

# Computer Applications

Solution

**IX**



# Chapter 1

## Computer System



### I. Tick (✓) the correct option.

1. Which among the following is not the characteristic of the computer?
- |              |                     |
|--------------|---------------------|
| a. Diligence | b. Unlimited Memory |
| c. Versatile | d. Accuracy         |

**Ans.** b. Unlimited Memory

2. The ALU stands for:
- |                                      |                          |
|--------------------------------------|--------------------------|
| a. Additional Logical Unit           | b. Asset Logical Unit    |
| c. Arithmetic Lexicographically Unit | d. Arithmetic Logic Unit |

**Ans.** d. Arithmetic Logic Unit

3. Which unit of the computer system is responsible for holding the input data, intermediate results, output results and program and makes them available for processing as and when required?
- |                          |                          |
|--------------------------|--------------------------|
| a. Input Unit            | b. Internal Storage Unit |
| c. Arithmetic Logic Unit | d. Control Unit          |

**Ans.** b. Internal Storage Unit

4. The \_\_\_\_\_ unit of the computer provides the capability of decision making to the computer.
- |                     |           |
|---------------------|-----------|
| a. Input            | b. Output |
| c. Internal Storage | d. ALU    |

**Ans.** d. ALU

5. Name the device that finds maximum usage in video conferencing and chatting in real time.
- |               |                   |
|---------------|-------------------|
| a. Scanner    | b. Digital Camera |
| c. Web Camera | d. Video Camera   |

**Ans.** d. Video Camera

6. Name the printer whose print head contains banks of pins moving at high speed against inked ribbon and paper.
- |                        |                  |
|------------------------|------------------|
| a. Dot-Matrix Printer  | b. Chain Printer |
| c. Daisy Wheel Printer | d. None of these |

**Ans.** a. Dot-Matrix Printer

7. The \_\_\_\_\_ printer is used to print images by selectively heating coated thermo chromic paper.
- a. Dot-Matrix Printer
  - b. Thermal Printer
  - c. Ink-Jet Printer
  - d. Laser Printer

**Ans.** b. Thermal Printer

8. The contents of main memory, currently in use and likely to be needed in future is stored in which memory?
- a. Registers
  - b. Hard Disk
  - c. Flash Memory
  - d. Cache Memory

**Ans.** d. Cache Memory

9. Which among the following secondary memories is not an Optical memory?
- a. Floppy
  - b. CD
  - c. DVD
  - d. Blu-Ray

**Ans.** a. Floppy

10. Name the type of memory that is used in pen drive.
- a. Magnetic Disk Memory
  - b. Optical Disk Memory
  - c. Flash Memory
  - d. None of these

**Ans.** c. Flash Memory

## II. Fill in the blanks with the given words.

1. The term **system** refers to a group of interconnected components which work together to perform an integrated whole.
2. Data are raw facts which when processed gives us **Information**.
3. The **Output** Unit is responsible for recording the final results sent from internal storage unit.
4. The **Control** Unit directs the operation of all components and units of the computer system as per the instructions given in a program.
5. The **ALU** unit of the CPU is responsible for all arithmetic as well as logical operations.
6. The **Scanner** is an input device that captures information from a page and store them in graphic format.
7. The **Laser** printer uses toner to print images.
8. The **Inkjet** printer fires ink drops on paper for printing.
9. A **webcam** is a video camera that feeds or streams its image in real time to or through a computer to a computer network.
10. A **block** is a sector or a group of sectors that the operating system can address in a hard disk.

### III. State whether the following statements are True (T) or False (F).

1. Webcam can be used to record moving video with sound. T
2. The term “Versatile” used to define a characteristic of a computer that is used to tell that a computer can do different type of task. T
3. Processing of Information gives Data. F
4. The Input Unit of the Computer is responsible for holding input data and intermediate results. T
5. ROM is volatile in nature. F
6. The direction key on a keyboard is used to move the cursor on the screen. T
7. A mouse can have only one button. F
8. A Scanner is used to display data on the screen. F
9. Dot Matrix Printer is an example of an non- Impact Printer. F
10. Among all the memories, the Registers are the fastest memory. T

### IV. Short Answer Type Questions (SA-I)

**1. What is a Computer System?**

**Ans.** Computer systems refers to a computer along with any software and peripheral devices that are necessary to make the computer perform a particular task.

**2. What is the function of an ALU?**

**Ans.** The Arithmetic Unit is responsible for performing arithmetic operations like addition, subtraction, multiplication and division. The Logical Unit is used to perform logic operations such as comparing, selecting, matching and merging of data.

**3. What is Flash Memory used for?**

**Ans.** Flash memory is a non-volatile memory chip used for storage and for transferring data between a personal computer (PC) and digital devices. It has the ability to be electronically reprogrammed and erased. It is often found in USB flash drives, MP3 players, digital cameras and solid-state drives.

**4. What is ‘block’ in a hard disk?**

**Ans.** A block is a sector or a group of sectors that the operating system can address (point to).

**5. Name the type of memory that is placed is logically positioned between the Registers and Main Memory.**

**Ans.** Cache Memory

### V. Short Answer Type Questions (SA-II)

**1. How does a Drum Scanner work?**

**Ans.** Drum scanners spins the image at high speed while it is scanned pixel by pixel, creating the highest possible quality scanned image. Here the original document to be scanned is wrapped around a drum and then scanned by moving the detector head longitudinally as the drum is rotated.

2. State two differences between a RAM and a ROM.

Ans.

Difference between RAM and ROM	
RAM (Random Access Memory)	ROM (Read Only Memory)
RAM is easily accessed by the processor.	ROM can't be directly accessed by the processor because first it is transferred into RAM where it is executed by the processor.
RAM is volatile in nature as it automatically erased when computer shutdowns.	ROM is non-volatile in nature as it never erased when there is any shutdown or restart of computer.

3. State two advantages of using a Dot Matrix Printer.

Ans. Advantages:

- It can print on multi-part stationery or make carbon-copies.
- Among all the printers it has the lowest printing costs per page.

4. State two disadvantages of using a Thermal Printer.

Ans. Disadvantages of Thermal Printers:

- Too much of heating is a possibility and may damage the printer.
- It is not suitable to print in colour.

5. What is a Laser Printer? How is it different from an Inkjet Printer?

Ans. A Laser printer is a type of printer that is linked to a computer producing good-quality printed material by using a laser to form a pattern of electrostatically charged dots on a light-sensitive drum, which attract toner (or dry ink powder). The toner is transferred to a piece of paper and fixed by a heating process.

Inkjet printer uses ink cartridges whereas laser printer uses toner cartridges.

6. What are the different types of memories that form the Memory Unit of the Computer System?

Ans. RAM, ROM, Registers, Cache, Hard Disk, Memory Card, Pen drive, optical disk, etc.

7. Define the terms "Block" and "Sector" as used in a Hard Disk.

Ans. A sector is one of the "pie slices" the diskette or disk is divided into. Dividing the circular medium into pie slices is a way to organize it so that data can be located by the read/write heads of the drive. The hard disk is usually installed inside the computer's case, though there are removable and cartridge types as well. A block is a sector or a group of sectors that the operating system can address (point to). The bigger the hard disk size more the sectors that a block will hold. It is the block where actual data is stored.

8. What is the difference between CD and DVD?

Ans. DVDs offer more data storage capacity compared to CDs. CDs are also commonly used for audio

and program files, while DVDs are used for video and program files.

**9. How are the terms Data and Information related?**

**Ans.** Data are simply facts or figures — bits of information, but not information itself. When data are processed, interpreted, organized, structured or presented so as to make them meaningful or useful, they are called information.

**10. What is an Input Device? Name two Input Devices.**

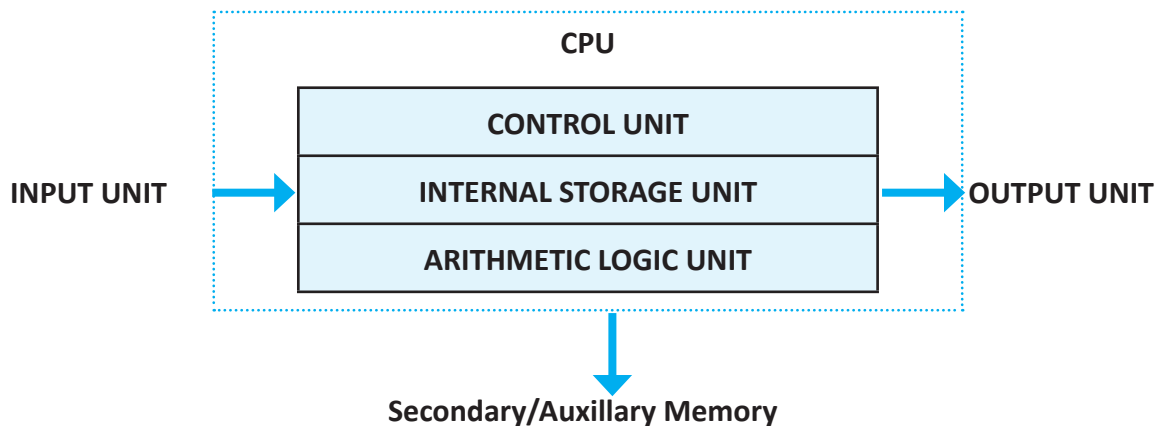
**Ans.** Input Devices are peripherals that are used to provide data to the computer system.

Example- Keyboard, Mouse, Scanner, etc.

**VI. Long Answer Type Questions (LA)**

**1. Using a block diagram explain how data is processed into information in the Computer System.**

**Ans.** The figure below shows the major components of a computer system. It consists of an Input Unit, Central Processing Unit (CPU) and Output Unit.

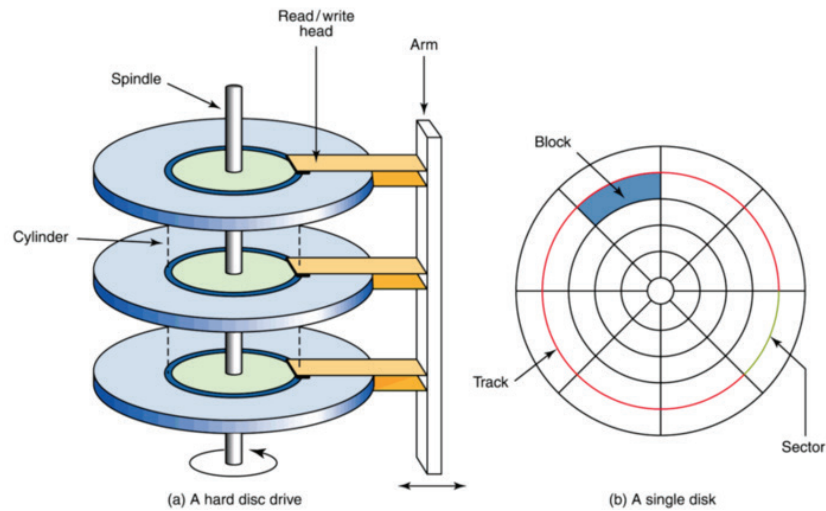


**Working of the components:** It is through the “Input Unit” a computer receives data and instruction which get processed in the Central Processing Unit (CPU) and the result or information is shown through “Output Unit”. While doing so the “Internal Storage Unit “ is responsible for holding the input data, intermediate results, output results and program and makes them available for processing as and when required. In case the data, information or instruction needs to be stored permanently for future reference or even after the computer is turned off, the “Secondary / Auxiliary Memory” is used.

**2. Explain the concept of Block, Sectors and Cylinder of a Hard Disk with the help of a diagram.**

**Ans.** Hard Disk consists of 1 or more metal platters which are sealed inside a case. The metal platters attached to a spindle are magnetic in nature and stores data. Each platter requires two read/write heads, one for each side. All the read/write heads are attached to a single access arm so that they cannot move independently. Each platter has the same number of tracks(they are like concentric rings), and a track location that cuts across all platters is called a cylinder. A sector is one of the “pie slices” the diskette or disk is divided into. Dividing the circular medium into pie slices is a way to organize it so that data can be located by the read/write heads of the drive.

The hard disk is usually installed inside the computer's case, though there are removable and cartridge types as well. A block is a sector or a group of sectors that the operating system can address (point to). The bigger the hard disk size more the sectors that a block will hold. It is the block where actual data is stored.



**3. Describe the memory hierarchies of a computer system.**

**Ans.** The different types of memories that forms the Memory Unit of the Computer System are:

- CPU Registers
- Cache Memory
- Main Memory
- Secondary Memory

**4. How is a Impact printer different from a Non-Impact printer? Also give examples of both these printers.**

**Ans.**

Impact Printers	Non-impact Printers
1. It prints characters or images by striking print hammer or wheel against an inked ribbon.	1. It prints characters and images without striking the papers.
2. Its speed is slower.	2. Its speed is faster.
3. Its printing quality is lower.	3. Its printing quality is higher.
4. It normally uses continuous paper sheet.	4. Its normally uses individual paper sheet.
5. It generates noise during printing.	5. It does not generate noise during printing.
6. It uses inked ribbon for printing.	6. It uses toner or cartridge for painting.

7. It is less expensive.	7. It is more expensive.
8. Dot matrix is an impact printer.	8. Laser printer is a non-impact printer.

**5. Explain how printing occurs in a Laser Printer.**

**Ans.** It makes a laser beam scan back and forth across a drum inside the printer, building up a pattern of static electricity. The static electricity attracts onto the page a kind of powdered ink called toner. Finally, as in a photocopier, a fuser unit bonds the toner to the paper.

**Application based Questions**

**1. Shamim is a student of architectural student and wants to design a building using his computer. He manages to draw a building but is unable to determine what type of printer should be used. Suggest him a suitable printer along with the reason.**

**Ans.** Shamim should go for a Plotter, this is because it has the following advantages for users of architecture.

- Plotters are able to work on large sheets(2 or more feet) of paper and still maintain high quality resolution at good speed.
- It can print on wide variety of materials such as sheet steel, plywood, aluminum, plastic, cardboard and almost any flat sheet material.
- It is possible for plotters to save all patterns and templates on disk and eliminate the hassle of having to load the same patterns or templates over and over again.

**2. Anuska is a video editor and performs video editing in a production house. The files she stores are usually of huge sizes approximately of 30 GB. The company plans for an upgradation and require to keep backup. Suggest Anuska an Optical Disk that will help her in keeping backup, with reasons.**

**Ans.** As Video Editing requires huge amount of storage space for rendering movies, the best optical backup device would be to use Blu-Ray Disc.

**3. Phantom is a computer programmer, who is developing a small software for a retail chain. Unfortunately, the shop owner is not able to provide him an internet connection; Phantom carries different modules of this software, installs in the computers connected in various shops and carries sample data back with him for testing. Which storage device will you suggest to him to use for this purpose? This device should have high storage capacity and should be re-writeable.**

**Ans.** A Pen Drive using Flash Memory is more preferable, as it is not only fast for reading and writing, but also portable for the Phantom Programmer to carry here and there.



## Chapter 2

# Types of Software



### I. Tick (✓) the correct option.

1. Name the type of software that is designed to operate the computer hardware and to provide a platform for running application software.

- a. Application Software
- b. Web-Based Software
- c. System Software
- d. None of these

**Ans.** c. System Software

2. Which among the following is not an Operating System?

- a. Unix
- b. Android
- c. Microsoft Word
- d. Microsoft Windows

**Ans.** c. Microsoft Word

3. Which among the following is used for controlling the peripheral devices?

- a. Assembler
- b. Operating System
- c. Library Programs
- d. Web Based programs

**Ans.** c. Library Programs

4. Which among the following is not an Antivirus software?

- a. WinZip
- b. McAfee
- c. Quick Heal
- d. Kaspersky

**Ans.** a. WinZip

5. A Utility software that speeds up the system by arranging files stored on the hard disk at discrete location to occupy contiguous storage locations:

- a. Antivirus
- b. Compression Utility
- c. Text Editor
- d. De-Fragmentation Utility.

**Ans.** d. De-Fragmentation Utility

6. Which among the following is a type of translator that converts a program line-by-line to machine language while executing it?

- a. Assemblers
- b. Compilers
- c. Interpreters
- d. None of these

**Ans.** c. Interpreters

7. Which of the following is not an example of a Word Processor?
- a. Microsoft Word
  - b. Adobe Pagemaker
  - c. OpenOffice Writer
  - d. OpenOffice Calc

**Ans. d. OpenOffice Calc**

8. Name the software that helps in organizing and analysis of information in tabular form.
- a. Word Processor
  - b. Presentation Tools
  - c. Spreadsheet Tools
  - d. Database Management System

**Ans. c. Spreadsheet Tools**

9. Which of the following is an example of DBMS?
- a. OpenOffice Writer
  - b. OpenOffice Impress
  - c. OpenOffice Calc
  - d. OpenOffice Base

**Ans. d. OpenOffice Base**

10. Which among the following is not a Mobile Application?
- a. Native apps
  - b. Web apps
  - c. Hybrid apps
  - d. System apps

**Ans. d. System apps**

## II. Fill in the blanks with the given words.

1. **Software** is a program or a group of instructions given to the computer to perform a particular task.
2. **Antivirus** is a software that is used to remove viruses and other malware programs from an infected computer.
3. The **Quarantine** option in an Antivirus Software is used to disable a virus, which is too difficult to remove.
4. The **Utility** programs are used to enhance the functionality of a computer system.
5. It is always advisable to take **Backup** in case there is any damage or accidental damage to the computer system to protect its content.
6. **Library** Programs are a way of sharing common programs that do not need to be re-written for each piece of software.
7. **Language Processors** are translators that converts programs written in High-Level Language to Machine Language.
8. **Presentation Tool** is a software that facilitates the creation of presentations on any particular topic.
9. **Encryption** is the technique of converting a content into un-understable form.
10. A **mobile app** is a software application developed specifically for use on small hand-held devices.

### III. State whether the following statements are True (T) or False (F).

1. Computerised Reservation System is a software that allows you to conduct transactions related to railway or air travel. T
2. An Attendance Module is a part of Human Resource Management System. T
3. Finger Print Reader is a biometric device mostly used in an Attendance System. T
4. Mobile web apps are the web applications to render/deliver pages on web browsers running on mobile devices. T
5. General Application software can only be used specifically for an organization. T
6. An assembler is used to convert a high level language program to low-level language. T
7. Tally is a Mobile application. T
8. Android is an operating system for a Personal Computer (PC). T
9. Proximity Reader is a device that senses an employee within its proximity and marks the person present or absent as attendance. T
10. OpenOffice Writer is a customised software. T

### IV. Short Answer Type Questions (SA-I)

**1. What is a software?**

**Ans.** Software refers to a program or group of instructions that are given to the computer, which is stored in the main memory to perform a specific job.

**2. What is a database management system?**

**Ans.** A Database Management System (DBMS) is a software package that enables you to store, modify and extract information from a database.

**3. State any one use of an accounting management software.**

**Ans.** Accounting Management Software is used to generate Balance Sheet for a company or an individual.

**4. What is human resource management?**

**Ans.** A Human Resources Management System (HRMS) is just the software application that caters to the management of the human resources of an organization. It combines many human resources functions including benefits administration, payroll, recruiting and training, and performance analysis and review into one package.

**5. What is the function of a proximity reader in an attendance system?**

**Ans.** These devices are very advanced compared to the above mentioned Attendance system devices. It just senses an employee within its proximity and marks the person present or absent.

### V. Short Answer Type Questions (SA-II)

**1. What is system software? Name the different types of system software.**

**Ans.** System software is collection of programs that is used to service or help other programs during execution.

The different types of System Software are:

- Operating System
- Library Programs
- Utility Programs
- Programming Language Translators

**2. State two functionalities of an operating system.**

- Ans.** i. It acts as an interface between the computer and the user.  
ii. It controls all hardware and software resources of the computer system.

**3. What is an anti-virus software? Also explain the term quarantine with respect to anti-virus software.**

**Ans.** Virus Scanner or Antivirus is a utility software that is used to remove viruses and other malware programs from the computer.

**Quarantine:** Certain virus may be too difficult to be removed completely, this virus are disabled and kept in a safe place so that it cannot infect other files.

**4. What are mobile applications?**

**Ans.** A mobile application, most commonly referred to as an app, is a type of application software designed to run on a mobile device, such as a smartphone or tablet computer.

**5. What is the use of compression utility software?**

**Ans.** Compression utility software is used to compress a file to a smaller size, which may then be used for storage or transfer from one computer to another.

**6. State at least two advantages of using a backup utility software.**

- Ans.** 1. Taking regular backups makes data reliable.  
2. Taking regular backups can make recovery easier during catastrophic disaster.

**7. How does the process of defragmentation speed up the computer system?**

**Ans.** Disk de-fragmentation utility software speeds up the system by rearranging files stored on the hard disk to occupy contiguous storage locations using a technique called defragmentation. This leads to minimizing the head travel, which reduces the time it takes to read files from and write files to the disk.

**8. What are library programs?**

**Ans.** Library Programs are a way of sharing common programs so that they do not need to be re-written for each piece of software. For example, the use of mouse is almost same in different application software.

**9. What is the significance of using language translator?**

**Ans.** A Programming Language Translator is responsible for converting programs written in a computer language to machine language. There are three types of translator namely Assemblers, Compilers and Interpreters.

**10. State one difference between**

- a. Compiler and interpreter.
- b. Standard software and customised software

**Ans.** a. Interpreter converts each line of a program to machine language whereas Compiler converts an entire program to machine language as a whole.

b. Standard or Generic Software is a general purpose software that is mass produced with the intention that it will be used by a wide variety of different users in a range of different situations. Customised software on the other hand as the name suggest, is more specific towards a particular organization or an individual. Such software's meets the requirements of that organization or individual to whomever it may be concerned. It is created for a specific purpose which will be used in a known environment.

**11. What is a presentation tool? Give two examples of a presentation software.**

**Ans.** Presentation Tool is a software that facilitates the creation of presentations on any particular topic. A presentation is a combination of slides, handouts, notes and outlines all kept in a single file. It is possible to add text, graphics, photos, clip art, sound and video to your slides.

Examples OpenOffice Impress and Microsoft PowerPoint.

**12. Which software is used to analyse statistical data? Give two examples of such software.**

**Ans.** Spreadsheet is used to analyse statistical data. Examples OpenOffice Calc and Microsoft Excel.

**13. State two features of accounting management software.**

**Ans.** Two features of Accounting Management Software are:

- Financial Accounting (Multi-Currency)
- Inventory Management (Multi-location)

**14. What is a reservation system?**

**Ans.** Reservation System or Computerised Reservation System is a software that is used to store and retrieve information and conduct transactions related to railway travel, air travel, hotels, car rental, or activities. Reservation System was originally designed and operated by airlines, but currently is extended extensively by Indian railways and also by travel agencies.

**15. What is the function of a payroll module in a human resource management software?**

**Ans.** The Payroll module is responsible for automating the pay process by gathering data on employee time and attendance, calculating increments, calculating various deductions and taxes, and generating periodic pay cheques and employee tax reports.

**16. Name two devices that are used as an automated attendance system.**

**Ans.** Two devices that are used as an automated Attendance System:

- Finger Print Reader
- Proximity Reader

**17. What is the function of a inventory control system?**

**Ans.** An inventory control system is an application that encompasses all aspects of managing a company's inventories i.e. purchasing, shipping, receiving, tracking, warehousing and storage, turnover and reordering.

**18. State one difference between native app and web app.**

**Ans.** Native apps are built for a specific operating system. A native app developed for iOS operating system won't work on Android devices and vice-versa. If an app is developed for iOS, it will remain exclusive to that operating system.

Web apps on the other hand are the web applications to render/deliver pages on web browsers running on mobile devices. Since these apps target browsers, they work on different mobile operating systems. Web apps are mobile-optimized web pages that look like an app.

**VI. Long Answer Type Questions(LA)**

**1. What is the significance of using a billing system?**

**Ans.** It provides many facilities to the people working through it. In the billing process one simply have to add the information into the data base and all the calculations are done by the billing services provider itself. It handles all the data merging, copying from the sources and application of different formulas on it to get the required results for the company. It helps to maintain the system of the costumers, their records and helps to ensure the working of the entire system of the company.

**2. Describe the use of accounting management software.**

**Ans.** Accounting software is a class of computer programs that enable you to manage your business's financial transactions. Such programs can vary widely in scope, with some programs designed for little more than simple bookkeeping and some designed to manage the entire financial comings and goings of large businesses. Using accounting software helps companies to use the resources in their accounting departments efficiently, and can reduce costly bookkeeping mistakes.

**3. What are presentation tools used for?**

**Ans.** Presentation Tool is a software that facilitates the creation of presentations on any particular topic. A presentation is a combination of slides, handouts, notes and outlines all kept in a single file. It is possible to add text, graphics, photos, clip art, sound and video to your slides.

**4. Explain the working of a:**

- i. Interpreter
- ii. Compiler

**Ans.**

Interpreter	Compiler
Translates program one statement at a time.	Scans the entire program and translates it as a whole into machine code.

It takes less amount of time to analyze the source code but the overall execution time is slower.	It takes large amount of time to analyze the source code but the overall execution time is comparatively faster.
No intermediate object code is generated, hence are memory efficient.	Generates intermediate object code which further requires linking, hence requires more memory.
Continues translating the program until the first error is met, in which case it stops. Hence debugging is easy.	It generates the error message only after scanning the whole program. Hence debugging is comparatively hard.
Programming language like Python, Ruby use interpreters.	Programming language like C, C++ use compilers.

**5. What is the function of encryption/decryption tool?**

**Ans.** Encryption is the conversion of electronic data into another form, called ciphertext, which cannot be easily understood by anyone except authorized parties. The primary purpose of encryption is to protect the confidentiality of digital data stored on computer systems or transmitted via the Internet or other computer networks.

Decryption is the process of transforming data that has been rendered unreadable through encryption back to its unencrypted form. In decryption, the system extracts and converts the garbled data and transforms it to texts and images that are easily understandable not only by the reader but also by the system.

**6. What are hybrid apps?**

**Ans.** Hybrid apps are a mixture of both native and mobile web apps and therefore target multiple platforms. This type of application has cross-platform compatibility but can still access phone's hardware. Softwares used to develop these apps are generally HTML, CSS, Javascript, JQuery, Mobile Javascript frameworks, Cordova/PhoneGap, etc.

**Application based questions**

**1. Below are mentioned some of the most common general purpose software, give a short description of them also give two examples of such a software:**

General Purpose Software	Define	Examples
Word processor		
Spreadsheet		
presentation Tool		
DBMS		
Accounting System		

Ans.

General Purpose Software	Description	Examples
Word Processor	Word processing is a term used in computer education for typing, editing, saving it for future reference and printing any kind of text-letters, memos, articles, reports and even books.	Microsoft Word and OpenOffice Writer
Spreadsheet	A spreadsheet is a computer application that helps in organizing and analysis of information in tabular form. It is primarily used to work with statistical data and can also help in organizing information, to calculate and analyze using mathematical formulas.	Microsoft Excel and OpenOffice Calc
Presentation Tool	Presentation Tool is a software that facilitates the creation of presentations on any particular topic. A presentation is a combination of slides, handouts, notes and outlines all kept in a single file.	Microsoft Powerpoint and OpenOffice Impress
DBMS	A Database Management System (DBMS) is a software package that enables you to store, modify and extract information from a database.	MySQL and Oracle
Accounting System	Accounting System is a practical application of management techniques to analyse, control and report on the financial health of the organization. Thus requiring analysis, planning, implementation and control of programs designed to provide financial data reporting for managerial decision making.	Busy and Tally

2. **Kapil finance limited a microfinance firm is planning to computerise its office to give better service to its customers. Here are some the task the firm needs to do:**

- a. Write profile of the firm.
- b. Stores the name and addresses of the customers.
- c. Send letters to customers.
- d. Keeps the account of the money being approved for a customer.
- e. Give salaries to its employees.
- f. Present different products to the employees.

**Suggest suitable general purpose software that may be used to perform each of the above task.**

- Ans.
- a. Word Processor-OpenOffice Writer
  - b. Data Base Management System- MySQL



- c. Word Processor-OpenOffice Writer
- d. Spreadsheet Tool-OpenOffice Calc
- e. Spreadsheet Tool-OpenOffice Calc
- f. Presentation Tool-OpenOffice Impress

- 3. St. Antony's School Vishakapatnam is planning to provide computerised Progress Report to its students. As the school is affiliated to CBSE, proper norms of projects and assignments needs to be kept. Apart from the aforesaid norms it also accesses a student on other co-curricular and extra-curricular activities. The problem is, the school is finding it difficult to get an adequate software according to its requirement. Suggest a suitable software between General- Software and Customised Software along with reasons for the school to use.**

**Ans.** The school should opt for a Customised software as there is no generalised software according to the requirement of the school. Thus a software is required which should be tailor made according to the requirement of the school.

# Chapter 3

## Operating System



### I Tick (✓) the correct option.

1. Which among the following is not an example of an Operating System?

- a. Windows 7
- b. Linux
- c. Unix
- d. Microsoft Word

**Ans.** d. Microsoft Word

2. Name the type of Operating System that allows supports and allocates programs on more than one CPU.

- a. Multiuser Operating System
- b. Multiprocessing Operating System
- c. Distributed Operating System
- d. None of the above

**Ans.** b. Multiprocessing Operating System

3. Which among the following has the fastest response time?

- a. Multiuser Operating System
- b. Multiprocessing Operating System
- c. Distributed Operating System
- d. Real Time Operating System

**Ans.** d. Real Time Operating System

4. Which among the following forms the core of the Operating System?

- a. User Interface
- b. File Management
- c. Memory Management
- d. Kernel

**Ans.** d. Kernel

5. Which of the following does not come under the memory management of the Operating System?

- a. It keeps track of the main memory and checks which part is in use and by which process. It also keeps track of the part that is not in use.
- b. It checks whether the RAM is physically broken or not and gives a relevant message during the booting process.
- c. It makes a decision on which process will get memory when and by how much.
- d. It allocates the memory according to the requirement of the process.

**Ans.** b. It checks whether the RAM is physically broken or not and gives a relevant message during the booting process.

6. Which among the following is not a type of system call?

- a. Process Control
- b. File Management

c. BIOS

d. Device Management

**Ans. c. BIOS**

7. Which among the following is not a type of kernel?

a. Macrokernel

b. Microkernel

c. Nano Kernel

d. Hybrid Kernel

**Ans. a. Macrokernel**

8. Which among the file system is no longer supported by the developer?

a. FAT 32

b. NTFS

c. HFS

d. None of these

**Ans. HFS**

## II. Fill in the blanks with the given words.

1. An **Operating System** is a software that provides a platform for other applications to be executed.
2. The **Distributed** operating system allows software and data to be distributed around the system.
3. **Booting** is the process of loading the Operating System into the memory during start up.
4. **Hybrid** kernel runs a few services in the kernel space to reduce the performance overhead of traditional microkernels.
5. Hierarchical File System was made by **Apple**.
6. **Nano** Kernel simplify the memory requirement by entrusting services, including the basic ones like interrupt controllers or timers to device drivers.
7. **Process Scheduling** is the process through which the Operating System decides which process gets the processor when and for how much ime.
8. The **Process control** system call is used to end, abort, create, terminate, allocate and free memory
9. The **Kernel** layer of the Operating System is responsible for multi-tasking, process control, exception handling and interrupt processing.
10. The **User Interface** is a software layer which allows the user to interact directly with the operating system.
11. **Multithreading** is an Operating System that allows different parts of a single program to run concurrently.

## III. State whether the following statements are True (T) or False (F).

1. The HFS was developed and maintained by Apple.
2. Real Time and Multi Threading Operating system behaves same like each other.
3. Booting is the process of storing the Operating System into the Hard Disk.
4. Tracking of files and folders is the File Management functionality.

T

F

F

T

5. Operating System is not responsible for de-allocating the memory when a process no longer requires it. F
6. An Application Software can execute even without an Operating system. F
7. User Interface layer is the core of an operating system. F
8. FAT 32 file system is better than NTFS file system. F
9. An Application Software allocates the CPU to a process. F
10. The Device Drivers are special software designed to enable interaction with hardware devices. T

#### IV. Short Answer Type Questions (SA-I)

**1. What is an operating system?**

**Ans.** An operating system (OS) is software that manages computer hardware and software resources and provides common services for computer programs.

**2. What are system calls?**

**Ans.** In computing, a *system call* is the programmatic way in which a computer program requests a service from the kernel of the operating *system* it is executed on.

**3. What is a real time operating system?**

**Ans.** A *real-time operating system (RTOS)* is an operating system (OS) intended to serve real-time applications that process data as it comes in, typically without buffer delays.

**4. State any one function of the memory management of the operating system.**

**Ans.** The memory management function of an operating system keeps track of the main memory and checks which part is in use and by which process. It also keeps track of the part that is not in use.

**5. What is an user interface?**

**Ans.** User Interface refers to the visual part of an operating system through which a user interacts with a computer or a software.

#### V. Short Answer Type Questions (SA-II)

**1. Why is an operating system needed for a computer system?**

**Ans.** In earlier day's user had to design the application according to the internal structure of the hardware. Operating System was needed to enable the user to design the application without concerning the details of the computer's internal structure. In general the boundary between the hardware & software is transparent to the user.

**2. What is a interactive operating system?**

**Ans.** Interactive (GUI based) Operating System: GUI or Graphical User Interface based Operating System allows the use of icons, windows and menus as tools to interact with the computer.

**3. How is a real time operating system different from distributed operating system?**

**Ans.** A distributed OS provides the essential services and functionality required of an OS, adding

attributes and particular configurations to allow it to support additional requirements such as increased scale and availability. To a user, a distributed OS works in a manner similar to a single-node, monolithic operating system. That is, although it consists of multiple nodes, it appears to users and applications as a single-node.

A real time operating system is intended to serve real-time application process data as it comes in, typically without buffering delays. Processing time requirements (including any OS delay) are measured in tenths of seconds or shorter.

**4. What do you understand by the term “Device Management”?**

**Ans.** It is used to keep track of all I/O (Input/Output) devices like monitor, keyboard, mouse, scanner, etc., and the program responsible for this task is known as the I/O controller.

**5. State any two functions of memory management by the operating system.**

**Ans.** The following are the functions associated with the memory management:

- The kernel keeps track of the main memory and checks which part is in use and by which process. It also keeps track of the part that is not in use.
- The kernel makes a decision on which process will get memory when and by how much? Thus each process must have enough memory in which to execute, and should not overlap the memory space of another process nor be run into by another process.

**6. Name the different type of services provided by system calls.**

**Ans.** The following are some of the services provided by the system calls:

- Process creation and management
- Main memory management
- File Access, Directory and File system management
- Device handling(I/O)
- Protection
- Networking

**VI. Long Answer Type Questions (LA)**

**1. State the activities of an OS related to “File Management”.**

**Ans.** The activities related to File Management includes:

**a. File Attributes**

File attributes are the properties associated with a file that specifies the different information related to the file or data of the file. It specifies the characteristics of a file, such as a type and location that completely describe a file.

**b. File Operations**

File operations are the various tasks that are performed on files. A user can perform these operations by using the commands provided by the operating system.

**c. File Access Permissions**

File access permission help specify the manner in which a user can access a file. These are the access rights that allow us to read, write or execute a file.

#### d. File System

File systems are used by an operating system to store and organize the various files and their information on a hard disk.

### 2. What are the different type of system calls in an operating system?

**Ans.** Types of System Calls: There are 5 different categories of system calls:

- Process control which is used to end, abort, create, terminate, allocate and free memory.
- File management which is used to create, open, close, delete, read file etc.
- Device management
- Information maintenance
- Communication

### 3. State the activities of a OS related to “Processor Management”.

**Ans.**

- The operating system keeps track of the processor and the status of process.
- The operating system allocates the processor (CPU) to a process.
- The operating system is also responsible for de-allocating the processor when processor is no longer required.

### 4. State the features of a interactive (GUI based) operating system.

**Ans.** Interactive (GUI based) Operating System: GUI or Graphical User Interface based Operating System allows the use of icons, windows and menus as tools to interact with the computer. For example such tools may be used for opening, deleting, and moving files. Usually GUI operating systems are navigated through the use of a mouse, the keyboard may also be utilized by using keyboard shortcuts or arrow keys to speed up operations. Because of their ease of use, GUI operating systems have become the dominant operating system used by today’s end-users. Windows is an example of GUI based Operating System.

### 5. How is FAT 32 file system different from NTFS?

**Ans.** FAT32 and NTFS are file systems created for keeping track of files in the hard disk. A file system is a set of logical constructs that dictate how the space on a disk volume is to be utilized. NTFS is more robust and effective simply because of its advanced features and functionalities. FAT, in general, comprises of overly simplistic data structures, hence making operations more time consuming. The functionalities of NTFS are far more over-powering since it makes use of advanced data structures to improve reliability, disk space utilization and overall performance.

## Application based Questions

### 1. Sadhana want her personal office PC to be secured and protected. Suggest some builtin features of the operating system that gives her the protection and security required.

**Ans.** Some of the built-in features of an operating system that would give Mrs Sadhana protection and security are:

- It allows user accounts for each individual accounts for each user,
- It allows user authorisation can be attained using password protection.
- It allows the user to define and thus allows accessibility of different kind of information for different people.
- It allows data encryption thus allowing protection of data by making it un-understandable for those for which it is not meant for.
- It allows data backup for storing data on a peripheral device other than the hard disk.
- In a networked environment, only trusted computers should be able to share data. Some of the common security threats occur due to hacking, viruses, etc.

**2. Mr Rohan just started learning about computer. He is planning to buy a computer system, but he got stuck with the requirement of the operating system's user interface. Suggest him an user interface along with reasons.**

**Ans.** For Mr. Rohan an Operating System that provides Graphical User Interface is more preferable as it is easy to master without much of an effort unlike a Character User Interface which requires some effort, because Mr. Rohan needs to know the different commands through which he can make the computer do some task.

**3. One of the primary features of an operating system is file management. State at least three functionalities of the file management.**

**Ans.** The File Management feature of an Operating System provides the following functionalities:

- It handles the organisation and tracking of files and directories (folders) saved or retrieved from the secondary storage devices.
- It allows the user to perform such tasks as creating files and directories, renaming files, copying and moving files, and deleting files.
- It keeps track of information, location, uses, status etc of the file system.
- It decides which process gets the secondary memory resources, allocates the resources and de-allocate the resources when the process is complete.

**4. Samir a student of engineering is designing an operating system on a pre-defined kernel. What should be used to interact or call the kernel services. Also state some of services provided by the call.**

**Ans.** To interact or call the kernel services System Call is used. The following are some of the services provided by the system calls:

- Process creation and management
- Main memory management
- File Access, Directory and File system management
- Device handling(I/O)
- Protection
- Networking

5. **“Memory management capability of a kernel refers to management of primary memory”. State three functions of memory management of an operating system.**

**Ans.** The following are the functions associated with the memory management:

- The kernel keeps track of the main memory and checks which part is in use and by which process. It also keeps track of the part that is not in use.
- The kernel makes a decision on which process will get memory when and by how much? Thus each process must have enough memory in which to execute, and should not overlap the memory space of another process nor be run into by another process.
- The kernel allocates the memory according to the requirement of the process.

6. **Rekha had got a new printer her birthday. She looked at the manual and connected the cables accordingly. She even inserted the printer cartridge carefully. Now when she tried printing a document in Word 2016, the printer would not print. State with reason why is the printer not printing. Also state the measures she should take for making the printer work correctly.**

**Ans.** This is because the Device Driver for the printer is not installed. The printer packaging must be coming with a CD/DVD for the device driver installation or can be downloaded from the internet, only then the printer would function.



# Chapter 4

## Computer Networking



### I. Tick (✓) the correct option.

1. Which of the following transmission medium is the costliest?
- |                  |                  |
|------------------|------------------|
| a. UTP           | b. STP           |
| c. Coaxial Cable | d. Optical Fibre |

**Ans.** d. Optical Fibre

2. Which among the following is used for transmission in short range (mobile phone) devices?
- |                  |                  |
|------------------|------------------|
| a. Infrared      | b. Bluetooth     |
| c. Coaxial Cable | d. Optical Fibre |

**Ans.** b. Bluetooth

3. Which transmission would you use which can be setup at no time if the cost of digging the land for placing the cables is high?
- |                   |                   |
|-------------------|-------------------|
| a. Microwaves     | b. Satellite Link |
| c. Infrared Waves | d. Bluetooth      |

**Ans.** a. Microwaves

4. Which among the following protocol is used for transferring a web page from a web server to a web browser?
- |         |         |
|---------|---------|
| a. HTTP | b. SMTP |
| c. FTP  | d. TCP  |

**Ans.** a. HTTP

5. Which of the following is not used for wired transmission?
- |                       |                  |
|-----------------------|------------------|
| a. Coaxial Cables     | b. Optical Fibre |
| c. Twisted Pair Cable | d. Microwaves    |

**Ans.** d. Microwaves

6. Which among the following protocols used for Internet Telephony?
- |         |         |
|---------|---------|
| a. HTTP | b. SMTP |
| c. FTP  | d. VoIP |

**Ans.** d. VoIP

7. What is the set of rules called that is used for transmission of data over a network?
- |             |                       |
|-------------|-----------------------|
| a. LAN      | b. WAN                |
| c. Protocol | d. Transmission Media |

**Ans.** c. Protocol

8. What is the practice of using a network of remote servers hosted on the Internet to store, manage, and process data, rather than a local server or a personal computer?
- a. Internet Computing
  - b. Cloud Computing
  - c. Protocol
  - d. Transmission Media

**Ans.** b. Cloud Computing

9. Which among the following is not a type of cloud?
- a. Public
  - b. Private
  - c. Protected
  - d. Hybrid

**Ans.** b. Private

10. In which type of cloud, the infrastructure is shared between several organizations of a specific community or group with common goals and security specifications?
- a. Public
  - b. Private
  - c. Community
  - d. Hybrid

**Ans.** c. Community

## II. Fill in the blanks with the given words.

1. A Private cloud is meant only for one organisation.
2. A hybrid cloud is a mix of private and public cloud.
3. SMTP is the standard protocol for sending emails across the Internet.
4. HTTP is a protocol used for transferring a web page from a web server to a web browser.
5. FTP protocol is used to transfer files between two computers on the Internet.
6. The transmission from the earth to the satellite is known as Uplink.
7. Infrared waves have its frequency just less than red light.
8. In microwave transmission high Towers are used.
9. Optical fibres uses Light as its source of data transmission.
10. A hotspot is a venue that offers Wi-Fi access.

## III. State whether the following statements are True (T) or False (F).

1. Networking allows sharing of printers. T
2. WAN spans over an area near an individual. F
3. LAN spans over small area, usually within a room or a building. T
4. PAN spreads over a very small area usually at the vicinity of a device. T
5. Microwaves are used in LAN. F
6. Bluetooth technology is used for communication in most hand-held devices. T

7. Optical fibers though expensive, is the fastest and most reliable transmission medium.
8. Satellite link is used for radio waves communication.
9. Data transmission rate in coaxial cable is slower than the twisted pair cable.
10. Radio Waves are used in walky-talkies.

T  
F  
F  
T

#### IV. Short Answer Type Questions (SA-I)

**1. What is a Computer Network?**

**Ans.** A computer network is a group of computer systems and other computing hardware devices that are linked together through communication channels to facilitate communication and resource-sharing among a wide range of users.

**2. List two advantages of a network.**

**Ans.** The following are some of the most important uses and benefits of a computer network.

- **File sharing:** Networking of computers helps the network users to share data files.
- **Hardware sharing:** Users can share devices such as printers, scanners, CD-ROM drives, hard drives, etc.

**3. Name the type of network that spans over an area near an individual, typically within a range of 10 meters.**

**Ans.** PAN(Personal Area Network)

**4. Name two guided media used in a network.**

**Ans.** Twisted Pair and Co-axial

**5. What is a protocol?**

**Ans.** In computing, a protocol or communication protocol is a set of rules in which computers communicate with each other. The protocol says what part of the conversation comes at which time. It also says how to end the communication.

#### V. Short Answer Type Questions (SA-II)

**1. State two advantages of infrared waves.**

**Ans.** Advantages

- Compared to other transmission media infrared transmission consumes less power.
- Cost of setting up, i.e., the circuit is very economical.

**2. State two disadvantages of microwaves.**

**Ans.** Disadvantages

- Line-of-sight will be disrupted if any obstacle, such as new buildings, are in the way.
- Difficult weather conditions like rain, thunder, storm, lightening affects microwave transmission.

**3. What is a wi-fi hotspot?**

**Ans.** A hotspot is a physical location where people may obtain Internet access, typically using Wi-Fi technology, via a wireless local area network (WLAN) using a router connected to an internet service provider.

**4. What are protocols used to determine?**

**Ans.** The protocols are used to determine the following:

- type of error checking to be used, data compression method (if any),
- how the sending device will indicate that it has finished a message and how the receiving device will indicate that it has received the message.

**5. State the difference between TCP and IP.**

**Ans.** TCP/IP is a two-layer program where the higher layer, TCP, manages the assembling of a message or file into smaller packets that are transmitted over the Internet and received by a TCP layer that reassembles the packets into the original message. The lower layer, IP, on the other hand handles the address part of each packet so that it gets to the right destination.

**VI. Long Answer Type Questions (LA)**

**1. What is an optical fibre? What are its different components?**

**Ans.** Optical Fibers consist of thin strands of long glass whose thickness is that of a human hair. These wires are arranged in bundles which are technically called optical fiber cables and used to transmit data through light signals over long distances using the principle of Total Internal Reflection. An optical fiber has the following parts:

- Core - It is the thin glass rod at the center through which the light travels
- Cladding - It is the outer optical material surrounding the core that reflects the light back into the core
- Buffer coating - It is the plastic coating that protects the cable from damage and moisture

**2. Write a short note on Radio Waves.**

**Ans.** Radio waves have a frequency ranging from 3 KHz to 3GHz. It is used for communication over short distances like from a few meters (as in walkie-talkies) up to covering an entire city. It is easier to generate these waves and can travel long distances and is able to penetrate buildings easily. This makes it widely used in both indoor and outdoor communication.

**3. Why are satellite links used even though it is expensive?**

**Ans.** Even though these systems are expensive, the area it covers compensates for the expenses. The communication satellites are generally owned by governments or by government approved organizations of various countries.

**4. What is WiMAX?**

**Ans.** WiMAX (Worldwide Interoperability for Microwave Access) is a wireless communications standard designed to provide 30 to 40 megabits-per-second data rates. WiMax requires a tower

called WiMax Base Station, similar to a cell phone tower, which is connected to the Internet using a standard wired high-speed connection. But as opposed to a traditional Internet Service Provider (ISP), which divides that bandwidth among customers via wire, it uses a microwave link to establish a connection. In other words, WiMax does not depend on cables to connect each endpoint, the Internet connectivity to an end-user is provided through microwave link between the tower and the user-endpoint, known as Wi-Max subscriber unit.

**5. State two advantages and disadvantages of Bluetooth.**

**Ans. Advantages**

- Connection establishment is very quick and easy, you just need to pair the Bluetooth PAN connection between two devices.
- It has low power consumption.
- It can pass through walls unlike Infrared.

**Disadvantages**

- Bluetooth communication is insecure.
- It is used only for short range communication.
- Power consumption is very high compared to a condition when Bluetooth is powered off.

**Application based Questions**

**1. Tarini Fancy Inc. is planning to connect all computers in their office building spread over an area of 50 metres.**

- a. Suggest the most economical cable type having high data transfer speed which can be used to connect these computers.

**Ans.** Twisted wire cable

- b. Which type of network (out of WAN, LAN and MAN)?

**Ans.** LAN

- c. Which device will be used to connect all the computers?

**Ans.** Hub/Switch

**2. Shobhit wants to create a network for his computers in his office for sharing of hardware and software resources.**

- a. What type of network will be formed (LAN, MAN and WAN)?

**Ans.** LAN

- b. To keep things economical suggest a type of transmission media over a network.

**Ans.** Twisted Pair Cable

- c. What device should be present in each computers for the cable to connect?

**Ans.** Network Interface Card (NIC)

d. He also wants an internet connection for the network, name the device which is primarily used for the internet connectivity.

**Ans.** Modem

**3. Swapan wants to send a video to Sinha sitting beside him on her mobile phone. What networking technology is needed to share a video through the mobile phones? Describe it.**

**Ans.** Bluetooth Technology

It is an unguided media. It is one of the most popular technologies used in hand-held (mobiles and tablets) devices for transmission of data. Its frequency ranges from 2.402 GHz to 2.480 GHz and is therefore used for short range communication (approx. 10m). Its data transfer rate is too slow compared to other waves.

**4. Carefully go through the following descriptions and identify what is being talked about?**

a. It consist of two insulated wires twisted around each other that provides protection against noise and cross talk.

**Ans.** Twisted Pair Cable

b. Disturbance caused due to interference of one signal's electric or magnetic field into other signals.

**Ans.** Crosstalk

c. It is a device used to convert digital signal to analog vice-versa.

**Ans.** Modem

d. It is a software program that allows multiple users to communicate online with realtime audio, video and text chat in dynamic 3D environments.

**Ans.** Interspace

e. It is a device which is used to amplify the signal which is being transmitted.

**Ans.** Repeater

# Chapter 5

## Multimedia, Chat Sites and Social Networks



### I. Tick (✓) the correct option.

1. Which among the following are types of multimedia?
- |                 |                  |
|-----------------|------------------|
| a. Linear       | b. Non-Linear    |
| c. Both a and b | d. None of these |

**Ans.** c. Both a and b

2. Which among the following is not an element of multimedia?
- |              |             |
|--------------|-------------|
| a. Audio     | b. Video    |
| c. Animation | d. Keyboard |

**Ans.** d. Keyboard

3. Which among the following graphics format is used to create digital images through a sequence of commands or mathematical statements that place lines and shapes in a given two-dimensional or three-dimensional space?
- |                    |                        |
|--------------------|------------------------|
| a. Vector graphics | b. Raster graphics     |
| c. Linear graphics | d. Non-linear graphics |

**Ans.** a. Vector graphics

4. What is the full form of JPEG of image format?
- |  |  |
|--|--|
| a. Joint Photographic Experts Groups   | b. Joint Photographic Experts Graphics |
| c. Joint Photographic Elemental Groups | d. Joint Picture Experts Groups        |

**Ans.** a. Joint Photographic Experts Groups

5. Which among the following image formats uses animation?
- |         |        |
|---------|--------|
| a. TIFF | b. BMP |
| c. GIF  | d. PNG |

**Ans.** c. GIF

6. What is the full form of MPEG used in audio formats?
- |                                    |                                |
|------------------------------------|--------------------------------|
| a. Moving Picture Experts Group    | b. Moving Pixel Experts Group  |
| c. Moving Picture Experts Graphics | d. Music Picture Experts Group |

**Ans.** a. Moving Picture Experts Group

7. Name the audio format that is a proprietary format, and is used for streaming audio that enables you to play digital audio files in real-time.
- a. WAV  
b. RAM  
c. WMA  
d. MIDI

**Ans. b. RAM**

8. Name the audio format which is a standard adopted by the electronic music industry for controlling devices, such as synthesizers and sound cards, that emit music.
- a. WAV  
b. RAM  
c. WMA  
d. MIDI

**Ans. d. MIDI**

9. Name the video format developed by Apple.
- a. AVI  
b. WMF  
c. MP3  
d. MOV

**Ans. d. MOV**

10. Name the type of animation that describes the process in which a lead animator draws only the animation frames where major changes take place, called keyframes.
- a. Tweening  
b. Frame by Frame  
c. Vector  
d. Raster

**Ans. a. Tweening**

## II. Fill in the blanks with the given words.

- Virtual Reality is a kind of technology to create a simulated environment.
- Chat Site is a part of an online service that provides a venue for people to exchange messages about a particular subject in real time.
- Social networking is the practice of expanding the number of one's business and/or social contacts by making connections through individuals, often through social media sites such as Facebook, Twitter, LinkedIn and Google+.
- Vector based animation is a graphic element is stored as a mathematical expression that describes its size, shape, position and other characteristics.
- QuickTime is a video format developed by Apple.
- Ogg is a free, open container audio format maintained by the Xiph.Org Foundation.
- WMA is an audio format that can compress files at a higher rate compared to MP3.
- The BMP image format developed by Microsoft do not have any compression or information loss.
- Lossy compression will result in some loss of data as the compression algorithm eliminates redundant or unnecessary information.
- JPEG image format uses very less space though the compression is lossy.



### III. State whether the following statements are True (T) or False (F).

1. TIFF stands for Tagged Image File Format. T
2. Vector graphics uses a dot matrix data structure. F
3. Generative Graphics is extensively used in drawings and illustrations in the form of 2-D and 3-D pictures. T
4. Non- Linear active content progresses often without any navigational control for the viewer such as a cinema presentation. F
5. TIFF image format is best for web graphics. F
6. BMP image format allows lossy compression. F
7. GIF format is widely used graphics format for the web. T
8. Real Audio files uses a lossy compression. F
9. The MIDI is a standard format for digitizing audio of musical instruments. T
10. Shockwave format video files has the .swf extension. T

### IV. Short Answer Type Questions (SA-I)

**1. What is multimedia?**

**Ans.** Multimedia is the field concerned with the computer-controlled integration of text, graphics, drawings, still and moving images (Video), animation, audio, and any other media where every type of information can be represented, stored, transmitted and processed digitally.

**2. List two types of multimedia.**

**Ans.** Linear and Non-Linear

**3. Name any hardware and software requirement for text element in multimedia.**

**Ans.** The hardware and software requirements for text matter as follows:

- Keyboard
- Text Editors
- Text Searching
- Text Importing & Exporting
- Optical Character Recognizers (OCR)
- Text Style
- Hypertext

**4. What is generative graphics?**

**Ans.** Generative Graphics is extensively used in drawings and illustrations in the form of 2-D and 3-D pictures. It is created for mathematical representation of simple objects.

**5. What is raster graphics?**

**Ans.** Raster graphics or bitmap image on the other hand is a dot matrix data structure, representing a generally rectangular grid of pixels, or points of color, viewable via a monitor, paper, or other display medium.

## V. Short Answer Type Questions (SA-II)

1. **What are the different type of audio formats used in multimedia?**

**Ans.** They are:

- Uncompressed audio formats
- Lossless compression
- Lossy compression

2. **State two disadvantages of microwaves.**

**Ans.** Disadvantages

- Line-of-sight will be disrupted if any obstacle, such as new buildings, are in the way
- Difficult weather conditions like rain, thunder, storm, lightening affects microwave transmission.

3. **What is real audio? Name the file extensions of real audio.**

**Ans.** Real Audio is a proprietary format, and is used for streaming audio that enables you to play digital audio files in real-time.

Files with this format has the .ra .ram or .rm extension.

4. **What does MPEG stand for? What are the file extensions of MPEG file format?**

**Ans.** MPEG (Moving Pictures Expert Group) format is the most popular format on the Internet. It is cross-platform, and supported by all the most popular web browsers.

Videos stored in the MPEG format have the extension .mpg or .mpeg.

5. **What is tweened path animation?**

**Ans.** Tweened path animation: Tweening is a traditional animation term that describes the process in which a lead animator draws only the animation frames where major changes take place, called keyframes. Assistants draw the frames in between. Adobe Flash may be used to create tweened path animation.

## VI. Long Answer Type Questions (LA)

1. **What is virtual reality? What are its kinds?**

**Ans.** Virtual Reality: It is a kind of technology to create a simulated environment. Unlike traditional user interfaces, Virtual Reality places the user inside an experience. Instead of viewing a screen in front of them, users are immersed and able to interact with 3D worlds.

There are two kinds of Virtual Reality techniques:

- That allows a user to view a picture from many angles.
- A “world” is constructed of polygons in a 3D plane. The computer then renders in real time the world allowing you to walk through the world.

2. **What is chatting? State two advantages and disadvantages of chatting.**

**Ans.** On the Internet, chatting is talking to other people who are using the Internet at the same time you are. Usually, this “talking” is the exchange of typed-in messages requiring one site as the

repository for the messages (or “chat site”) and a group of users who take part from anywhere on the Internet.

#### Advantages

- Can communicate instantly
- Can attach files
- Fast
- Cheap (almost free)

#### Disadvantages

- Need internet connection
- Other person needs to be online
- Lose non verbal communication (body language, tone of voice)
- Very hard to spot emotions of the people at the other end, which could be upset and you wouldn't know it
- Usually open to other people so not very secure.

### 3. State two advantages of social networking.

#### Ans. Advantages:

**Education Field:** Social networks can be used to improve the education of adults and students since they already have certain influence on the learners. Schools and teachers can take the advantage of social networking abilities to create discussion forums, class blogs and online teaching. Even students can further explore topics that they are interested in by using online social networking since they may have limited resources and time in school.

**Business Field:** Many companies use social networks such as Twitter and Facebook to connect with customers and prospective clients. This leads to a golden opportunity for job seekers to learn more about the organization and easily connect with people who work there.

### 4. What is cyber bullying?

**Ans.** Cyber bullying is a type of cybercrime that involves harassment, where the abusive and insulting messages are repeatedly sent to the victim. Other kinds of cyber bullying such as flaming, denigration, impersonation, outing, trickery, and exclusion are also found in the world of social networks.

### 5. What is digital video?

**Ans.** Digital video is an electronic representation of moving visual images (video) in the form of encoded digital data. This is in contrast to analog video, which represents moving visual images with analog signals. Digital video comprises a series of digital images displayed in rapid succession.

## Application based Questions

1. **Suresh wants to incorporate compression technique for his multimedia files. Name the two compression techniques and their file extensions.**

**Ans.** Uncompressed audio formats do not use any compression. Such files are of large sizes. A WAV audio file is an example of an uncompressed audio file.

- Lossless compression applies compression without losing information or degrading the quality of the digital audio file. The WMA audio file format uses lossless compression.
- Lossy compression will result in some loss of data as the compression algorithm eliminates redundant or unnecessary information. It produces file size that is small, thus making it easier to transmit over the Internet. MP3 and Real Audio files use a lossy compression.

2. **Jiten wants to develop a multimedia application that makes the user actively participate. What type of multimedia would it be? Define it.**

**Ans.** Non-Linear: Non-linear uses interactivity to control progress as with a video game or self-paced computer based training. Example: Hypermedia.

3. **Chandrachur is developing a music for the annual concert at school using his synthesizer. What format would he use?**

**Ans.** MIDI

4. **Carefully go through the following descriptions and identify what is being talked about?**

a. It consists of a file format usually used in digital cameras. Also give its full form.

**Ans.** JPEG - Joint Photographic Experts Groups

b. Name the audio format that is popular for transfer of data over the internet and allows one to stream files even over internet connections with low bandwidths.

**Ans.** WMA and MP3

c. Name the technique that is used to convert analog sound waves to a digital format.

**Ans.** Sampling

d. It is an open container format maintained by the Xiph.Org Foundation.

**Ans.** Ogg

e. It is an audio format used for storing uncompressed sound in files, developed jointly by Microsoft and IBM.

**Ans.** WAV

# Chapter 6

## Cyber Safety



### I. Tick (✓) the correct option.

1. If someone says they are 16 you should
  - a. Believe them, they have no reason to lie
  - b. Not trust anyone you don't personally know
  - c. Give them your age
  - d. Meet up with them because they may be someone cool to hang out with

**Ans.** b. Not trust anyone you don't personally know

2. Who is the most common victim of online predators?
  - a. Infants
  - b. Adults
  - c. 5-9 year olds
  - d. Teenagers

**Ans.** d. Teenagers

3. Which among the following is not a malicious website?
  - a. Address, Phone Number and/or Email address is present.
  - b. The website address is not mis-spelled.
  - c. The https:// at the beginning of the web site.
  - d. The link shows a different address than what is mentioned.

**Ans.** c. The https:// at the beginning of the website

4. When visiting sites where you win something or they are giving something away
  - a. Give your name, phone number, and address
  - b. Give parents information
  - c. Give no personal information (If it sounds to good to be true, it is)
  - d. Give whatever information they request

**Ans.** c. Give no personal information

5. You are online and you get an instant message from your internet service provider needing your password
  - a. I give it to them because they are my ISP
  - b. I ask them why they need it
  - c. I never give my password to anyone
  - d. I log off without giving any information

**Ans.** c. I never give my password to anyone

6. \_\_\_\_\_ is a fraudulent practice of directing Internet users to a bogus website that mimics the appearance of a legitimate one.

- a. Virus
- b. Malware
- c. Pharming
- d. Chatting

**Ans. c. Pharming**

7. What is the private browsing mode in Internet Explorer/Edge called?

- a. InPrivate
- b. Incognito
- c. PrivateIn
- d. All of these

**Ans. a. InPrivate**

8. Which among the following is not a social networking site?

- a. Facebook
- b. Gmail
- c. Twitter
- d. LinkedIn

**Ans. b. Gmail**

9. \_\_\_\_\_ monitors user activity and transmit that information in the background to someone else.

- a. Malware
- b. Spyware
- c. Adware
- d. None of these

**Ans. b. Spyware**

10. Viruses are \_\_\_\_\_.

- a. Man made
- b. Naturally occurring
- c. Machine made
- d. All of these

**Ans. a. Man made**

## II. Fill in the blanks with the given words.

1. Unsolicited commercial email is called **Spam**.
2. **Protect** your computer and smartphone with strong, up-to-date security/anti-malware software.
3. A **Virus** is a piece of code which is capable of replicating itself and typically has a detrimental effect, such as corrupting the system or destroying data.
4. **Biographical** Information is submitted voluntarily in social networking sites.
5. The default privacy settings in social networking site is **Public**.
6. **Tagging** refers to assigning a keyword or phrase that describes the theme of a group of articles, photos, videos, or other types of media files in social networking sites.
7. **Confidentiality** of information is defined as information to which the public does not have general access.

8. **Cyberstalking** is a crime in which the attacker harasses a victim using electronic communication.
9. An **authentication** process, ensures that authorized users are assigned confidential user identification and passwords.
10. A **malware** is a broad term used to describe all sorts of unwanted or malicious code.

### III. State whether the following statements are True (T) or False (F).

1. Computer “virus” is a program which is developed by humans whose malicious intents is to disrupt the normal activity that can be done using a computer. T
2. A virus can spread if you are using an infected media like Pen drives, CD, DVD, etc, which may have itself got infected from some other computer. T
3. Worms are usually parasitic in nature. F
4. Macro viruses infects files with .exe extension. F
5. Privacy is used to verify that a user sending a message is who he or she claims to be, and to provide the receiver with the means to encode a reply. F
6. Identity protection refers to the protection of personally identifiable information. T
7. Confidentiality of information is is defined as information to which you do not have general access. T
8. Cyber safety refers to safe and responsible use of Information and Communication Technologies (ICT). T
9. Facebook is a malware. F
10. Polymorphic viruses have the capability of changing itself after infecting a computer. T

### IV. Short Answer Type Questions (SA-I)

**1. What are blogs?**

**Ans.** A blog is a regularly updated website or web page, typically one run by an individual or small group, that is written in an informal or conversational style.

**2. What does https stand for?**

**Ans.** Hyper Text Transfer Protocol Secured.

**3. What is the feature of private browsing called in Chrome browser?**

**Ans.** Incognito

**4. What is Log off in Social Networking?**

**Ans.** Log off refers to closing the current session in the social networking site.

**5. What is Cyberstalking?**

**Ans.** Cyberstalking is a crime in which the attacker harasses a victim using electronic communication, such as e-mail or instant messaging (IM), or messages posted to a social networking site and chat site. A cyberstalker, using anonymity allow them to stalk their victim without being detected.

## V. Short Answer Type Questions (SA-II)

1. **State two methods by which you can detect a virus.**

**Ans.** Following are some of the ways your computer reacts to viruses:

- The speed of your computer may go down to a considerable extent.
- Certain software may require more time to start than it does usually.
- Certain software may not start at all.
- Some software may start normally but closes down abruptly.

2. **Name the three type of information collected by a social networking site.**

**Ans.** They are

- **Required Information:** Name, E-Mail, Date of Birth, Location. (Essential for the account.)
- **Secret Information:** Alternate e-mail, mobile phone number, security question and answer. (In case the account is compromised or you have lost your password.)
- **Biographical Information:** Information about yourself submitted voluntarily. (For advertisement content offered to you and to aid in advertisement targeting.)

3. **State three points that you should remember while selecting a password.**

**Ans.** While selecting passwords the following points are to be remembered:

- The longer the password, the harder it is to crack. Consider a 12-character password or longer.
- Avoid names, places, and dictionary words.
- Mix it up. Use variations on capitalization, spelling, numbers, and punctuation.
- You may also use a specialized Password Manager package; as ultimately the number of passwords that you need to remember will grow.

4. **What is Pharming?**

**Ans.** Pharming refers to the fraudulent practice of directing Internet users to a bogus website that mimics the appearance of a legitimate one, in order to obtain personal information such as passwords, account numbers, etc.

5. **List two methods by which you will be able to identify malicious websites.**

**Ans.** The following are the list of malicious, criminal or inappropriate websites:

- Check for presence of an address, phone number and/or email contact – often indications that the website is genuine. If in doubt, send an email or call to establish authenticity.
- Check that the website's address seems to be genuine by looking for subtle misspellings, extra words, characters or numbers or a completely different name from that you would expect the business to have.
- Roll your mouse pointer over a link to reveal its true destination, displayed in the bottom left corner of your browser. Beware if this is different from what is displayed in the text of the link from either another website or an email.

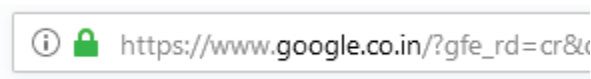


## VI. Long Answer Type Questions (LA)

### 1. Give four methods of identifying malicious sites.

**Ans.** The following are the list of malicious, criminal or inappropriate websites:

- Check for presence of an address, phone number and/or email contact – often indications that the website is genuine. If in doubt, send an email or call to establish authenticity.
- Check that the website's address seems to be genuine by looking for subtle misspellings, extra words, characters or numbers or a completely different name from that you would expect the business to have.
- Roll your mouse pointer over a link to reveal its true destination, displayed in the bottom left corner of your browser. Beware if this is different from what is displayed in the text of the link from either another website or an email.
- If there is no padlock in the browser window or 'https://' at the beginning of the web address to signify that it is using a secure link, do not enter personal information on the site.



- Websites which request more personal information than you would normally expect to give, such as user name, password or other security details IN full, are probably malicious.

### 2. Give four methods by which you will be able to safely use a social networking site.

**Ans.** The following list should be followed for using the social networking safely:

- Use a strong password. The longer it is, the more secure it will be.
- Use a different password for each of your social networking accounts and try changing it frequently.
- Set up your security answers which available with social networking sites.
- If you have social networking app on your phone, be sure to password protect your device.

### 3. What do you understand by Identity protection? Give three steps you should take to protect from theft.

**Ans.** Identity protection refers to the protection of personally identifiable information, such as Aadhar Card Number, Credit/Debit Card Number, bank account number, username or password by an imposter in order to impersonate someone else. Identity fraud can be used to obtain credit, merchandise and services in the name of the victim, or to provide the thief with false credentials. In addition to running up debt, in rare cases, an imposter might provide false identification to police, creating a criminal record or leaving outstanding arrest warrants for the person whose identity has been stolen.

Some of the steps you should take to protect your identity from theft are:

1. Protect your computer and smartphone with strong, up-to-date security/anti-malware software. This is because if your computer or phone is infected with malicious software, other safeguards will be of little help.
2. The Operating System should also be regularly updated with different security patches and service packs as this will decrease the possibility of the security breach.

You should be able to spot spam and scams. Although some phishing scams are easy to identify, other phishing attempts in email, Instant Messaging, on social networking sites, or websites can look very legitimate. You should never click on a link that has been sent to you, if you have no idea about the source.

**4. What is the method of selecting a strong password?**

**Ans.** While selecting passwords the following points are to be remembered:

- The longer the password, the harder it is to crack. Consider a 12-character password or longer.
- Avoid names, places, and dictionary words.
- Mix it up. Use variations on capitalization, spelling, numbers, and punctuation.
- You may also use a specialized Password Manager package; as ultimately the number of passwords that you need to remember will grow.

**5. What do you understand by confidentiality of information? State the best practices to ensure confidentiality.**

**Ans.** Confidentiality of information is defined as information to which the public does not have general access. This policy governs the use or further disclosure of such information.

Best practices used to ensure confidentiality are as follows:

- An authentication process, which ensures that authorized users are assigned confidential user identification and passwords. Another type of authentication is biometrics.
- Role-based security methods may be employed to ensure user or viewer authorization. For example, data access levels may be assigned to specified department staff.
- Access controls ensure that user actions remain within their roles. For example, if a user is authorized to read but not write data, defined system controls may be integrated.

### Application based Questions

**1. To use the internet safely, Suresh has been given a questionnaire consisting of 5 questions. Help him with the questionnaire.**

a. When you are making up a user name for email and instant messaging, you should:

- i. Always use your real name.
- ii. Use a name that does NOT reveal your true identity.
- iii. Use a name that gives good clues about who you really are.

**Ans.** ii. Use a name that does NOT reveal your true identity.

b. With your secret codes and passwords, you should:

- i. Give them out to only your best friends.
- ii. Give them out to strangers.
- iii. Never give out your passwords, except to your parents.

**Ans.** iii. Never give out your passwords, except to your parents.

- c. When someone asks for personal information like phone numbers or addresses online, you should:
- Give the information to anyone who asks because it's the polite thing to do.
  - Post the information on any public Web site like MySpace, so anyone can find it.
  - Never give out personal information online in emails or instant messages because you never know who you are really communicating with.

**Ans.** iii. Never give out personal information online in emails or instant messages because you never know who you are really communicating with.

- d. When you are filling out forms or surveys online, you should:

- Answer all the questions truthfully.
- Before you answer any questions, you should get your parents' approval.
- Make up funny answers to all the questions.

**Ans.** ii. Before you answer any questions, you should get your parents' approval.

- 2. Shobhit felt that he had been a victim of cyberstalking for a long period of time. Give 4 steps you should take for reporting cybercrimes.**

**Ans.** Here are few steps you should keep in mind for reporting cybercrimes:

- The first step is to register a written complaint to the immediate cyber cell in the city. The Information Technology Act categorically provides that a cyber crime has global jurisdiction, meaning that the crime may be reported in the Cyber Crime Units of any city, irrespective of the place where the act was committed. At the time of filing of the complaint, the person reporting the crime may also be required to provide their name, contact details and mailing address along with the application, which is to be addressed to the Head of the Cyber Crime Cell of the city.
- In case of non-availability of cyber-cells in the city, one can file a F.I.R. in the local police station, commissioner or judicial magistrate of the city.
- Offences covered by the Indian Penal Code may also be reported at a local police station by lodging a First Information Report (FIR) irrespective of the jurisdiction in which the offence was committed.
- A report should also be send to the administration of the website for them to take immediate steps. Most social networking websites have a procedure in place for reporting any abusive activity or other such alleged offence.

- 3. Mr Swapan wants to secure his profile in a Social Networking site. To do this, he needs to change some privacy settings of his profile in the social Networking site. Suggest some privacy settings that will safe guard his identity.**

**Ans.** Some of the common privacy settings associated with social networking sites are:

- The default privacy settings is "Public" , which may also be "Friends" or "Custom. The first two options are good for someone who has a small group of friends they don't mind sharing everything with or who has no personal identifying information on their profile and doesn't

mind it all being public. But for those of us who want a little more control over exactly who sees what on our profiles, it's time to familiarize yourself with the "Custom" option.

- **How You Connect**– This section allows you to change how people find you, who can post to your wall and who sees what information on your wall.
- **How Tags Work**– This option controls who can tag you in pictures, you can see the pictures you're tagged in and who can tag people in the pictures that you post. By default, Facebook shows the pictures you are tagged in publicly, even if you do not have a public wall.
- **Apps and Websites**– This section controls the third party apps that are allowed to access and interact with your profile without compromising it.
- **Privacy of each post**- This option is for convenience where each time you make a post, you can choose if that post is public, only to friends, only to you and more. You can even set it to show only to certain lists that you have.

**4. Indranil always finds his password is being compromised in his social networking account. Suggest him suitable ways by which, he will be able create a strong password.**

**Ans.** While selecting passwords the following points are to be remembered:

- The longer the password, the harder it is to crack. Consider a 12-character password or longer.
- Avoid names, places, and dictionary words.
- Mix it up. Use variations on capitalization, spelling, numbers, and punctuation.
- You may also use a specialized Password Manager package; as ultimately the number of passwords that you need to remember will grow.

# Chapter 7

## Word Processing using Microsoft Word 2016







### I. Tick (✓) the correct option.

1. Which among the following software is not used for Word Processing?
- |                      |                    |
|----------------------|--------------------|
| a. OpenOffice Writer | b. Microsoft Word  |
| c. Adobe PageMaker   | d. Microsoft Excel |

**Ans.** d. Microsoft Excel

2. Which group of the Home Tab allows you to change the font colour?
- |              |           |
|--------------|-----------|
| a. Clipboard | b. Font   |
| c. Paragraph | d. Styles |

**Ans.** b. Font

3. Which among the following buttons allows you to change Line and Paragraph Spacing?
- |   |  |
|---|--|
| a.   | b.   |
| c.  | d.  |





**Ans.** c. 

4. Which of the following is not a Font Style?
- |              |            |
|--------------|------------|
| a. Bold      | b. Italics |
| c. Underline | d. Capital |





**Ans.** d. Capital

5. Which among the following group of the Home Tab allows you to make a text bold?
- |              |           |
|--------------|-----------|
| a. Clipboard | b. Font   |
| c. Paragraph | d. Styles |

**Ans.** b. Font

6. Which among the following button is used to change the font colour of a text?
- |  |   |
|--|---|
| a.  | b.  |
| c.  | d.  |

**Ans.** a. 

7. Which among the following button is used to change the background colour of a text?
- |  |   |
|--|---|
| a.  | b.  |
| c.  | d.  |

**Ans.** b. 

8. The \_\_\_\_\_ alignment aligns selected text to both right and left margin.
- a. Left Alignment
  - b. Right Alignment
  - c. Centered Alignment
  - d. Justified Alignment

**Ans.** d. Justified Alignment

9. Which among the following Tab is used to add a Header and/or Footer?
- a. Home
  - b. Insert
  - c. Design
  - d. Layout

**Ans.** b. Insert

10. What is the default font in Word?
- a. Calibri
  - b. Times New Roman
  - c. Bookman
  - d. None of these

**Ans.** a. Calibri

## II. Fill in the blanks with the given words.

1. Document1 is the default name for a Word document.
2. The Save As of the File menu allows you to make a copy of the current document.
3. To type in a series of capital letters the Caps Lock on the keyboard should be pressed.
4. Font Face is a set of characters, including letters, numbers, symbols and punctuators.
5. To Save and Open a Word document the File Tab is used.
6. The Backspace key on the keyboard is used to remove a character on the left of the cursor and Delete key is used to remove a character on the right of the cursor.
7. Calibri is the default font in Word 2016.
8. Left alignment is the default alignment in Word.
9. The default line spacing in Word is 1.15.

## III. State whether the following statements are True (T) or False (F).

1. You can press the Enter key on the keyboard to mark the end of a paragraph. T
2. The default file extension of a Word file is .docx. T
3. It is possible to change the amount of space to leave between the lines of text. T
4. The Multiple Line Spacing option allows you to choose how many points of spacing you want between the lines. T
5. Headers are text and/or graphics that are repeated on the top of every page. T
6. Page Number cannot be added as header in a page. F
7. The New, Open and Save option is present in the Home Tab. F
8. Font is a specific form of typeface and is a typeface of one size and style. T

9. Word 2016 do not have a Title bar.
10. You cannot have Justify alignment of a paragraph.

F

F

#### IV. Short Answer Type Questions (SA-I)

**1. What is a font?**

**Ans.** A font is a graphical representation of text that may include a different typeface, point size, weight, color, or design.

**2. What are the different types of alignments in Word?**

**Ans.** Align Left, Justify, Align Right and Center.

**3. What is a footer work space?**

**Ans.** The amount of space allocated for the footer section of a page is called footer work space.

**4. What is the file extension of Word document?**

**Ans.** The default extension is docx.

**5. What is paragraph spacing?**

**Ans.** The spacing that can be adjusted before and after paragraphs is called paragraph spacing.

#### V. Short Answer Type Questions (SA-II)

**1. State the difference between a header and a footer.**

**Ans.** A header is text that appears within the top margin on each page of a document or section. A footer appears in the bottom margin of each page

**2. How do you highlight a text in Word?**

**Ans.** To highlight a text in word the following steps are involved:

1. Select the txt.
2. Click on the 'Highlight' drop-down list of the 'Font' group of the 'Home' Tab.

**3. Name any two options of 'Paragraph Spacing'.**

**Ans.** The two options of the 'Paragraph Spacing' are:

- Exactly: When you choose this option, the line spacing is measured in points, just like font size. For example, if you're using 12-point text, you could use 15-point spacing.
- At least: Like the Exactly option, this lets you choose how many points of spacing you want. However, if you have different sizes of text on the same line, the spacing will expand to fit the larger text.

**4. What does multiple line spacing mean in Word?**

**Ans.** The 'Multiple' line spacing allows you to type the number of lines of spacing you want. For example, choosing Multiple and changing the spacing to 1.2 will make the text slightly more spread out than single-spaced text. If you want the lines to be closer together, you can choose a smaller value, like 0.9.

**5. What is alignment? Name the four forms of alignment in Word.**

**Ans.** Alignment refers to the position of lines in a paragraph in relation to the documents left and right margins. The four forms of Alignment are Align Left, Justify, Align Right and Center.

**VI. Long Answer Type Questions (LA)**

**1. Explain the process of inserting a header and a footer in Word.**

**Ans.** To insert a header or footer:

1. Select the Insert tab.
2. Click either the Header or Footer command.
3. From the drop-down menu, select Blank to insert a blank header or footer, or choose one of the built-in options.
4. The Design tab will appear on the Ribbon, and the header or footer will appear in the document.

**2. Explain the any three line spacing in a paragraph.**

**Ans.** Some of the options that you can change are:

- **Exactly:** When you choose this option, the line spacing is measured in points, just like font size. For example, if you're using 12-point text, you could use 15-point spacing.
- **At least:** Like the Exactly option, this lets you choose how many points of spacing you want. However, if you have different sizes of text on the same line, the spacing will expand to fit the larger text.
- **Multiple:** This option lets you type the number of lines of spacing you want. For example, choosing Multiple and changing the spacing to 1.2 will make the text slightly more spread out than single-spaced text. If you want the lines to be closer together, you can choose a smaller value, like 0.9.

**3. How do you save a file in Word?**

**Ans.** To save a file:

1. Locate and select the Save command on the Quick Access Toolbar.
2. If you're saving the file for the first time, the Save As pane will appear in Backstage view.
- 3 You'll then need to choose where to save the file and give it a file name. Click Browse to select a location on your computer. Alternatively, you can click OneDrive to save the file to your 2OneDrive.
4. The Save As dialog box will appear. Select the location where you want to save the document.
5. Enter a file name for the document, then click Save.
6. The document will be saved. You can click the Save command again to save your changes as you modify the document.



**4. Discuss the steps involved in paragraph spacing in Word.**

**Ans.** To change the paragraph spacing:

1. Click the Home tab.
2. In the Paragraph group, click the Line Spacing command button. A menu appears.
3. Choose a new line spacing value. The line spacing is set for the current paragraph or all selected paragraphs.

**5. How would you change the font size of a text in Word?**

**Ans.** To change the Font size of a text in Word:

1. Select the text or cells with text you want to change. To select all text in a Word document, press Ctrl + A.
2. On the Home tab, click the font size in the Font Size box.

**Application based Questions**

**1. Rashid while typing a document, usually have the habit of using the Save Button on the Quick Access Toolbar to store the document. One day while working suddenly he does not find the Save Button. Suggest the method to Rashid so that he can again use the Save Button.**

**Ans.** To add the Save button:

1. Click Customize option of the Quick Access Toolbar, and then click More Commands.
2. In the Choose commands from list, click File Tab.
3. Choose Save command, and then click Add.
4. Remember to click OK.

**2. Sujata has created a test on her students of class 3 on prepositions in Microsoft Word. She had created a paragraph as shown below:**

**Fill in the blanks with the given suitable prepositions:**

1. I want to lose 5 kilogram \_\_\_\_\_ (on, at, in) one month.
2. Could you get me this pants \_\_\_\_\_ (on, at, in) a larger size?
3. She seems to be interested \_\_\_\_\_ (on, at, in) Psychology.
4. I will come to pick you up \_\_\_\_\_ (on, at, in) 2 pm tomorrow.
5. This class will be held \_\_\_\_\_ (on, at, in) Mondays.

But the space (especially the height) given for each blank is too less for a child of class 3 to write. Suggest a method through which you will be able to help Sujata in increasing the space between the lines so that it helps the children in writing the prepositions comfortably.

**Ans.** Sujata can increase the line spacing between the lines using the following steps:

1. Select the paragraph you want to change.
2. Select Home > Line and Paragraph Spacing, and choose the spacing you want.

**3. Tripti a personal assistant at Zimole Corporation Pvt. Ltd. She had typed in a correspondence as specified by her boss, but due to hurry she had typed the entire letter in capital letters. Help her in converting the letter to lower case, with the first alphabet of a sentence in capital, without retyping the entire letter.**

**Ans.** To change according to requirement:

1. Click on the Home Tab.
2. From the Font group use the 'Change Case' command options to change it to 'Sentence case'.

**4. Suzane had typed her English project entirely in Word. She now wants the page number of each page to be displayed at the bottom of every page. Suggest her the process to do so.**

**Ans.** To insert page numbers:

1. Double-click the header or the footer area (near the top or bottom of the page).
2. On the Header & Footer, tab, click Field.
3. In the Field names list, click Page, and then click OK.

# Chapter 8

## Advance Formatting in Word 2016



### I. Tick (✓) the correct option.

1. Grammatical errors are shown using \_\_\_\_\_ wavy lines.
- a. Red  
b. Blue  
c. Green  
d. Purple

**Ans.** b. Blue

2. Which Tab contains the Spelling & Grammar command?
- a. References  
b. Layout  
c. Design  
d. Review

**Ans.** d. Review

3. Which group of the Review Tab contains the Spelling & Grammar command?
- a. Proofing  
b. Insights  
c. Language  
d. Comments

**Ans.** a. Proofing

4. Which function key is used to start the Spelling & Grammar check?
- a. F5  
b. F6  
c. F7  
d. F8

**Ans.** c. F7

5. Name the command that is used to provide synonyms for selected words ?
- a. Grammar.  
b. Dictionary.  
c. Thesaurus.  
d. None of these

**Ans.** c. Thesaurus

6. The subscript and superscript command is present in which group of the Home Tab.
- a. Clipboard  
b. Font  
c. Paragraph  
d. Styles

**Ans.** b. Font

7. Thesaurus allows you to choose a \_\_\_\_\_ for a given text.
- a. Antonyms  
b. Synonyms  
c. Both a and b  
d. Neither a nor b

**Ans.** b. Synonyms

8. Which Tab contains the Symbol command?

- a. Home
- b. Insert
- c. Design
- d. Layout

**Ans. b. Insert**

9. In printing what is the term that refers to the gathering and arranging of individual sheets or other printed components into a pre-determined sequence?

- a. Print Preview
- b. Page Preview
- c. Collate
- d. Print

**Ans. c. Collate**

10. Which group of the Insert Tab contains the Pictures command?

- a. Tables
- b. Illustrations
- c. Add-Ins
- d. Header & Footer

**Ans. b. Illustrations**

11. What are the different type of page orientation in Word?

- a. Landscape
- b. Portrait
- c. Both a and b
- d. None of these

**Ans. c. Both a and b**

12. Which Tab contains the Orientation command?

- a. Home
- b. Insert
- c. Layout
- d. Design

**Ans. c. Layout**

13. Which group of the Layout Tab allows you to change the Margins and Size of a Page?

- a. Page Setup
- b. Paragraph
- c. Arrange
- d. None of these

**Ans. a. Page Setup**

14. What is size of an A4 sized Paper?

- a. 8.5 "x 11"
- b. 8.5 "x 14"
- c. 7.25 "x 10.5"
- d. 8.27 "x 11.69"

**Ans. d. 8.27" X 11.69"**

15. What are the different type of list possible in a Word Processor?

- a. Bullet
- b. Numbering
- c. Both a and b
- d. None of these

**Ans. c. Both a and b**

## II. Fill in the blanks with the given words.

1. The function key **F7** is used to start with the Spelling & Grammar check..
2. A **Bullet** is a black circle used to highlight items in a list.
3. Word offers two page orientation options: **landscape** and portrait.
4. The Thesaurus command is present in the **Review** tab.
5. Superscript and **subscript** refer to the characters that are positioned slightly higher or slightly lower than the text on the line.
6. The Symbol command is present on the Insert Tab of the **Symbols** group.
7. A printout that you obtain on paper is called **hardcopy**.
8. **Grammatical** or punctuation mistakes in a document are shown in wavy blue underlines.
9. A **Thesaurus** is a book of group of words in groups of synonyms that have the same or nearly the same meaning.
10. You can insert images present in a file from the **Insert** Tab.

## III. State whether the following statements are True (T) or False (F).

- |  |                            |
|--|----------------------------|
| 1. It is not possible to insert pictures into a Word document external to Office.            | <input type="checkbox"/> F |
| 2. Grammatical mistakes are shown using red wavy underline.                                  | <input type="checkbox"/> F |
| 3. The Orientation command is present in the Page Setup group of the Home Tab.               | <input type="checkbox"/> F |
| 4. You cannot change the size of a page of a Word document.                                  | <input type="checkbox"/> F |
| 5. Numbering a list is required when a sequence needs to be followed.                        | <input type="checkbox"/> T |
| 6. The Margins command is present in the Layout Tab.   | <input type="checkbox"/> T |
| 7. You can use Border and Shading to a text to produce emphasis.                             | <input type="checkbox"/> T |
| 8. The Thesaurus command sometimes may not work in Word.                                     | <input type="checkbox"/> F |
| 9. Superscript are characters that are positioned slightly higher than the text on the line. | <input type="checkbox"/> T |
| 10. The Symbol command is present on the Insert Tab of the Symbols group.                    | <input type="checkbox"/> T |

## IV. Short Answer Type Questions (SA – I)

1. **How are Spelling and Grammatical mistakes shown in a Word document?**

**Ans.** Spelling mistakes are shown as red wavy underlines and grammatical mistakes are shown using blue wavy underlines.

2. **Which group and Tab contains the Thesaurus command?**

**Ans.** Tab-Review and Group-Proofing

3. **What is the keyboard shortcut for subscript and superscript?**

**Ans.** Superscript: Ctrl, Shift and +

Subscript: Ctrl and =

**4. Which group and Tab contains the Symbol command?**

**Ans.** Tab: Insert

Group: Symbol

**5. What are Bullets?**

**Ans.** Bullets In Word are used to add bullets in Microsoft Word to differentiate between the different points you want to make. The bulleted points form a list.

**V. Short Answer Type Questions (SA – II)**

**1. State the difference between a Subscript and a Superscript.**

**Ans.** A subscript or superscript is a character (number, letter or symbol) that is (respectively) set slightly below or above the normal line of type. It is usually smaller than the rest of the text. Subscripts appear at or below the baseline, while superscripts are above.

**2. What do you understand by the ‘Collate’ option during printing a document?**

**Ans.** In printing, the term Collate refers to the gathering and arranging of individual sheets or other printed components into a pre-determined sequence. Basically, Collating creates consistent, logical sets from multiple parts.

**3. What do you understand by the term “Page Setting” in Word?**

**Ans.** Page settings refers to the parameters defined by the user that help determine how a printed page will appear. Those parameters can include everything from the size, margins, page orientation, to quality of print. More plainly, it’s a menu that allows users to customize the layout of a page.

**4. What is a Margin in Word?**

**Ans.** A margin is the space between the text and the edge of your document. By default, a new document’s margins are set to Normal, which means it has a one-inch space between the text and each edge.

**5. State the difference between Bullets and Numbering in Word.**

**Ans.** Numbered lists are usually used when you need to put the headings under a specific order, ascending or descending. However, bullet points are used to get across your stuff fully in rather a chronological order without emphasis on any one point particularly.

**6. What do you understand by the term “Borders and Shading”?**

**Ans.** Word’s options for borders in a document are moderately comprehensive and allow you to create a clear-cut layout or decorative design. You can apply borders to things like paragraphs, pages, table cells, etc.

**VI. Long Answer Type Questions (LA)**

**1. State the process of performing Spelling and Grammar check in Word.**

**Ans.** To start a check of the spelling and grammar in your file just press F7 or follow these steps:

1. Click the Review tab on the ribbon.

2. Click Spelling or Spelling & Grammar.
3. If the program finds spelling mistakes, a dialog box appears with the first misspelled word found by the spelling checker.

**2. What are Symbols? How would you insert symbols into a document?**

**Ans.** A symbol is a special character that is generally not found on the keyboard and therefore cannot be inserted directly into a document.

To insert such symbols:

1. Place the cursor where you want the character to appear.
2. The Symbol command is present on the Insert Tab of the Symbols group.
3. Click on the drop down list beside the Symbol command to see a dialog containing commonly used symbols. Click on a symbol to insert.
4. In case you want to see more symbol, click on the More Symbols... option to make the Symbol dialog box to appear. Click on a symbol you wish to insert, in order, then click on the Insert button.

**3. State the process of creating a Bulleted List in Word.**

**Ans.** To create a bulleted list:

1. Select the text you want to format as a list.
2. Click the drop-down arrow next to the Bullets command. A menu of bullet styles will appear.
3. Move the mouse over the various bullet styles. A live preview of the bullet style will appear in the document. Select the bullet style you want to use.
4. The text will be formatted as a bulleted list.

**4. Name 4 options that you can customize before printing a document.**

**Ans.** Some of the options are: Pages, Print One sided, Collate, Page Orientation, Paper Size, Page Margins and Scaling.

**5. State the process of creating a border around a paragraph.**

- Ans.**
1. Click the Home tab and from the Paragraph group, click drop-down list of the Borders button to display the Borders menu.
  2. Choose the Borders and Shading command, which will make the Borders and Shading dialog box appear..
  3. Click on a relevant border style.
  4. To shade the selected paragraph click on the Shading Tab in the dialog.
  5. Select a relevant colour or pattern for shading.
  6. Click on the OK button when done.

## Application based Questions

1. **Arpita a primary teacher of St. Mary's School at Dehradun is preparing a comprehension for her students. She prepared a comprehension which only fills half the A4 size paper (8.27 inches x 11.69inches). Therefore when printed a lot of paper gets wasted . She needs to repeat the entire comprehension in the second half without rewriting it, so that she can tear off the paper at the middle and distribute each half to two students, thus saving some paper. Suggest a suitable method for repeating the comprehension for Arpita.**

**Ans.** Arpita can go for Copy-Paste method to repeat the entire comprehension without rewriting it entirely.

2. **Sneha while typing in her Geography project typed the names of the planets as bulleted list:**

- 
- Mercury
  - Venus
  - Earth
  - Mars
  - Jupiter
  - Saturn
  - Uranus
  - Neptune

**But the order of the planets should be maintained according to the distance from the sun and therefore the sequence should be maintained. This involves the list to be changed to Numbered list. Suggest the method by which you will be able to change the above Bulleted list to Numbered list.**

**Ans.** To change the list to Numbered List, select the entire bulleted list and press F12 on the keyboard to change the list to Numbered List.

3. **Sunanda wants to insert an image into a document. State the process of doing it.**

**Ans.** To insert a picture or a scanned image, follow these steps:

1. Place the insertion point (cursor) where you want the image to appear.
2. Select the Insert tab on the Ribbon, then click the Pictures command.
3. The Insert Picture dialog box will appear. Navigate to the folder where your image is located, then select the image and click Insert.
4. The image will appear in the document.



## Chapter 9

# Advanced Features of Microsoft Word



### I. Tick (✓) the correct option.

1. Which group of the Insert Tab is used to insert an equation in Word?

- a. Comments
- b. Illustrations
- c. Text
- d. Symbols

**Ans.** d. Symbols

2. Which group of the Insert Tab is used to insert shapes into a Word document?

- a. Comments
- b. Illustrations
- c. Text
- d. Symbols

**Ans.** b. Illustrations

3. Which Tab presents you with the New Comment command?

- a. Home
- b. References
- c. Review
- d. View

**Ans.** c. Review

4. It is a feature in Word that allows users to keep track of the changes a user makes or other users have made to a document.

- a. Track Changes
- b. Note Changes
- c. Review Changes
- d. Track Modifications

**Ans.** a. Track Changes

5. How many successive equal to symbols should you use to create a double line?

- a. 1
- b. 2
- c. 3
- d. 4

**Ans.** c. 3

6. In which Tab do you find the option to activate or deactivate the Autocorrect option?

- a. File
- b. Home
- c. Insert
- d. Design

**Ans.** a. File

7. Which among the following commands is not present in the 'Comments' group of the 'Review' Tab?

- a. Show Comments
- b. Previous
- c. Delete
- d. Hide

**Ans.** d. Hide

8. It appears as letter(s) to denote relative position in a sequence.
- |                 |                  |
|-----------------|------------------|
| a. Ordinals     | b. Cardinals     |
| c. Both a and b | d. None of these |

**Ans.** a. Ordinals

9. Which option of the Insert Tab do you find the way to insert a Mathematical Formula?
- |                   |                    |
|-------------------|--------------------|
| a. Formula        | b. Equation        |
| c. Image->Formula | d. Object->Formula |

**Ans.** b. Equation

10. Which option of the left hand panel of the Word Options dialog allows Autocorrect Options?
- |             |            |
|-------------|------------|
| a. General  | b. Display |
| c. Proofing | d. Save    |

**Ans.** b. Proofing

## II. Fill in the blanks with the given words.

- The Table command is present in the Insert Tab..
- The Track Changes command of the Tracking group is present in the Review Tab.
- Merge cells is used to break down the barriers between cells and join them into one cell.
- Split cells is used to divide a single cell into several cells.
- A table is a grid of cells arranged in rows and columns.
- Another way to merge and split cells is to click the Draw Table or Eraser command on the Table Tools Layout contextual tab of the Draw group.
- AutoFormat controls some minor text formatting as you type.
- Part of Word 2016's AutoCorrect function is a feature named AutoFormat..
- You can format a fraction by typing the first value in superscript, the slash mark, and then the second value in subscript.
- When you turn on Track Changes, every change you make to the document will appear as a coloured markup.

## III. State whether the following statements are True (T) or False (F).

- |   |          |
|---|----------|
| 1. Track changes option allows you to take a print out of a document.                             | <b>F</b> |
| 2. Once a Table is inserted, you cannot insert additional rows.                                   | <b>F</b> |
| 3. It is possible to delete a row by a right-click on any cell of the row for the desired option. | <b>T</b> |
| 4. Merge cells is used to break down the barriers between cells and join them into one cell.      | <b>T</b> |
| 5. Split cells allows you to break a Table into 2 tables.   | <b>F</b> |
| 6. Using 'Draw Table' command it is possible to merge a cell.                                     | <b>F</b> |

7. Using 'Eraser' command it is possible to split a cell. F
8. The AutoFormat option automatically detects and correct typos and misspelled words. T
9. You cannot insert mathematical symbols into a Word document. F
10. To create a bold line, type three underlines and press Enter. T

### III. Short Answer Type Questions (SA-I)

**1. What are tables in Word?**

**Ans.** A table is a grid of rows and columns that intersect to form cells. The lines that mark the cell boundaries are called gridlines.

**2. What is AutoFormat?**

**Ans.** AutoFormat is a software feature that automatically changes the formatting or appearance of text.

**3. What is split cell in a table?**

**Ans.** The Split Cells feature allows you to split cells into two or more cells.

**4. What is track changes option in Word used for?**

**Ans.** The track changes is an editing command that is commonly used when you create an original document and make changes and want to keep track of the changes that are made to that original document.

**5. Which command and Tab allows you to insert a mathematical formula into a document?**

**Ans.** Command- Equation  
Tab- Insert

### IV. Short Answer Type Questions (SA-II)

**1. Can you insert a row into a table? If so, how?**

**Ans.** Yes. Click where you want in your table to add a row or column and then click the Layout tab (this is the tab next to the Table Design tab on the ribbon).

**2. How would you remove a column in a table?**

**Ans.** To remove a column

1. Select the row or column.
2. Right-click your mouse. A menu will appear.
3. Select Delete Cells. Selecting Delete Cells.
4. Select Delete entire row or Delete entire column, then click OK. Deleting a column.

**3. State the process of creating a solid line and double line using the AutoFormat feature.**

**Ans.**

- To create a double line, type three equal signs and press Enter.
- To create a bold line, type three underlines and press Enter.

4. **What is the function of “Review Comments”? Name the group of the Review Tab that allows you to insert comments into a document.**

**Ans.** Word 2016 also provides comments, which authors and reviewers often use to exchange ideas, ask for suggestions, or brainstorm during the review process. This is called ‘Review Comments’.

Group- Comments

5. **What is the function of the shapes tool in Word?**

**Ans.** The Shapes Tool allow you allows you to create graphics, such as simple diagrams using rectangles, circles, lines, text, and other predefined shapes.

#### V. Long Answer Type Questions (LA)

1. **How would you insert a table in Word?**

**Ans.** To insert a blank table:

1. Place your insertion point in the document where you want the table to appear.
2. Select the Insert tab.
3. Click the Table command.
4. Hover your mouse over the diagram squares to select the number of columns and rows in the table. ...
5. Click your mouse, and the table appears in the document.

2. **State the process of merging cells and splitting cells in Word.**

**Ans.** To merge and split cells:

Select the cells you want to merge or split, go to the Table Tools Layout contextual tab, and follow these instructions to merge or split cells:

- **Merging cells:** Click the Merge Cells command (you can also right-click and choose Merge Cells) of the Merge group.
- **Splitting cells:** Click the Split Cells button (you can also right-click and choose Split Cells) of the Merge group. In the Split Cells dialog box, declare how many columns and rows you want to split the cell into and then click OK.

3. **State the process of activating the AutoFormat dialog box.**

**Ans.** To activate the AutoFormat dialog:

1. Click the File tab, which brings the Backstage view.
2. Choose Options from the left hand panel.
3. The Word Options dialog box appears.
4. Select Proofing from the left side of the window. Click the button labeled AutoCorrect Options.
5. The AutoCorrect dialog box appears. Click the AutoFormat as You Type tab.

**4. State the process of inserting comments in Word.**

**Ans.** If you want to add a comment on a word or paragraph, select it and then select the Review tab and click New Comment in the Comments group.

Your comments will then appear on the right side of the document, provided the Show Comments command is activated.

**5. State the process of tracking changes made to a document.**

**Ans.** Tracked changes are really just suggested changes. To become permanent, they must be accepted. On the other hand, the original author may disagree with some of the tracked changes and choose to reject them.

To accept or reject changes:

1. Select the change you want to accept or reject.
2. From the Review tab, click the Accept or Reject command.
3. The markup will disappear, and Word will automatically jump to the next change. You can continue accepting or rejecting each change until you have reviewed all of them.
4. When you're finished, click the Track Changes command once again to turn off Track Changes.

**Lab Exercise**

1. Darpan is given a Table in Word as the following.

Period->	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	4 <sup>th</sup>	
Monday	English	Drawing		Maths	
Tuesday	EVS	Maths	Art and craft		
Wednesday	Gardening		Singing	Dancing	English
Thursday	English	Maths	Games		

Mark the cells that are merged or split.

2. Study the screenshot below.

Top of Form

**2**      **DEFINING SALES PROMOTION**

**2.1**      **What is sales promotion?**

According to Barker (2013: 196) sales promotion is the promotional action(s) taken by an organisation to convince existing and new customers to purchase a product. Furthermore, it can be bound to a particular time period and best suited for short or medium term marketing goals.

For example, marketing the new energy drink may be produced and timed to occur during the summer period, with advertising featuring summer sports, people enjoying the sun and the desirability of drinking this drink. Consumer promotions such as handing out free samples of the drink and discount vouchers to encourage people to purchase the drink, can also be employed in the marketing communication strategy.

Sales promotion affects integrated marketing communication (IMC) in that it affects the purchasing styles of clients, how the product is made available to clients and the timing of the distribution. (Barker 2013: 196). Sales promotion is further involved in the activities related to how the product is branded and packaged, its cost and the profit margin the producers or distributors of the product can expect.

For example, branding the new energy drink to reflect the benefits of consuming it, such as health and sport, making it available during the summer and at purchase points where clients would expect to buy energy drinks, will ensure it is available at the right time and right place.

- i. Tessa's supervisor has asked her to review the corrections he had made using the Track Change function, however, the changes are not visible. How can Tessa view the changes he made?
  - a. She can view the changes by changing the Display for Review value to All Markup.
  - b. She can view the changes by selecting Show Markup in the Tracking group.
  - c. She can view the changes by switching on track changes by clicking on the Track Changes button in the Tracking group.
  - d. There are no track changes made to this document.

**Ans. b**

- ii. How do you insert a comment into a document?
  - a. Right click and select Insert Comment then type your comment.
  - b. Under the Review tab on the Ribbon, in the Comments group, select New Comment then type your comment.
  - c. Under the Insert tab on the Ribbon, in the Comments group, select Comment then type your comment.
  - d. All of the options listed above are correct.

**Ans. b**

# Chapter 10

## Presentation Tool using PowerPoint 2016




### I. Tick (✓) the correct option.

1. Which among the following is not an Animation Effect?
- |             |                |
|-------------|----------------|
| a. Entrance | b. Emphasis    |
| c. Repeat   | d. Motion Path |

**Ans.** c. Repeat

2. Which of the following icon represents a PowerPoint package?

- |  |   |
|--|---|
| a.  | b.  |
| c.  | d.  |

**Ans.** c. 

3. Which Tab contains the different view options of a presentation?

- |         |               |
|---------|---------------|
| a. File | b. Home       |
| c. View | d. Animations |

**Ans.** c. View

4. Name the view that shows a thumbnail of each slide in order.

- |                      |                 |
|----------------------|-----------------|
| a. Normal View       | b. Outline View |
| c. Slide Sorter View | d. Reading View |

**Ans.** c. Slide Sorter View

5. Maximum how many slides can you include in a page in a handout?

- |      |      |
|------|------|
| a. 2 | b. 4 |
| c. 6 | d. 9 |

**Ans.** d. 9

6. Which command is used to insert a new slide into a presentation?

- |                |                |
|----------------|----------------|
| a. New Slide   | b. Fresh Slide |
| c. Blank Slide | d. Title Slide |

**Ans.** a. New Slide

7. Which among the following views allows you to give a thumbnail view of all the slides in a presentation?
- a. Normal View
  - b. Outline View
  - c. Notes View
  - d. Slide Sorter View

**Ans.** d. Slide Sorter View

8. Name the group that contains the Format Background command.
- a. Themes
  - b. Variants
  - c. Customize
  - d. Designer

**Ans.** c. Customize

9. Which among the following is not a fill style in Format Background panel?
- a. Solid fill
  - b. Gradient fill
  - c. Pattern fill
  - d. Mixed fill

**Ans.** d. Mixed fill

10. Which among the following group contains the Header & Footer command?
- a. Slides
  - b. Tables
  - c. Comments
  - d. Text

**Ans.** d. Text


## II. Fill in the blanks with the given words.

1. The 2 tabs of the Header and Footer dialog are Slide and Notes and Handouts.
2. A small number before an animated object on a slide show that it has an animation along with the order of animation.
3. The Picture command of the Insert Tab is present in the Images group.
4. Animating slides involves adding movement and sometimes sound to text or to the slides in a presentation.
5. A layout is a design template that shows the arrangement of various objects over a slide.
6. A Placeholder is a box with a dotted outline, designed for the placement of different type of content on the slide.
7. The Entrance animation effect controls the way how an object enters the slide.
8. Exit animation effect controls the way how an object exits the slide.
9. The Animation Pane is present in the Animations Tab.
10. The Comparison layout is usually used for comparison between 2 items.

## III. State whether the following statements are True (T) or False (F).

1. You cannot have a blank slide layout in a presentation. F
2. Transitions is the animation effect that is produced when one slide moves to the next slide. T



3. The Slide Show is the final result of a presentation, which may be displayed to a group of audience using an overhead projector. T
4. The default extension of an Impress file is ..pptm. F
5. The  button may be used to save a presentation. T
6. The Placeholder allows you to insert only images into a slide. F
7. A template is a predesigned presentation you can use to create a new slide show quickly. T
8. Normal view is the view that shows a thumbnail of each slide in order. F
9. Handout view is the view that allows you to get a print-out of your slides for a handout. T
10. The Text Box command of the Drawing group is used to insert text. T

#### IV. Short Answer Type Questions (SA-I)

1. **What is a presentation?**

**Ans.** A presentation software is a computer software package used to show information, normally in the form of a slide show. It mostly includes three major functions: 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.

2. **What is a Slide Show?**

**Ans.** A collection of pages arranged in sequence that contain text and images for presenting to an audience is called slide show.

3. **What is a slide layout?**

**Ans.** Slide layouts contain formatting, positioning, and placeholders for all of the content that appears on a slide.

4. **What is the extension of a presentation file in PowerPoint?**

**Ans.** .pptx

5. **What is a placeholder?**

**Ans.** Placeholders are the containers in layouts that hold such content as text (including body text, bulleted lists, and titles), tables, charts, SmartArt graphics, movies, sounds, pictures, and clip art.

#### IV. Short Answer Type Questions (SA-II)

1. **Name the basic elements of a slide.**

**Ans.** Titles and sub-titles, Text, Shapes, Pictures, Audio/Video Clips and Transitions.

2. **Name the four fill option present in the Format Background panel.**

**Ans.** Solid fill, Gradient fill, Picture or Texture fill and Pattern fill.

3. **What is the difference between normal view and slide sorter view?**

**Ans.** Normal view is the view for creating individual slides. This is the main/default view for formatting and designing slides by adding text, graphics, and animation effects

Slide Sorter view is the view that shows a thumbnail of each slide in order. Using this you may rearrange the order of slides, produce a timed slide show, or add transitions between selected slides.

**4. What do you understand by the term animation in a slide?**

**Ans.** Animating slides involves adding movement and sometimes sound to text or to the slides in a presentation.

**5. In your own words explain the importance of “Rehearse Timing”.**

**Ans.** PowerPoint assists you in defining the right rehearse timings for automatic slide changes. This is particularly important to know the display time for each slide, particularly when you are talking to an audience along with the slide.

## V. Long Answer Type Questions (LA)

**1. Describe the different slide layouts in PowerPoint.**

**Ans. Section Header:** This layout is usually used to separate different sections of the same presentation, rather than use an additional Title slide.

**Two Content:** It consist of a placeholder to add title to the slide as well as placeholders for 2 contents. The contents can be filled with bulleted text or different type of content may be added as mentioned in Title and Content layout.

**Comparison:** It consist of a placeholder to add title to the slide as well as placeholders for 2 contents. This layout is usually used for comparison between 2 items. You can also add different type of content as mentioned in Title and Content layout.

**Title Only:** This layout contains a placeholder only to add a title at the top. The remaining page is blank and therefore anything may be added.

**Blank:** This layout offers a blank slide, where you may add any element at any position according to choice.

**Content with Caption:** To insert some text as well as a caption, this layout is used.

**Picture with Caption:** To insert a picture as well as a caption, select this slide layout. The slide contains a placeholder for inserting the picture on the right side of the slide as well as placeholders for inserting captions on the left side of the slide.

**2. State the process of adding a background to a group of slides.**

**Ans.** To add a background to a slide or slides:

1. Select the Design tab, then click the Format Background command of the Customize group.
2. The Format Background pane will appear on the right. Select the desired fill options. In our example, we'll use a Solid fill with a light gold color.
3. The background style of the selected slide will update.
4. If you want, you can click Apply to All to apply the same background style to all slides in your presentation.

**3. State the process of inserting a page number to a slide.**

**Ans.** To Insert slide numbers or page numbers:

1. On the View tab, click Normal.
2. Click the Insert menu, and then click Slide Number.
3. The Header and Footer settings will open. Check the box next to Slide Number and enter the number you'd like to start your slide numbers with. The location of the slide number is highlighted in bold in the Preview area at the top of the settings box.
4. (Optional) If you don't want to number your title slide, make sure the box next to Don't show on title slide is checked.
5. When you're finished, if you want slide numbers on your entire presentation, click Apply to all. If you only want numbering on the slide or slides you have selected, click Apply.

**4. State the process of animating text in a slide.**

**Ans.** To apply animation to a text follow these steps:

1. Select the text on the slide that you want to animate.
2. On the Animations tab of the ribbon, click Add Animation, and pick an animation effect.

**5. How would you add Footer to the slides of a presentation?**

**Ans.** To Add a footer to a slide

1. On the Insert tab, in the Text group, click Header & Footer.
2. In the Header and Footer dialog box, on the Slide tab, select the Footer check box, and then type the text that you want to appear in the center bottom of the slide.
3. Click on the OK button.

**Application based Questions**

**1. Rimika wants to ensure that there is consistency in design and colour in the presentation that she is making. What should she do to achieve this?**

**Ans.** She could use Slide /master View. Slide Master view is a special feature in PowerPoint that allows you to quickly modify the slides and slide layouts in your presentation. From there, you can edit the slide master, which will affect every slide in the presentation. You can also modify individual slide layouts, which will change any slides using those layouts.

**2. Kanan wants to see all the slides in her presentation simultaneously. Suggest which view she should use to see all the slides simultaneously.**

**Ans.** Slide Sorter View

**3. Irene doesn't know the meaning of the following animation effect:**

- a. Entrance b. Motion Paths

Explain the meaning of a) and b).

**Ans.** a. **Entrance** is an animation effect that controls the way how an object enters the slide. For example, in Bounce animation effect you will find an object "fall" onto the slide and then bounces several time.

b. **Motion Paths:** This animation effect ensures a predetermined path through which an object moves within the slide path.

4. **Keerit doesn't know the meaning of handouts. Explain the meaning of handouts to him.**

**Ans.** Handouts are documents you can print from within PowerPoint that include slide representations from your presentation. PowerPoint lets you include as many as 9 slides on each Handout page. Most Handouts are created to be printed, and the look and feel of these printed Handouts is determined by the Handout Master. To access and make edits to the Handout Master, you need to get to the Handout Master view in PowerPoint. Changes you make in this view influence the look and layout of printed Handouts.

5. **Sunita wants to create a presentation on "Global Warming". State at least two things she should prepare first for creating the presentation.**

**Ans.** Sunita needs to take certain points in consideration, while preparing the presentation:

- Remember: A presentation is different than a paper.
- Resources of information is key to success.
- Logistics to be taken care of:
- Equipment Needs should also be taken care-of.

# Chapter 11

## Introduction to Microsoft Excel 2016



### I. Tick (✓) the correct option.

1. Which among the following Microsoft Office package is a spreadsheet application?
- |               |           |
|---------------|-----------|
| a. Word       | b. Excel  |
| c. PowerPoint | d. Access |

**Ans.** b. Excel

2. The default name for a Excel Workbook is \_\_\_\_\_.
- |              |               |
|--------------|---------------|
| a. Workbook1 | b. Worksheet1 |
| c. Sheet1    | d. Book1      |

**Ans.** d. Book1

3. What is the total number of rows in a Excel Worksheet?
- |            |            |
|------------|------------|
| a. 256     | b. 1024    |
| c. 1048576 | d. 1048578 |

**Ans.** c. 1048576

4. Which of the following constitutes a Cell Reference
- |   |
|---|
| a. It is column name followed by a row number.              |
| b. It is row number followed by a column name.              |
| c. It is row number followed by a hyphen and a column name. |
| d. It is column name followed by a hyphen and a row number. |

**Ans.** a. It is column name followed by a row number.

5. A Cell range always has the \_\_\_\_\_ symbol between the cell references.
- |                  |                 |
|------------------|-----------------|
| a. ; (semicolon) | b. . (fullstop) |
| c. , (comma)     | d. : (colon)    |

**Ans.** d. : (colon)

6. The cell which is currently being used is called \_\_\_\_\_.
- |                 |                 |
|-----------------|-----------------|
| a. Current Cell | b. Active Cell  |
| c. Start Cell   | d. Editing Cell |

**Ans.** b. Active Cell

7. Which of the following shows the reference to the Active Cell?
- a. Name Box
  - b. Active Box
  - c. Both a and b
  - d. None of these

**Ans. a. Name Box**

8. Which of the following function key is used for editing in a cell?
- a. F1
  - b. F2
  - c. F3
  - d. F4

**Ans. b. F2**

9. The default extension of Excel file is \_\_\_\_\_.
- a. .xlsx
  - b. .xld
  - c. .xlm
  - d. .xlExcel

**Ans. a. .xlsx**

10. Which of the following comes under Horizontal Alignment
- a. Left Alignment
  - b. Right Alignment
  - c. Center Alignment
  - d. All of these

**Ans. d. All of these**

## II. Fill in the blanks with the given words.

1. In a cell you can have either a Horizontal or/and Vertical alignment.
2. To default name of an Excel workbook is Book1.
3. The XFD is the last column name in Excel.
4. A workbook is a file in which data is kept in worksheets.
5. Cell reference refers to a location of a cell which is the column name followed by row number.
6. Use the keyboard combination Ctrl+1 to activate Format Cells.
7. An intersection point of a row and a column is called a Cell.
8. By default text is aligned to the left and numbers are aligned to the right.
9. The Editing group of the Home Tab contains the Fill command.
10. Shift cells up option of the Delete dialog is used to fill the space produced by the deleted cell with the cell underneath it.

## III. State whether the following statements are True (T) or False (F).

1. The default name for a worksheet in Excel is Sheet1. T
2. The address of a cell is referred by the row number followed by the column number. F
3. You can have maximum 10000 rows in an Excel worksheet. F

4. An Excel worksheet there are maximum 1028 columns. F
5. A cell range is used to represent a group of cells. T
6. An Active Cell always have a thick border around it. T
7. The Function Key F3 is used for direct cell editing. F
8. It is not possible to select an entire worksheet at the click of a button. F
9. The Name Box is used to show the address of the current selection or active cell in the form of Column and Row Headings. T
10. The content of a row or column cannot be deleted. F

#### IV. Short Answer Type Questions (SA-I)

1. **What is the last row heading and column heading in Excel?**

**Ans.** Last column heading: XFD  
Last row heading: 1048576

2. **Which Tab host the New, Save and Open option in Excel?**

**Ans.** File

3. **Name the Toolbar that contains the 'Save' button in Excel.**

**Ans.** Quick Access Toolbar

4. **What is the alignment by default in Excel for Numbers and Text?**

**Ans.** Numbers: Right Aligned  
Text: Left Aligned

5. **State the difference between 'Shift cells up' and 'Entire row' option used with deletion.**

**Ans.** Shift cells up option to fill the space produced by the deleted cell with the cell underneath it.  
Entire rows option after selecting at least one cell, deletes the entire row from the sheet.

#### V. Short Answer Type Questions (SA-II)

1. **State the difference between a Worksheet and a Workbook.**

**Ans.** Excel Workbook is like a book that contains a number of pages while Excel Worksheet is a single page or sheet of a workbook like a page in a book. Linking two worksheets is more easy than linking two workbooks. Workbook is not a place where we manipulate with data.

2. **What is a cell reference? How would you declare a cell range using a cell reference?**

**Ans.** A cell reference, or cell address, is an alphanumeric value used to identify a specific cell in a spreadsheet. Each cell reference contains one or more letters followed by a number. The letter or letters identify the column and the number represents the row.

A cell range is a group or block of cells in a worksheet that has been selected or highlighted. When cells have been selected they are surrounded by an outline or border as shown in the image to the left.

**3. What is the function of 'Autofill'? Which Tab option allows you to fill up a series using Autofill?**

**Ans.** Autofill is a feature in Excel, that automatically fills certain boxes with data based on information the user has entered elsewhere.

Home Tab

**4. Name the three methods by which you can edit the contents of a cell in Excel.**

**Ans.** Replace Content      Direct Cell Editing      Formula bar Editing

**5. Name the three alignment types of:**

a. Horizontal Alignment      b. Vertical Alignment

**Ans.** a. Left, Right and Center      b. Top, Bottom and Middle

## VI. Long Answer Type Questions (LA)

**1. State the process of formatting a group of numbers in Excel, so that it displays two digits after the decimal.**

**Ans.** The method involves the following steps:

1. Select a cell or range of cells.
2. Right-click on the selected cells and from the popup menu that appears click on Format Cells... option. This makes the Format Cells dialog open.
3. Click on the Number tab and from the Category list click on Number.
4. Use the Decimal places box to specify the number of decimal places (e.g., if the number in the cell is 13.5 for 2 decimal places it displays 13.50, 3 decimal places would display 13.500).  
Click on Use 1000 Separator checkbox to specify the position of comma(,) in a given number.
5. Click the OK button.

**2. State the process of formatting the appearance of Time in a cell.**

**Ans.** To Format the Appearance of Time in a Cell:

1. Select the range of cells you want to format.
2. Right-click and click on the Format Cells option to activate the Format Cells dialog box and click on the Number Tab.
3. Click Time in the Category list box and select the desired time format from the Type: list box.
4. Click the OK button.

**3. State the process of changing the font colour of a group of entries in Excel.**

**Ans.** To change the font colour:

1. Select a cell or range of cells.
2. From the Font Colour drop-down list select the desired colour. The default font colour in Excel is black.



**4. State the process of deleting an entire row in Excel.**

**Ans.** You can delete a row in a worksheet by a simple right click on the row heading and from the popup menu that appears click on the Delete option.

**5. Explain the following options of the Insert dialog in Excel.**

- a. Shift cells right
- b. Shift cells down
- c. Entire row
- d. Entire column

**Ans.** a. Shift cells right option to move the contents of the selected cell to the right when a cell is inserted.

b. Shift cells down option to move the contents of the selected cell downward when a cell is inserted.

c. Entire row option to insert an entire row. The content of the original row is moved downward.

d. Entire column option to insert an entire column. The content of the original column is shifted to the right.

### Application based Questions

**1. Naina Sharma wants to store data of her monthly expenditure for a period of one year and also wants to perform some calculations and analysis. Which Office application, will you suggest Naina should use for this purpose?**

**Ans.** Microsoft Excel

**2. Name the group in the Home Tab that has all the options of changing the font properties.**

**Ans.** Font

**3. Name the cells included in the range reference A1:B2.**

**Ans.** A1,A2,B1 and B2.

**4. What will be the cell address of the cell formed by the intersection of:**

- a. the fifth column and the eighth row?
- b. the ninth column and the eighth row?

**Ans.** a. E8                      b. I8

**5. How would you refer to the range starting from 1st column, 1st row and spread till 4th column and 5th row?**

**Ans.** A1:D5

**6. In Excel, what is the column immediately next to column "Z"?**

**Ans.** AA

**7. In Cell A1 a certain date is written as 30/04/2015. Suggest a method by which you can make it display as 30 April 2015.**

**Ans.** To change the date format in the A1 cell follow these steps:

- 1. Select a cell or range of cells.

2. Right-click and click on the Format Cells option to activate the Format Cells dialog box and click on the Number Tab.
3. Click Date in the Category: list box and select the desired date format from the Type: list box.
4. Click on the OK button.

8. Tarini had created a worksheet that looks like this:

	A	B	C	D
1	Roll	Name	Percentage	
2		1 Amit Kumar	56	
3		2 Sumit Bhanja	92	
4		3 Amitava Mala	83	
5		4 Saswati Das	76	
6				
7				

As you can see that column B containing Names are overlapping with column C. What should Tarini do so that the names are completely visible.

**Ans.** Tarini needs to resize the width of column 'B' to make the content of that column visible. To resize the column the following actions need to be performed:

- a. Place your mouse pointer to the right edge of column B.
- b. The mouse pointer changes to the adjustment tool (double-headed arrow).
- c. Drag the Adjustment tool to the right to desired width to make the entire content visible and release the mouse button.

9. Radhika calculated the percentage obtained by students as shown Fig A:

D
Percentage
59.6
17.85
17
54
72.1
33.9

**Fig A**

D
Percentage
59.60
17.85
17.00
54.00
72.10
33.90

**Fig B**

Because of incorrect formatting the decimal did not align with each other. State the process by which she will be able to change it to Fig B.

- Ans.**
1. Select a cell or range of cells.
  2. Right-click on the selected cells and from the popup menu that appears click on Format Cells... option. This makes the Format Cells dialog open.
  3. Click on the Number tab and from the Category list click on Number.
  4. Use the Decimal places box to specify 2 for the number of decimal places.
  5. Click the OK button.

# Chapter 12

## Advance Features of Excel



### I. Tick (✓) the correct option.

1. Which among the following is the result when a cell contains an entry  $=7^3$ ?
- a. 256  
b. 343  
c. 341  
d. None of these

**Ans.** b. 343

2. Which among the following mathematical operators have the top most order of precedence?
- a. +  
b. -  
c. ^  
d. \*

**Ans.** c. ^

3. To add up the numbers in cell A1, A2, A3 and A4, which among the following is correct?
- a.  $=A1+A2+A3+A4$   
b.  $=SUM (A1;A2;A3;A4)$   
c.  $=SUM (A1:A4)$   
d. None of these

**Ans.** c.  $=SUM (A1:A4)$

4. Which cell constitutes the 5th row and the 3rd column in a sheet?
- a. 5C  
b. 5:3  
c. 3:5  
d. C5

**Ans.** d. C5

5. Which among the following symbols is used to represent an absolute cell reference?
- a. \$  
b. #  
c. %  
d. @

**Ans.** a. \$

6. A formula  $=B\$1 + C\$3 + 5$  in a cell D9 when copied to F12 will get the formula changed to \_\_\_\_\_.
- a.  $=D1 + E3 +5$   
b.  $=B\$2 +C\$4+5$   
c.  $=C\$1+D\$3+5$   
d.  $=D\$1+E\$3 +5$

**Ans.** d.  $=D\$1+E\$3 +5$

7. A formula in a cell that directly/indirectly refers to its own cell is called \_\_\_\_\_.
- a. Relative Reference  
b. Absolute Reference  
c. Mixed Reference  
d. Circular Reference

**Ans.** d. Circular Reference



7. In a hierarchy of operation in a mathematical expression, the calculation in parenthesis is always evaluated first.
8. Arguments in a function are separated by . (comma).
9. A Line Chart displays the contribution of each value to a total.
10. Data Series is the actual charted values of the source data.

T  
T  
F  
T

#### IV. Short Answer Type Questions (SA-I)

1. What is absolute cell referencing?

**Ans.** An absolute cell reference is a cell reference in a spreadsheet application that remains constant even if the shape or size of the spreadsheet is changed, or the reference is copied or moved to another cell or sheet.

2. Which operator is used to start with a formula or function?

**Ans.** =

3. Give a cell reference as an example for:

a. Relative referencing

b. Mixed referencing

**Ans.** a. A1

b. \$A\$1

4. Give the general syntax of the IF function in Excel.

**Ans.** The general syntax of the function is:

=IF(Test , Then\_value , Otherwise\_value)

5. What is a 'Data Point' in a chart?

**Ans.** It represents one value of the data series.

#### V. Short Answer Type Questions (SA-II)

1. What are the different mathematical operators and their use in Excel?

**Ans.** The different mathematical operators in Calc are:

^ for exponential (to the power of) e.g.  $5^2 = 25$  as  $5 \times 5 = 25$

+ for addition

- for subtraction

\* for multiplication

/ for division

2. What are the three types of cell referencing?

**Ans.** Relative, Absolute and Mixed Referencing.

3. What are the rules for using a function?

**Ans.** Rules for using a function:

- All functions begin with the = sign.



**3. Explain the use of the following with respect to charts.**

- a. Source Data
- b. Axis
- c. Data Series
- d. X-Axis

- Ans.**
- a. Source data are the values upon which a chart is created.
  - b. An axis on a chart or graph in Excel is a horizontal or vertical line containing units of measure. The axes border the plot area of column charts (bar graphs), line graphs, and other charts.
  - c. Data Series is a collection of related values that are plotted on a chart.
  - d. It is a horizontal line that shows variation another component of the chart. Its length and segments represent different intervals of the values.

**Application based Questions**

**1. Write appropriate formula for calculating percentage of marks of a student. Marks obtained are given in the cell D8 and maximum marks are given in the cell D2.**

**Ans.** =D8/D2\*100

**2. In the Excel sheet shown below, cell A3, B3 contain numbers, and cell C3 contains a formula.**

	A	B	C
1			
2			
3	2	3	5
4			
5			

What will happen if

- a. Contents of cell A3 is changed to 5?
  - b. Contents of cell B3 are deleted?
- Ans.** a. Cell C3 will display 8 instead of 5.      b. Cell C3 will display 8 i.e. the value in A3.

**3. Give the following answers with respect to Excel:**

- a. Cell A1 contains the number 20 and B1 contains 3. What will be the contents of cell C1, if the formula `=A1+B1*2^3` is entered in cell C1?
- b. The contents of Cell A1, B1, C1 and D1 are 10, -20, 30 & -40 respectively. What will be the value displayed in cell E1 which contains the formula `=MIN(A1:D1)`
- c. Cell D3 contains the formula `=$B3 + C3` and this formula is copied to cell E3, what will be the copied formula in cell E3?

**Ans.** a. 44      b. -40      c. =\$B3 + G3

**4. NewStyle Fashions maintain their employee salary details in a spreadsheet as shown below. A sample data of 7 employees is shown below. Write formulas for the operations (a) to (c) and answer the questions based on the spreadsheet given below along with the relevant cell address:**

	A	B	C	D	E	F
1	NAME	BASIC	HRA	DA	PF	NET SALARY
2	Surinder	50000	20000	___	600	___
3	Kanika	56000	20000	___	600	___
4	Aashish	35000	15000	___	400	___
5	Harjit	45000	15000	___	500	___
6	Abhijit	60000	25000	___	700	___
7	Jyoti	75000	30000	___	700	___
8	Amita	25000	10000	___	300	___
9	Maximum Net Salary					___

- To calculate the DA as 25 % of BASIC+HRA for each employee and display in column D.
- To calculate the NETSALARY as BASIC+HRA+DA–PF for each employee and display it in column F.
- To find the maximum NETSALARY and display in cell F9.

- Ans.**
- In cell D2 you may use the formula as  $=25/100*(B2+C2)$  and copy the formula to the remaining cells in column D.
  - In cell F2 you may use the formula as  $=B2+C2+D2-E2$  and copy the formula to the remaining cells in column F.
  - In cell F9 the entry should be  $=MAX(F2:F8)$

**5. Give the following answers with respect to Excel:**

- Kunal has stored the formula  $=MIN(C1:C5)$  in cell C6. How will the formula change when copied to cell D6.

**Ans.**  $=MIN(C2:C6)$

- If the values in the cells is as given A1 = 5, A2 = 10, A3 = 15 then to continue the series up to A20 which feature can we use?

**Ans.** Autofill

- The formula in cell A2 is  $=B2+C3$ . On copying this formula to cell C2, what will the formula be?

**Ans.**  $=D2+E3$

- The formula  $=A1+ \$A\$2$  were entered in cell A3 and then copied into cell B3, what is the formula copied in to B3?

**Ans.**  $=B1+ \$A\$2$

**6. Tariq Fashions maintain their employee salary details in Excel as shown below. A sample data of 7 employees is shown below. Write steps for the operations (i) to (v) and answer**



the questions (vi) to (viii) based on the spreadsheet given below along with the relevant cell address:

	A	B	C	D	E	F
1	NAME	BASIC	HRA	DA	PF	NET SALARY
2	Surinder	50000	20000	___	600	___
3	Kanika	56000	20000	___	600	___
4	Aashish	35000	15000	___	400	___
5	Harjit	45000	15000	___	500	___
6	Abhijit	60000	25000	___	700	___
7	Jyoti	75000	30000	___	700	___
8	Amita	25000	10000	___	300	___
9	Maximum					___
10	No. of Emp					___

- i. To calculate the DA as 25 % of BASIC+HRA for each employee and display in column D.

**Ans.** In cell D2 you may use the formula as  $=25/100*(B2+C2)$  and copy the formula to the remaining cells in column D.

- ii. To calculate the NETSALARY as BASIC+HRA+DA–PF for each employee and display in column F.

**Ans.** In cell F2 you may use the formula as  $=B2+C2+D2-E2$  and copy the formula to the remaining cells in column F.

- iii. To find the maximum NETSALARY and display in cell F9.

**Ans.** In cell F9 the entry should be  $=MAX(F2:F8)$

- iv. The manager inserts a column for S.No. in the above spreadsheet. Which feature will help him automate the typing of sequential numbers in this column?

**Ans.** The Autofill handle is used to automate the typing of sequential numbers.

- v. The manager wants to graphically represent a comparative analysis of the salaries of employees. Suggest the most suitable chart type for achieving the same.

**Ans.** He can go for Pie Chart for comparative analysis.

- vi. If the Basic salary of an employee changes, will the manager have to redo all the calculations for that particular employee? Explain.

**Ans.** No the recalculation is not again required because the formula and functions that are given changes according to the values in the cells.

# Chapter 13

## Scratch Programming



### I. Tick (✓) the correct option.

1. Which among the following area in the Scratch window is used to show the output?
- a. Title Bar  
b. Blocks Area  
c. Stage  
d. Script Area

**Ans.** c. Stage

2. Which among the following is used to show the program or script for execution.
- a. Title Bar  
b. Blocks Area  
c. Stage  
d. Script Area

**Ans.** d. Script Area

3. Which button should be clicked to select a different sprite?
- a. Sprite Library  
b. Sprite Button  
c. Backdrop Library  
d. None of these

**Ans.** a. Sprite Library

4. Which among the following code block is used to remove all line traces?
- a. remove  
b. delete  
c. clear  
d. erase

**Ans.** c. clear

5. What are the Tabs present in a Scratch window?
- a. Scripts  
b. Costumes  
c. Sounds  
d. All of these

**Ans.** d. All of these

6. Which among the following will turn a sprite by 180 degree?

- a.  b. 
- c. Both a and b  
d. None of these

**Ans.** c. Both a and b

7. Which among the following will turn sprite by 90 degree clockwise?

- a.  b. 
- c. Both a and b  
d. None of these

**Ans.** a. 

8. Which among the following blocks in the Control script is used to create a block that executes continuously?



d. None of these



9. Which among the following script will make the pen ready for writing?



c. Both a and b

d. None of these



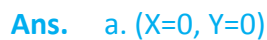
10. What is the center coordinate of the XY plane

a. (X=0, Y=0)

b. (X=0, Y=180)

c. (X=-240, Y=0)

d. (X=0, Y=-240)



## II. Fill in the blanks with the given words.

1. The Script area shows the code for execution.
2. The Stage shows the output of a script.
3. The Tabs present in the Blocks Area are Scripts, Costumes and Sounds.
4. The default filename in Scratch is Untitled.
5. To make the script say something you need to use the Looks block.
6. The Green flag is used to execute a script.
7. The default file extension of Scratch file is .sb2.
8. The code “wait 1 secs” is present in the Control block.
9. The Repeat code is used to execute a group of codes for specified number of times.
10. The scratch stage is 480 pixels wide and 360 pixels high.

## III. State whether the following statements are True (T) or (F) False.

1. It is possible to select a different sprite other than a cat.
2. The green colour is associated with the Motion scripts.
3. The ‘clear’ command of the Pen script is used to remove all line traces.
4. The pen up command of the Pen script is used to trace a line with a moving object.

5. The Sound script allows you to insert sound effects into your program.-
6. The Scratch stage is 380 pixels high.
7. The Repeat block is used to execute infinitely.
8. The Backdrop library dialog allows you to select different backgrounds for the stage.
9. Move 10 steps refers to moving 10 pixels.
10. The “next costume” code is present in the Looks Block.



#### IV. Short Answer Type Questions (SA-I)

1. **What is a program?**

**Ans.** The step by step of writing instructions for the computer to perform is called a program.

2. **Write any two codes of the Pen Block.**

**Ans.** clear stamp

3. **Which code block is used to repeat execution of a group of codes infinitely?**

**Ans.** forever

4. **What is a Sprite?**

**Ans.** A Sprite is an object in Scratch which performs functions controlled by scripts.

5. **What block contains all movement of a Sprite?**

**Ans.** Motion block

#### V. Short Answer Type Questions (SA-II)

1. **Name the different Tabs of the Block Area.**

**Ans.** Scripts, Costumes and Sounds

2. **What is the function of the Script Area?**

**Ans.** The Scripts Area is where scripts can be assembled. The Scripts Area is the area on the right side of the project editor where scripts are assembled. It can be accessed from both the Stage and from sprites, although the Stage and each sprite all have separate scripts areas and scripts.

3. **What is a Stage in Scratch?**

**Ans.** The Stage is the term for the background of the project, but can have scripts, backdrops (costumes), and sounds, similar to a sprite. It has some restrictions of sprite functionality, such as motion and size blocks.

4. **Name the menu options in Scratch.**

**Ans.** File, Edit, Tips and About

5. **What is Backdrop Library?**

**Ans.** A backdrop is one out of possibly many frames, or backgrounds, of the Stage. It is located in the backdrops library.

## V. Long Answer Type Questions (SA-II)

1. How do we execute a script in Scratch?

**Ans.** A Script may be executed by clicking on the “Green Flag” or clicking any where on the script.

2. State the process of selecting a new sprite in Scratch.

**Ans.** 1. From the Scripts Area click on Sprite Library button.  
2. The Sprite Library dialog opens up. From the Category panel select a category and from the right hand panel select a sprite and click on the OK button.  
3. The Stage Area now shows the selected sprite.

3. How do you change the background of a stage?

**Ans.** 1. To change the background(which is white by default), click on backdrop button on the bottom left corner of the Scratch window.  
2. This will present you with a library of backdrops. Select any backdrop and click on the OK button.  
4. What is the function of the Motion Block? State any 3 codes of the Motion Block.  
5. What is the significance of the command ‘if on edge, bounce’?

## Application Based Questions

1. Sundaram has created a project in Scratch but does not know how to save it. State the process of saving the project in “projects” folder of the D drive.

**Ans.** To save the project:  
1. Click on File->Save.  
2. Select the D drive.  
3. Select the “projects” folder  
4. Provide a name to the file.  
5. Click on OK button.

2. Ramen wants to draw a rectangle of 200 pixels length and 100 pixels breadth. Help him write the code.

**Ans.** 

- 3. Dinesh wants to change the background of his project and the sprite. State the process of changing the background. Also state the process of changing the sprite.**

**Ans.** Changing the background:

1. To change the background(which is white by default), click on backdrop button on the bottom left corner of the Scratch window.
2. This will present you with a library of backdrops. Select any backdrop and click on the OK button.

**Changing the Sprite:**

1. From the Scripts Area click on Sprite Library button.
2. The Sprite Library dialog opens up. From the Category panel select a category and from the right hand panel select a sprite and click on the OK button.
3. The Stage Area now shows the selected sprite.

# Chapter 14

## Introduction to Python



### I. Tick (✓) the correct option.

1. Which of the following language processor is used in Python?
- |                 |                  |
|-----------------|------------------|
| a. Interpreter  | b. Compiler      |
| c. Both a and b | d. None of these |

**Ans.** a. Interpreter

2. Which are the modes of programming in Python?
- |                     |                  |
|---------------------|------------------|
| a. Interactive Mode | b. Script Mode   |
| c. Both a and b     | d. None of these |

**Ans.** c. Both a and b

3. IDLE stands for \_\_\_\_\_.
- |  |
|--|
| a. Integrated Development Learning Environment.  |
| b. Integrated Deployment Learning Environment.   |
| c. Interactive Development Learning Environment. |
| d. Integrated Development Learning Engineering.  |

**Ans.** a. Integrated Development Learning Environment.

4. Which statement in Python is used to display the output in the Shell window?
- |           |            |
|-----------|------------|
| a. print  | b. display |
| c. output | d. PRINT   |

**Ans.** a. print

5. Python strings are enclosed within quotes.
- |                 |                  |
|-----------------|------------------|
| a. Single       | b. Double        |
| c. Both a and b | d. None of these |

**Ans.** c. Both a and b

6. Which of the following symbol is used to insert comment in a program in Python?
- |      |      |
|------|------|
| a. # | b. @ |
| c. ! | d. ^ |

**Ans.** a. #

7. The statement `print("Hello" "World")` will display:
- a. HelloWorld
  - b. Hello World
  - c. Hello World
  - d. HW

**Ans.** a. HelloWorld

8. Which of the following keyboard combination is used to start the script editor?
- a. Ctrl+S
  - b. Ctrl+O
  - c. Ctrl+N
  - d. None of these

**Ans.** a. Ctrl+S

9. Which among the following function key is used to run a Python script?
- a. F1
  - b. F2
  - c. F4
  - d. F5

**Ans.** d. F5

10. What does `15 % 2` evaluate to?
- a. 0
  - b. 1
  - c. 2
  - d. 3

**Ans.** b. 1

## II. Fill in the blanks with the given words.

1. The print statement is used to display the output.
2. If a line begins with # it is completely Ignored by the interpreter.
3. Data Type is a way of dictating Python what type of data will a variable hold.
4. Strings are enclosed within single or Double quotes.
5. Integers are numbers without a Point.
6. Integers, Float and Complex numbers are valid Python numerical types.
7. A variable is a name given to a memory location that can contain a data value.
8. The equal sign (=) is used to assign values to variables.
9. Variables may begin with an alphabet or Underscore.
10. Keywords are reserve words that have special meaning to the compiler.

## III. State whether the following statements are True (T) or False (F).

1. You need to declare a variable before using it.
2. Keywords may be used as variables.
3. Arithmetic Operators are used to evaluate a mathematical expression.
4. `25max` is a valid variable.
5. You need to save a file before execution in Interactive mode.

F

F

T

F

F



6. Python uses a compiler.
7. Lines of comments are preceded with the # symbol.
8. The display( ) statement is used to print the output on the shell window.
9. You can program both in Interactive and Script Mode in Python.
10. Variables are names given to memory locations that stores data.

F

F

F

T

T

#### VI. Short Answer Type Questions (SA-I)

1. **Who developed Python?**

**Ans.** Guido van Rossum

2. **Name any numerical data type.**

**Ans.** Integer

3. **What is comment used for?**

**Ans.** A comment is a programmer-readable explanation or annotation in the source code of a computer program. They are added with the purpose of making the source code easier for humans to understand, and are generally ignored by compilers and interpreters.

4. **Which mode is used to save a program for future use?**

**Ans.** Script Mode

5. **What are Arithmetic Operators?**

**Ans.** Arithmetic Operators are symbols used to perform arithmetic operations that include multiplication, division, addition and subtraction.

#### V. Short Answer Type Questions (SA-II)

1. **What are the two modes of programming in Python?**

**Ans.** Script Mode and Interactive Mode

2. **Name any two areas where Python programs are used.**

**Ans.** It has wide range of applications from Web development (like: Django and Bottle), scientific and mathematical computing (Orange, SymPy, NumPy) to desktop graphical user Interfaces (Pygame, Panda3D).

3. **What is a program? Which language processor is used by Python?**

**Ans.** A step-by-step instruction given to the computer to perform a particular job is called a program. Python uses an interpreter to convert programs written using python syntax during execution.

4. **What is Script Mode? What is the default extension of a Python file?**

**Ans.** The Script Mode on the other hand allows you to type in instructions into a file, which is then used by the interpreter for execution of the instruction. Thus instead of having to run one line or block of code as in interactive mode you can type up all your code in one text file, or script, and run all the code at once. Such files should have the extension '.py'.

**5. What is the full form of IDLE? State its function.**

**Ans.** IDLE: Integrated Development Learning Environment.

Python IDLE is a software suite that consolidates the basic tools developers need to write and test software. It contains a code editor, an interpreter and a debugger that the developer accesses through a single Graphical User Interface (GUI).

**VI. Long Answer Type Questions (LA)**

**1. State the process of starting Python IDLE.**

**Ans.** To start the Python IDLE.

1. Click on Start-> All apps of the Start Menu.
2. Scroll down the list until you get Python 3.6. Click on it.
3. It shows you a list of programs in a submenu. Click on IDLE (Python 3.6 32-bit)

**2. State the difference between Interactive and Script Mode.**

**Ans.** Interactive Mode is a command line shell which gives immediate result for each instruction, while running previously fed instructions in active memory. As new lines are fed into the interpreter, the fed program is evaluated both in part and in whole.

The Script Mode on the other hand allows you to type in instructions into a file, which is then used by the interpreter for execution of the instruction. Thus instead of having to run one line or block of code as in interactive mode you can type up all your code in one text file, or script, and run all the code at once.

**3. Give any two aspect of the print( ) statement in Python.**

**Ans.** The two aspects of print() statement are:

- The print( ) statement is used to display an output.
- In case you want to display a message, you need to enclose within quotes within the parenthesis. Any text enclosed within quotes is called a string. A string may consist of letters, digits and/or symbols. Thus print( ) statement is used to display a string.

**4. What is a Data Type? What are the data types used in Python?**

**Ans.** Data Type is a way of dictating Python what type of data will a variable hold.

**5. Name the different numerical data types used in Python.**

**Ans.** Python has five standard data types –

- Numbers
- String
- List
- Tuple
- Dictionary

## Application based Questions

1. Which of the following is not a valid variable and why?

a. abc

**Ans.** valid

b. 1abc

**Ans.** Not valid, as variable names cannot begin with a digit

c. ab cd

**Ans.** Not valid, as variable names cannot have a blank space in between.

d. s.i

**Ans.** Not valid, as dot is used.

e. simple\_interest

**Ans.** Valid

2. Which among the following is not a valid integer and why?

a. 12.35

**Ans.** Invalid, as it contains a decimal point

b. 12,345

**Ans.** Invalid, as it contains a comma.

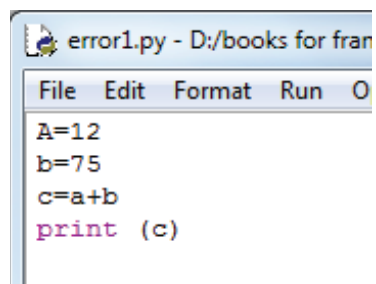
c. 12,345

**Ans.** Invalid, as it contains a comma.

d. 12345

**Ans.** Valid

3. Correct the following program that adds up 2 integers 12 and 75 using variables. Underline each correction.



```
error1.py - D:/books for fran
File Edit Format Run O
A=12
b=75
c=a+b
print (c)
```

**Ans.** a=12

b=75

c=a+b

print(c)

4. Give the output of the following program:

```
*error1.py - D:/books for frank edu/CB:
File Edit Format Run Options W
A=13
B=2
C=A+B
D=A*B
E=A/B
F=A&B
G=A+D*E-F
print (C, D, E, F, G)
```

Ans. Output

15 26 6.5 1 181.0

### Lab Activity

1. Write a program to find the sum and difference between 25 and 16 using variables in different lines.

Ans.

```
File Edit Format Run Option:
A=25
B=16
C=A+B
D=A-B
print ("Sum=", C)
print ("Difference=", D)
```

2. Write a program to find the product of 5, 7 and 12 using variables.

Ans.

```
File Edit Format Run Op
A=5
B=7
C=12
D=A*B*C
print ("Product=", D)
```

3. Write a program to find the product of the sum and difference between 17 and 2 using variables.

Ans.

```
File Edit Format Run Optic
A=17
B=2
C=(A+B) * (A-B)
print ("Product=", C)
```

4. Write a program to find the average of 36,45 and 53 using variables of adequate data type.

Ans.

```
File Edit Format Run Optic
A=36
B=45
C=53
D=(A+B+C)/3
print ("Average=",D)
```

5. Write a program using variables to find the sum of three numbers say 15, 36 and 45 and subtract the result from 100 using variables.

Ans.

```
File Edit Format Run Option
a=15
b=36
c=45
d=a+b+c
e=100-d
print (d)
print (e)
```

6. Write a program using variables to find the area and perimeter of a rectangle of length 12cm and breadth 8cm.

Ans.

```
File Edit Format Run Options Win
l=12
b=8
a=l*b
p=2*(l+b)
print ("Area=",a,"square cm")
print ("Perimeter=",p,"cm")
```

7. Write a program using variables to find the profit and profit percent of a certain transaction where S.P.=₹ 10000 and C.P.=₹ 7000.

Ans.

```
File Edit Format Run Options Window
sp=10000
cp=7000
p=sp-cp
pp=p/cp*100
print ("Profit=Rs",p)
print ("Profit Percent=",pp,"%")
```

8. Write a program using variables to find the cost of 17 pencils if the cost of one pencil=₹ 2.50.

Output should be:

Cost of 1 pencil=₹2.5

Cost of 17 pencils=₹42.5

Ans.

```
File Edit Format Run Options Window Help
cp1=2.50
cp17=cp1*17
print("Cost of 1 pencil=Rs",cp1)
print("Cost of 17 pencils=Rs",cp17)
```

9. Write a program using variables to find the area and circumference of a circle whose radius is 12cm.

Note that :

Area of a circle=  $\pi r^2$

Circumference of a circle =  $2 \pi r$

Where r is the radius of the circle and  $\pi$  is 3.142.

Ans.

```
File Edit Format Run Options Window Help
r=12
a=3.142*r*r
c=2*3.142*r
print("Area",a,"square cm")
print("Circumference=",c,"cm")
```

10. Write a program to assign 5 and 6 to variables a and b respectively and interchange them. Thus after interchanging, a and b will be 6 and 5 respectively.

Ans.

```
File Edit Format Run Options Window Help
a=5
b=6
print("Before Interchange a=",a,"b=",b)
c=a
a=b
b=c
print("After Interchange a=",a,"b=",b)
```

11. Write a program to initialize three variables a, b and c with 234, 456 and 712 and store the sum of the last digits of the variables into d and display it.

Ans.

```
File Edit Format Run Options Window Help
a=234
b=456
c=712
d=a%10+b%10+c%10
print("Sum of their last digits=",d)
```