

## VIII COMPUTER(2020-2021)

### CHAPTER 1

#### OPERATING SYSTEM AND GRAPHICAL USER INTERFACE

##### Q-1 Fill in the blanks

1. Hardware represents physical and tangible components of the computer.
2. Interface is usually implemented with a program called a command line shell.
3. A system call can be simply defined as request by a computer program to the operating systems kernel.
4. Multithreading supports several simultaneous tasks within the same application.
5. The operating system acts as an intermediate between a user and the computer hardware.
6. Bootstrap loader is a program that is stored on the ROM and it loads the OS into the RAM.
7. Windows 10 is the latest version of windows operating system.
8. The commands are entered at a prompt called the command prompt.
9. The set of programs is called software.
10. System software controls the computer system.
11. MS-DOS is a/an operating system.
12. Windows is based on GUI.
13. Windows is a multitasking operating system.
14. In CUI, commands are typed at CLI.
15. An operating system manages multiple applications at a time.
16. An operating system is an interface between users and computer.
17. Every computer file is stored in a linear space on the storage.
18. An operating system can be designed for single tasking or multitasking.
19. A GUI has a powerful feature for creating graphics.

##### Q-2 State True or False

1. DOS is a single user operating system. **True**
2. UNIX is not an operating system. **False**
3. Windows XP is a multitasking operating system. **True**

4. An operating system cannot manage main memory. **False**
5. An operating system is capable of installing hardware devices. **True**
6. Application software controls all the functions of a computer. **False**
7. Microsoft word is a popular operating system. **False**
8. Windows 100 is an operating system. **True**
9. GUI means Graphical User Input. **False**
10. Icons are not the elements of the GUI. **False**
11. In windows, we can open only one program at a time. **False**

### Q-3 Choose the correct answer

1. Operating system is also called \_\_\_\_\_ software.  
 a) Application      **b) system**      c) DOS      d) Windows
2. Linux is a/an \_\_\_\_\_.  
**A) Operating System**      b) Microsoft      c) Windows      d) Mac
3. A \_\_\_\_\_ uses picture (called icons) and menus displayed on the screen to send commands to the computer system.  
 a) Command- based user interface      **b) GUI**      c) System utility      d) API
4. Operating system of a computer \_\_\_\_\_.  
 a) Enables the programmer to draw a flowchart  
 b) Links a program with subroutine with reference  
**c) Provides a layer, user friendly interface**  
 d) None of the above
5. The term 'operating system' means \_\_\_\_\_.  
**a) A set of programs which controls computer working**  
 b) The way a user operates the computer system  
 c) Conversion of high level language to machine language  
 d) The way computer operator works.

### Q-4 Answer in one word

1. Which operating system allows for multiple users to use the same computer at the same time or different time?  
**A: - Multiuser**
2. Which operating system is capable of supporting and utilizing more than one computer processor?

**A: - Multiprocessing**

3. Name any one operating system.

**A;- UNIX**

4. What enables a CPU to switch its attention between the requested tasks of two or more programs?

**A:-Time-Slice Multitasking**

5. What supports several simultaneous tasks within the same application?

**A:- Multithreading**

6. Which interface made possible for a mouse to be used with a computer?

**A:-GUI**

7. What manages the memory of the computer in operating system?

**A:-Memory Management**

8. Which operating system was developed by Google?

**A:- Android**

9. Which is a very user-friendly operating system?

**A:- Windows**

10. Which module of an operating system protects the resources and information of a computer system against unauthorized access?

**A:- Security**

### Q-5 Define the Following

1. **System Call**: - A system call can be simply defined as a request by a computer program to the operating system's kernel.
2. **Device Driver**: - A device driver is a computer program that controls a particular device attached to a computer.
3. **UNIX**: - UNIX is a computer operating system used most commonly in servers and workstations.
4. **LINUX**: - LINUX is UNIX like operating system that was designed to provide personal computer users to provide a very low cost operating system.
5. **Windows** : - It is a personal computer operating system from Microsoft. Windows contains built in networking which allows user to share file and application with each other.
6. **Operating System** :- An Operating System is a set of commands which can perform a specific task on the computer and helps the user to interact with the computer.
7. **GUI** :-A GUI operating system contains graphics and icons and is commonly navigated by using a computer mouse.

## Q-6 Answer the Following

### **1. What is an operating system? Name any four operating systems.**

Ans:- An operating system is a set of commands which can perform a specific task on the computer and helps the user to interface with the computer . It is also system software.

Windows, UNIX, LINUX, MS DOS

### **2. What are the functions of operating system?**

Ans:-functions of operating system are,

- Input and output management
- Memory management
- Processor management
- Runs software
- Establishment and enforcement of a priority system

### **3. What are the features of operating system?**

Ans :- Various features of operating system are,

- Interface: OS is an interface between user and computer.
- System Call: It is a request by computer program to OS Kernel.
- Device Drivers: It controls a computer program a particular device attached to a computer.
- File System: Every computer file is stored in a linear space on storage.
- Security : A user can use password to secure the system.

### **4. What are the advantages of GUI?**

Ans :-The advantages of GUI are,

1. Easy to use → A GUI is easy to use
2. Visual Elements → Visual elements such as desktop icons, to navigate and operate software.
3. Uses of Devices → It is very easy to install mouse, printer, web camera, scanner etc.
4. Multitasking → A user can work on more than one application at a time.

5. Ease of use of commands → A user has not to type commands line interface.
6. Powerful Features → A GUI has powerful features for creating graphics, audio and video.

**5. Write any three differences between CUI and GUI.**

Ans :-

<u>CUI</u>	<u>GUI</u>
Accuracy of typed command depends on the user.	No accuracy required from the user.
Graphics, charts cannot prepare	High quality graphics and chars can prepare.
Command is to be typed from the key board	Command is to be selectee through the help of On command line interface. Mouse or function key.
Multitasking not possible.	Multitasking possible.

**6. Explain various types of operating system.**

Ans:- Various types of Operating system.

- GUI -- A GUI operating system contains graphics and icons and is commonly navigated by using a computer mouse.
- Multiuser – A multiuser operating system allows for multiple users to use the same computer at the same time.
- Multiprocessing – An operating system capable of supporting and utilizing more than one computer processor.
- Multitasking – An operating system that is capable of allowing multiple software processes to run at the same time.
- Multithreading – An operating system that allows different part of a software program to run concurrently.

**7. Explain BOSS operating system.**

Ans :- BOSS stands for Bharat Operating System Solution .It is the Linux distribution based on Debian Linux and is customized for high performance, currently Boss GNU /Linux Desktop is available in all the official Indian Languages.

**8. What is the need of an operating system?**

Ans :- An operating system is the most essential program that allows a computer to run and execute programs. Without an operating system a computer cannot be of any important use since the computer's hardware won't be able to communicate with the software.