

COMPUTER SCIENCE

Grade: XI

APPLICATION PACKAGE

- Word Processing (MS-Word)
- Spreadsheet (MS-Excel)
- Presentation (MS- PowerPoint)
- Database (MS- Access)



REFERENCE NOTE

Unit Wise Important Questions for Computer Science XI

Unit 7 Application Package

1. What is word processing? Write its features.
2. What do you understand by formatting a document?
3. What is a word processor? State the advantages of the word processor.
4. Write short notes: a) Mail Merge b) Hyperlink and bookmark
5. What is spreadsheet package? State the advantages of the spreadsheet packages.
6. What is an application program? List the major features of the spreadsheet.
7. Write short notes: a) Cell b) The Goal Seeks c) Conditional formatting d) what if analysis
8. What is a presentation package? Explain with its features.
9. What is Database management system? Write its characteristics.
10. Describes the types of domain specific tools.

Unit-4 Application Package

4.1 Introduction to Office Package

4.1.1 Word Processing

Word Processing is an application of computer technology for typing and manipulating any kind of text such as letters, memos, articles, brochures, proposals, thesis, reports, books, etc. A word processor is a software package that provides a working environment to type, manipulate, edit, format, save, retrieve and print any kind of text. Some of the commonly used word processor is *Word perfect, word star, Ms-word, page maker*, etc.

Features of word Processor

- Fast operation
- Editing text features.
- Formatting features.
- Permanent Storage
- OLE (Object linking and embedding)
- Review the document
- Mail Merge
- Searching
- Print Design

Some Popular Word Processing Packages.

| | | | | |
|---------------------------|--------------------|-----------------|-----------------|--------------|
| MS word | MS write | AmiProWord Star | Kingsoft Writer | Lotus Notes |
| Lotus Word Pro | Professional Write | | MultiMate | Word Perfect |
| Apache Open Office Writer | Ted | | | |

Mail Merge

Mail Merge is the processing of merging (combining) the mail (letter/invitation card etc) document with the name list of different recipients individually. In Microsoft, the mail merge features makes it easy to send same letter to a list of different people with correct name and address printed on each letter.

Use of a word processor

- To create resume/bio-data
- Cover letters
- Advertisements
- Reports writings
- Update a blog
- World Wide Web Pages
- Newsletters
- Annual Reports

- Articles
- Directories
- Brochures
- Books

MS Word

We know that Microsoft Word (Ms-Word) is the most popular word processing software package developed by *Microsoft Corporation*. It runs in the windows platform. It provides several functions beside *entering, creating, editing, formatting, saving, retrieving and printing* document. The files created in Microsoft word is called word document. File extension is *.doc*.

Microsoft Company is releasing different versions of Ms-Word such as, Ms-Word 97, Ms-Word 2000, Ms-Word 2002, Ms-Word 2003, Ms-Word 2007, Ms- Word 2010, Ms- Word 2013, Ms- Word 2016 and Ms-Word 2019. It does not really matter which version of Ms-Word we are using. The icons and menus might look different but the functions are almost the same.

Macro:

A macro is a list of commands, keystrokes or some other actions that has been saved and given a name when you create a macro; we record a series of actions. When we replay the macro, it repeats those actions for us. We can use macro to automate nearly any task that requires multiple steps-no matter how many steps are required.

Many commercial applications supports macros and some even feature an array of built-in, predefined macros that we can use right away to suit our own work style.

Document Formatting:

It includes size of page, its orientation, headers or footers, merging columns & sections, Due to this, document look like good.

Templates:

Templates are redesigned documents that are blank except for present margins, fonts, paragraph formats; use a template we do not have to manually format complex documents. We can open a document template, type our text into it, save it and print the finished document.

4.1.2 Spreadsheet Package

Introduction:

Microsoft Excel (Ms-Excel) is one of the most popular types of spreadsheet package. This is developed by Microsoft Corporation, U.S.A. You can Ms- Excel to prepare salary sheet, Balance Sheet of company, profit and loss account etc. It can be used to solve arithmetical, algebraic, trigonometric and statistical problems. The file of Ms-Excel is called workbook and its extension is *.XLS*. An exe file of Ms-Excel is 'Excel. Each excel worksheet consists of 256 columns and 65,536 rows.

Features of Spreadsheet

- Allows data entry, storage, calculations and presentation.
- Formatting of data for making it attractive by using tools like font, font color, font size.
- Simple computing operations like copy, cut, paste, find, replace.
- Sorting data either in ascending or descending order on the basis of different fields.
- The formula for calculations using cell address including mathematical, statistical, trigonometrically etc.
- Allow sharing workbooks, allowing multiple users to edit the same workbook at the same time.
- Provide various chart types and shapes like pie, Bar, XY, Stack Bar, Area, 3D-Pie.
- Data validation for setting data entry rules.
- Internet features including a web toolbar and the ability to create hyperlinks and to save files using Save as HTML option.
- Advanced Features like goal seek, scenario, auditing, what if analysis pivot table pivot chart.
- Supports the high level features of object linking and embedding i.e. data from MS Word can be safely and easily put and linked with data in MS Excel and vice versa.
- Support natural language formulas.

Spreadsheet Software's

| | | | | |
|---------------------|----------|------------|----------------------------|--------------------|
| MS Excel | Gnumeric | Lotus1-2-3 | Simple Spreadsheet | Google Spreadsheet |
| OpenOffice.org Calc | | WikiCalc | Ability Office Spreadsheet | TABULUS |

Use of Spreadsheet

- Arithmetic and Statistical Calculations
- Preparation of Profit and Loss Account.
- Financial Forecasting
- Reports and Balance Sheet.
- Preparation of Income Statements.
- Charts (PIE, BAR etc)
- Regression Analysis
- Preparation of Tax Statements
- Database Management Developing Custom Application Using Visual Basic Application.

Basic Fundamental of Spread Sheet

Workbook: -

Workbook is a collection of one or more worksheets. A workbook is a file in which you work because each workbook can contain many sheets. You can organize various kinds of related information in a single file.

Worksheet: -

It is an area of workplace where the data or record can be placed. In each and every worksheet there are 256 columns and 65,536 rows, columns and rows are presented by A,B,CIV and 1,2,3..... 65,536 respectively.

- Rows: - The horizontal line of worksheet.
- Columns: - The vertical line of worksheet.

NOTE: - We can put 255 sheets in workbook of excel.

Cell: -

The intersection between row and column is called cell. It is unit part of worksheet, which can store information, as pictures text, number and formula. Each cell contains 32,000 characters.

Cell Range: -

It is an area or collection of defined number of cells into a worksheet that refers to a certain block of cell. Example: A1:E1, A1:C4 etc.

Cell Address (Cell Reference): -

It is the reference of a cell denoted by using the column label followed by row number. In spreadsheet terminology, a cells column and rows co-ordinate is called the cell reference. Example: A1, B2, C4, E9 etc.

4.1.3 Presentation (Power point)

Introduction:

Power point is a presentation package. When we have many pictures, texts, graphics, information's, sounds, video-clip to present this to a large number of people we use this package.

Features:

- Presentation gives detail overview of the topic.
- Audio-Video can be merged on the single to clarify on specific topic.
- It is easy to build from simple to interactive presentation.
- It provides wide range of design, animation and other built in tools for easiness.
- Presentation software provides 2D and 3D text editing and displaying facilities.
- Presentation software can be converted to movie file, so that it can be used as title and names displayer from the beginning or at last of the movie.

Use of Presentation Program

- An editor that allows text to be inserted and formatted.
- A method for inserting and manipulating graphic images and
- A slide show system to display the content.
- The Presentation Program is application software used for creating a slide, designing it, formatting it, setting animation and sound, setting effects and displaying the slides.

Examples of Presentation Program are

| | | | | |
|-------------------|---------------|---------------------|------------|------------------------|
| MS PowerPoint | Simple Slides | IBM Lotus | KPresenter | OpenOffice.org Impress |
| Opera Show Format | Magic Point | Corel Presentations | | Freelance Graphics |
| Apple Keynote | Power dot | Harvard Graphics | | |

Features of Presentation Package

- Allows data entry, storage, Calculations and presentation
- Formatting of data for making it attractive by using tools like font, font color , font size etc.
- Simple Computing operations like copy, cut, paste, find, replace.
- Pre-designed slide designs can use used faster and easier development of the presentation.
- Slide Transition, to define how a slide is displayed from the previous one.
- Predefined Slide animation for making the slide look attractive.
- Custom animation to develop our own animation.
- Buttons for the easier navigation from one slide to another.
- Bookmark and Hyperlink to link different components of a presentation.
- Provide various chart types and shapes like pie, Bar, XY, Stack Bar, Area, 3D-Pie.
- Internet features including a Web toolbar and the ability to create hyperlink and to save files using Save as HTML option.

Database Management System

Database:

It is organized form of record about some person, organization or something store under certain media. It is a collection of related information about a subject organized in a useful manner that provides a base or foundation for procedure, such as retrieving information, drawing conclusion and make decision.

DBMS:

Database Management System is software that manages the data stored in a database. This is a collection of software which is used to store data, records, process them and obtain desired information. Since, data are very important to the end users, we must have a good way of managing data.

A DBMS is a collection of programs that manages the database structure and controls access to the data stored in the database. The DBMS make it possible to share the data in the database among multiple applications or users. The DBMS stands between the database and the user.

Some major database System activities are (Functions of DBMS)

1. Adding new file to the database
2. Inserting data into the database
3. Retrieving/viewing data from the database
4. Updating data in existing database file
5. Deleting data from the database file
6. Removing files from the database

Advantages of DBMS (Features /Objectives of DBMS)

1. Sharing data
2. Reduced data redundancy
3. Data backup and recovery
4. Inconsistency avoided
5. Data integrity
6. Data security
7. Data independence
8. Multiple user interfaces
9. Process complex query

Concept of MS Access

Features of Microsoft Access:

- It provides very useful database features such as tables, forms, reports and queries.
- It works as front end development tool.
- This provides end-user applications developer environment.
- It shares data with other application such as Microsoft Word or Excel.
- It support three computer programming language such as: SQL, Macros and Visual BASIC etc.

4.2 Introduction to Domain- Specific Tools

Domains-specific tools refer to the application software developed and used for some specific domain (or area). It is developed to fulfill the requirement of a specific domain.

Some of the common domain specific tools are:

- School Management System
- Inventory Management System
- Payroll System
- Financial Accounting System
- Hotel Management System
- Weather Forecasting System