

**UNIT STRUCTURE****13.0 Learning Objectives****13.1 Introduction****13.2 Word Processing Software**

13.2.1 The significant features of M.S. Word are as follows

**13.3 Spreadsheets**

13.3.1 Microsoft Excel

**13.4 Database Management Systems**

13.4.1 Functions of DBMs

13.4.2 Examples of various organizations and their databases

**13.5 Presentation Programs****13.6 Graphics Programs**

13.6.1 Computer Graphics has following features

**13.7 Multimedia Authoring Applications****13.8 Entertainment and Education Software**

13.8.1 Some examples of entertainment software are

**13.9 Let Us Sum Up****13.10 Check Your Progress : Possible Answers****13.11 Glossary****13.12 Assignment****13.13 Activity****13.14 Further Reading****13.0 Learning Objectives :**

After working through this unit, you should be able to :

- State the basic concept of application software
- Explain how the word processing software works and features of MS Word
- Describe how the basic SCM model is developed
- Mention the concept of applications of spread sheets and significant features of MS Excel
- Discuss the concept of Database Management Systems and the use of MS Access and oracle in DBMS applications
- Show how MS PowerPoint is used for presentations
- Illustrate Multimedia Authoring Applications and entertainment and education software

### 13.1 Introduction :

We have studied the basic concept of application software in Unit 1. We have seen that the application software tells computer how to accomplish specific tasks such as word processing or drawing for the user. Thousands of applications are available for many purposes and the people of all ages. Some of the categories include :

1. Word Processing Software
2. Spreadsheets
3. Database Management Software
4. Presentation Programs
5. Graphics Programs
6. Multimedia authoring applications
7. Entertainment and education software
8. Web design tools and Web browsers
9. Games

In this unit, we will take a review of main application software being used.

#### ☐ Check Your Progress – 1 :

1. \_\_\_\_\_ is not an application software.  
 [A] Word processing                      [B] Presentation  
 [C] Windows                                [D] Spreadsheets
2. Identify the Application software from give below :  
 [A] Word processing                      [B] Presentation  
 [C] Spreadsheets                         [D] All of the above
3. Web–Browser is \_\_\_\_\_ software. [Application, System]

### 13.2 Word Processing Software :

Word processing software is used for creating documents. Drafts, letters, reports, essays, write ups etc. can be created using word processing software. Earlier, Word Star was being used widely for this purpose. Sidekick, word Prefect are also used for drafting letters. However, the most commonly used word processing package all over the world is Microsoft Word.

Microsoft Word is Microsoft's word processing software. It was first released in 1983 under the name Multi–Tool Word for Xenix systems. Versions were later written for several other platforms including IBM PCs running DOS (1983), the Apple Macintosh (1984), SCO UNIX, OS/2 and Microsoft Windows (1989). It is a component of the Microsoft Office system; however, it is also sold as a standalone product and included in Microsoft Works Suite. Beginning with the 2003 version, the branding was revised to emphasize Word's identity as a component within the Office suite; Microsoft began calling it Microsoft Office Word instead of merely Microsoft Word. The latest releases are Word 2007 for Windows and Word 2008 for Mac OS X. There are commercially available add–ins that expands the functionality of Microsoft Word.

### **13.2.1 The significant features of M.S. Word are as follows :**

1. It is an easy and simple package for a general user.
2. The features such as paragraph, font, symbols, spell check, table, drawing, bullets and numbering, page numbering etc. are provided by this package. This enables a user to develop a document in error free and attractive form.
3. The text file generated by MS Word is .doc. This file can be used in other applications such as MS Excel, MS Visual Studio 6.0, MS Visual Studio.net, Web browser, pdf format etc.

### **13.3 Spreadsheets :**

Spreadsheet is very well known and widely used computer applications that help us to work out a paper worksheet. It displays number of cells that together made a grid consisting of rows and columns, each cell consisting either alphanumeric text or numeric values. A spreadsheet cell defines a formula that how the contents of that cell are to be calculated from the contents of other cell that each time any cell is updated. Spreadsheets are used for financial information because of their ability to re-calculate the entire sheet directly as a change to a single cell is made.

VisiCalc is usually considered the first electronic spreadsheet and it helped to modify the Apple II computer into a success and greatly assisted in their widespread application. Lotus 1-2-3 was the leading spreadsheet when DOS was the dominant operating system (OS). Excel is now considered to have the largest market share on the Windows and Macintosh platforms

#### **13.3.1 Microsoft Excel :**

Microsoft had been developing Excel on the Macintosh platform for several years at this point, where it had developed into a fairly powerful system. A port of Excel to Windows 2.0 resulted in a fully functional Windows spreadsheet. The more robust Windows 3.x platforms of the early 1990s made it possible for Excel to take market share from Lotus. By the time Lotus responded with usable Windows products, Microsoft had started compiling their Office suite. Starting in the mid-1990s continuing through the present, Microsoft Excel has dominated the commercial electronic spreadsheet market.

#### **❑ Check Your Progress – 2 :**

1. \_\_\_\_\_ is an example of spreadsheet application.  
[A] MS-Word [B] MS-Excel  
[C] MS-PowerPoint [D] None of the above
2. To prepare your resume, you will use \_\_\_\_\_.  
[A] MS-Word [B] MS-Excel  
[C] MS-PowerPoint [D] None of the above
3. \_\_\_\_\_ application is not a part of MS-Office package.  
[A] Microsoft Word [B] Microsoft Excel  
[C] Microsoft Visual Studio [D] Microsoft PowerPoint

### **13.4 Database Management Systems :**

A database Management system is a tool to collect, organize and manage large amount of data in systematic manner that can be retrieved and used as per the need of the organization.

### 13.4.1 Most DBMSs perform the following functions :

- To create and maintain data structures
- It allows concurrent access to many users
- Enforce security and privacy
- Allow extraction and manipulation of stored data
- It enables data entry and data loading
- Provide an efficient indexing mechanism for fast extraction of selected data
- Provide consistency among different records
- Protect stored data from loss by backup and recovery process

### 13.4.2 Examples of various organizations and their databases are as follows :

- Manufacturing Company : stores product data.
- Bank : stores transactions data.
- Hospital : stores patient data.
- University : stores student data.

The commonly used DBMS packages are Microsoft Access and Oracle.

Microsoft Office Access is a relational database management system from Microsoft that combines the relational Microsoft Jet Database Engine with a graphical user interface and software development tools. It is a member of the

Microsoft Office suite of applications and is included in the Professional and higher versions for Windows.

Access stores data in its own format based on the Access Jet Database Engine. It can also import or link directly to data stored in other Access databases,

Excel SharePoint lists, text, XML, Outlook, HTML, dBase, Paradox, Lotus 1–2–3 or any ODBC–compliant data container including Microsoft SQL Server, Oracle, MySQL and PostgreSQL. Software developers and data architects can use it to develop application software and non–programmer ?power users ? can use it to build simple applications.

#### Check Your Progress – 3 :

1. SQL stands for \_\_\_\_\_  
 [A] System Query Language      [B] System Quality Language  
 [C] Structured Query Language    [D] Structured Quality Language
2. \_\_\_\_\_ language is used to operate database products.  
 [A] SQL      [B] C–Language    [C] Java      [D] C#
3. \_\_\_\_\_ is not a DBMS product.  
 [A] Access      [B] MS SQL Server  
 [C] WordPad      [D] PostgreSQL

### 13.5 Presentation Programs :

Microsoft PowerPoint is a presentation program developed by Microsoft. It is part of the Microsoft Office suite and runs on Microsoft Windows and Apple's Mac OS X computer operating systems.

PowerPoint is widely used for making presentation slides consisting of various types of information in text form, picture form by business people, educators, students and trainers and among the most prevalent forms of persuasive technology. Beginning with Microsoft Office 2003, Microsoft revised the branding to emphasize PowerPoint's place within the office suite, calling it Microsoft Office PowerPoint instead of just Microsoft PowerPoint. The current versions are Microsoft Office PowerPoint 2007 for Windows and 2008 for Mac.

### **13.6 Graphics Programs :**

Computer graphics are graphics created by using computers and their presentation and manipulation of pictorial data by using various graphic support application software. The development of computer graphics has made computers easier to interact with and better for understanding and interpreting many types of data. Developments in computer graphics had a profound impact on many types of media and have revolutionized the animation and video game industry. All types of computers use some or more graphics and users expect to control their computer through icons and pictures.

#### **13.6.1 Computer Graphics has following features :**

- Representation and manipulation of pictorial data
- Display pictures, films and movies as per the users need
- Digitally synthesizing and manipulating visual content

Today computers and computer-generated images touch many aspects of our daily life. Computer imagery is found in newspapers, on television, during surgical procedures and in weather reports. A well-constructed graph can present complex statistics in a form that is easier to interpret and understand. These graphs are used to illustrate reports, papers, these and other presentation material. A range of tools and facilities are available to enable users to visualize their data and computer graphics are used in many disciplines.

#### **❑ Check Your Progress – 4 :**

1. To make a Presentation \_\_\_\_\_ software is used.  
[A] Corel Draw [B] PowerPoint  
[C] Excel [D] None of the above
2. \_\_\_\_\_ is used to process pictorial data.  
[A] Word processor [B] Spreadsheets  
[C] Graphics programs [D] None of the above

### **13.7 Multimedia Authoring Applications :**

Multimedia is described as a medium having multiple content forms. Multimedia includes a combination of text, audio, images, animation and video in interactivity content forms.

Multimedia is usually recorded and played, displayed or accessed by information content processing devices, such as computerized and electronic devices, but can also be part of a live performance. Multimedia (as an adjective) also describes electronic media devices used to store and experience multimedia is similar to traditional mixed media in fine art, but with a broader scope. The term ? rich media ? is synonymous for interactive multimedia.

**❑ Check Your Progress – 5 :**

- Multimedia includes \_\_\_\_\_.  
[A] Text            [B] Audio            [C] Video            [D] All of the above
- \_\_\_\_\_ is usually recorded and played, displayed or accessed by information content processing devices.  
[A] Word processor            [B] Multimedia  
[C] Graphics programs            [D] Spreadsheet

**13.8 Entertainment and Education Software :**

The computer application software is widely used for entertainment and education purpose. Thousands of computer games are available for school children. While playing, they learn so many things such as logical reasoning, strategic planning, simulation of various situation and solving the problems and knowledge acquisition etc. The software that imparts education on number of subjects such as mathematics, English, history etc. is also available.

Educational software is computer application software, the primary purpose of such software is to teaching or self-learning processes effectively. The design of educational software programmes for home use has been influenced strongly by computer gaming concepts – in other words, they are designed to be fun as well as educational. A further category of educational software is designed for use in school classrooms. Typically, such software may be projected onto a large whiteboard at the front of the class and/ or run simultaneously on a network of desktop computers in a classroom. This type of software is often called classroom management software.

**13.8.1 Some examples of entertainment software are :**

- Find MP3 is an easy to use and powerful MP3 search tool that allows you to find thousands of free MP3 music files on the Internet. There are many search engines on the Internet that offer free MP3 files and 2 Find MP3 makes it easy to find and download the music you are looking for.
- Play and organize your favourite mp3 and movie files with all-in-one media player. All-in-One Media Player supports all popular audio and video formats including MP3, AVI, MPG and various DVD standards. You will never again lose track of your media collection which often is scattered over different folder locations and disks.

**13.9 Let Us Sum Up :**

**In this unit, we have :**

- Discussed what is word processing software and spreadsheet software.
- Elaborated Presentation software.
- Described DBMS software.
- Talked about Multimedia software.
- Discussed Educational and Entertainment software.

**13.10 Suggested Answers For Check Your Progress :****❑ Check Your Progress 1 :**

- [C]
- [D]
- Application

- ❑ **Check Your Progress 2 :**  
1. [B]                      2. [A]                      3. [C]
- ❑ **Check Your Progress 3 :**  
1. [C]                      2. [A]                      3. [C]
- ❑ **Check Your Progress 4 :**  
1. [B]                      2. [C]
- ❑ **Check Your Progress 5 :**  
1. [D]                      2. [B]

### **13.11 Glossary :**

**DBMS :** Database Management System. Application to store large amount of data.

**SQL :** Structured Query Language. It is 4th GL language, used to operate databases.

### **13.12 Assignment :**

#### ❖ **Broad Questions :**

1. What do you mean by word processing software ? List various words processing software. Discuss the significant features of Microsoft Word.
2. What do you mean by spread sheet ? What are its utilities ? List the various types of spreadsheets.

#### ❖ **Short Notes :**

- Database management system (DBMS)
- Microsoft PowerPoint
- Computer Graphics
- Multimedia Systems
- Entertainment and education software's

### **13.13 Activity :**

Gather information about "Open Office" product from the Internet and List the features of it.

### **13.14 Further Reading :**

1. Computer Fundamentals by P.K.Sinha and Priti Sinha.
2. Discovering Computers 2016 by Shelly Cashman Series. CENGAGE publications.
3. Computer Fundamentals by Pearl Software, Khanna Book Publishing.