr.	55,000	55,000
Mar. 31	Bank loan A/c Interest on Bank A/c To Bank A/c (Being installment & interest loan paid)	Dr. Dr.	1,00,000 1,00,000	2,00,000
Mar. 31	Depreciation A/c. To Furniture A/c. To Computer A/c. (Being depreciation Charged on Furniture and Computer)	Dr.	15,000	10,000 5,000
Mar. 31	Land A/c To Bank A/c. (Being plot land Purchased)	Dr.	10,00,000	10,00,000

Capital Account							
Dr.				Cr.			
Date	Particulars	J.F	Rs.	Date	Particulars	J. F	Rs.
31.3.15	To Balance c/d		2,00,000	1.4.1,	By Cash A/c		2,00,000
			2,00,000	1.4.15	By Balance b/d		2,00,000

Dr.	Electricity Account	Cr.
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Dr.	Packing Charges Account	Cr.
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Dr.	Insurance Account	Cr.
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Dr.	Rent Account	Cr.
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Dr.	Carriage Inward Account	Cr.
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Dr.	Interest Account	Cr.
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ΔΙΑΔΕΙΞΕΤΕ ΤΟΝ ΚΑΙΟΝ ΤΗΣ ΕΛΠΙΔΟΣ. **€**

Dr. Depreciation Account				Cr.			
Date	Particulars	J.F.	₹	Date	Particulars	J.F.	₹
1.6.15	To Furniture A/c		10,000	31.3.15	By Balance c/d		15,000
1.6.14	To Computer A/c		5,000	31.3.15			
			15,000				15,000
1.4.15	To Balance b/d		15,000				

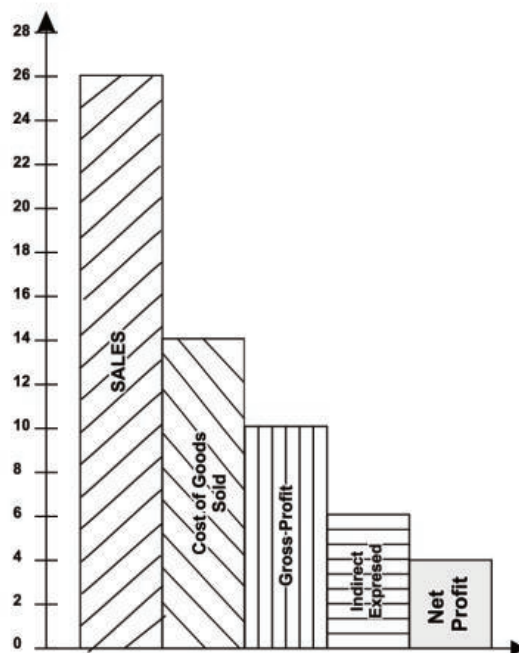
Dr. Land Account				Cr.			
Date	Particulars	J.F.	₹	Date	Particulars	J.F.	₹
31.3.15	To Bank A/c		10,00,000	1.6.14	By Balance A/c		1,00,000
			10,00,000				1,00,000
1.4.15	To Balance b/d		10,00,000				

Dr. Trial Balance as on 31.3.2015			Cr.	
Date	Debit Balance		Credit Balance	
Capital A/c			2,00,000	
Cash A/c	1,25,000			
Bank A/c	75,000			
Bank Loan A/c			9,00,000	
Purchases A/c	15,00,000			
Sales A/c			25,00,000	
Computer A/c	45,000			
Furniture A/c	90,000			
Staff Salary A/c	2,00,000			
Telephone Expenses A/c	50,000			
Electricity Charges A/c	1,00,000			
Packing Charges A/c	25,000			
Insurance A/c	1,00,000			
Rent A/c	1,20,000			
Carriage inward A/c	55,000			
Interest on Loan A/c	1,00,000			
Depreciation A/c	15,000			
Land A/c	10,00,000			
	36,00,000		36,00,000	

Dr. Trading and profit & loss A/c for the year ending on 31.3.2015				Cr.	
Particulars	₹	Particulars	₹		
To Purchases	15,00,000	By Sales	25,00,000		
To Carriage	55,000	By Closing Stock	1,00,000		
To Gross Profit	10,45,000				
	26,00,000				26,00,000

Dr. 31.3.2015

To Staff Salary	20,000	By Gross Profit	10,45,000
To Telephone Expenses	50,000		
To Electricity Charges	1,00,000		
To Packing Charges	25,000		
To Insurance	1,00,000		
To Rent	1,20,000		
To Interest on loan	1,00,000		
To Depreciation	15,000		
To Net Profit	3,35,000		
	10,45,000		10,45,000



Data relating to year 2014-15 of M/s Rajasthan Men's wear

$$\begin{aligned}
 \text{Cost of Goods sold} &= \text{Opening Stock} + \text{Net Purchases} + \text{Direct Expenses} - \text{Closing Stock} \\
 &= 0 + 15,00,000 + 55,000 - 1,00,000 \\
 &= 14,55,000
 \end{aligned}$$

OR

$$\begin{aligned}
 \text{Cost of Goods Sold} &= \text{Net Sales} - \text{Gross Profits} \\
 &= 25,00,000 - 10,45,000 \\
 &= 14,55,000
 \end{aligned}$$

