

Objective Type Questions & Answers

Q.2 Give short answers of the following questions.

1. Define operating system.

Answer

An operating system is the most important software that runs on a computer. It manages the computer's memory and processes as well as all of its software *and* hardware. It also allows users to communicate with the computer.

2. Name some common desktop operating system.

Answer

The commonly used operating systems are as follows.

- i. DOS
- ii. WINDOWS
- iii. Macintosh's OS X/OS2
- iv. UNIX/LINUX

3. What do DOS mean?

Answer

DOS stands for **Disk Operating System**. It was developed in 1970s when microcomputer was introduced. It was called Disk Operating System because the entire operating system was stored on a single floppy disk.

4. Make a table of three DOS commands

Answer

The following are some DOS commands

DOS Commands	Functions
RENAME	For renaming a file
CD	For changing directory (called folder in Windows)
DIR	To display directories and files in a directory

5. Why DOS was not a user-friendly OS?

Answer

DOS was not a user-friendly operating system because DOS commands were difficult to learn, memorize and use for novice computer users.

6. Who developed Microsoft Windows OS?

Answer

Microsoft Corporation developed Windows OS in mid 1980s.

7. Describe some features of Microsoft Windows OS.**Answer**

Microsoft Windows provides a Graphical User Interface (GUI), which is user-friendly. The user does not have to memorize commands like DOS. It allows user to give commands to computer through icons, menus, and buttons etc.

8. State any four popular version of Windows**Answer**

Some popular versions of Windows are as follow

- i. Windows 95
- ii. Windows 98
- iii. Windows Millennium
- iv. Windows XP

9. Write a short note on Mac OS.**Answer**

Mac OS is a series of operating systems developed by Potato incorporation. Mostly it is installed on all the Apple computers. It is the tenth major release of the Mac operating systems. It is a more secure operating system compared to Windows. Mac hardware and software works together very well with minimums flaws. Mac computer is of high quality but more expensive than IBM compatible computers.

10. Who developed UNIX?

Answer

Ken Thompson and Dennis Ritchie developed UNIX operating system in early 1970s at Bell Laboratories research center.

11. State some features of UNIX.**Answer**

UNIX provides greater processing power and better security than Windows operating system. Computers running UNIX operating system rarely have malware attack. It is available for a wide range of computer systems from microcomputers to mainframes. It is less popular on microcomputers on which Windows is pre-installed when they are sold.

12. State the important types of operating system.**Answer**

The following are the important types of operating systems:

- i. Batch Processing Operating System
- ii. Multiprogramming Operating System
- iii. Multitasking Operating System
- iv. Time-sharing Operating System
- v. Real-time Operating System
- vi. Multiprocessor Operating System
- vii. Parallel Processing Operating System
- viii. Distributed Operating System
- ix. Embedded Operating System

13. In which language, UNIX was developed?

Answer

UNIX was developed in C language.

14. Write down the uses of real time operating system.

Answer

Real time operating systems are commonly used in

- i. Space research programs
- ii. Real-time traffic control
- iii. To control industrial processes such as oil refining

15. Which devices are controlled by embedded operating system?

Answer

An embedded operating system controls the operation of devices such as:

- i. Microwave oven
- ii. TV
- iii. Camera
- iv. Washing machine
- v. Games

16. What is meant by Single-user Operating System?

Answer

The operating system that allows only one person to operate the computer at a time is known as single-user operating system.

17. Define Multi-user Operating System.

Answer

The operating system that allows many users on different terminals or microcomputers to use the resources of single central computer (server) in a network is known as multi-user operating system.

18. Write down some uses of multi-user operating system

Answer

Multi-user operating system is used on servers in business and offices where many users have to access the same application software and other resources.

19. Name the functions, which are performed by an operating system.

Answer

Following are the functions, which are performed by operating system:

- i. Process Management
- ii. Memory Management
- iii. File Management
- iv. I/O Management
- v. Secondary Storage Management
- vi. Network Management
- vii. Protection System

viii. Command-Interpreter

20. Which operations are allowed to perform by file management?

Answer

File management allows computer user to perform operations such as:

- i. Creating
- ii. Copying
- iii. Moving
- iv. Renaming
- v. Deleting
- vi. Searching (files and folders)

21. What is meant by process?

Answer

A process is a program in execution.

22. Differentiate between program and process.

Answer

A program is an executable code that is stored in disk as a text file whereas a process is a dynamic instance of a program during its execution in RAM.

23. Which resources of computer are used by a process?

Answer

Process uses various resources of computer such as:

- i. CPU time
- ii. Files
- iii. I/O devices
- iv. Memory

24. Name the states of a process.

Answer

There five states of a process which are as follow:

- i. New state
- ii. Ready state
- iii. Running state
- iv. Blocked State/Waiting State

25. What is meant by multithreading?

Answer

The process of executing multiple threads simultaneously is known as multithreading.

26. What is the main purpose of multithreading?

Answer

The main purpose of multithreading is to provide simultaneous execution of two or more parts of a program to maximum utilize the CPU time.

27. What is meant by multitasking?

Answer

Multitasking is the function of operating system that loads multiple (programs processes, tasks, threads) in main memory and executes them at the same time by rapidly switching the CPU among them.

28. What is multiprogramming?

Answer

In multiprogramming many programs are loaded in memory but the CPU only executes one program at a time. Other programs wait until the previous program is executed out or blocked.

29. State the advantages of multiprogramming?

Answer

The advantage of multiprogramming is that it saves user's time in loading the programs to main memory and runs the programs quickly.

30. What is meant by multiprocessing?

Answer

Multiprocessing is the ability of an operating system to execute more than one process simultaneously on a multi-processor machine (having more than one CPUs). In this a computer uses more than one CPU at a time.

