

- Types of OS are: Batch, Multiprogramming, Multiprocessor, Distributed, Real-Time.
- A user interface is the means by which the user and a computer system interact, in particular the use of input devices and software.
- Two types of User Interfaces are: Command User Interface and Graphical User Interface.
- Mac OS is a line of Operating System created by Apple.
- Linux is an open-source Operating System.

EXERCISES

1. Fill in the blanks.

- a. A process Management is like a traffic cop ensuring that different users working and many programs running the same time do not interfere with each other.
- b. I/O Controller keeps track of all devices
- c. A Warm boot is the process of using the OS to restart the computer.
- d. In time sharing many users can share the resources of the computer. or multi-tasking
- e. In Real-time operating system data is processed at the same instance as it comes in.

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

- a. MS-DOS is a single user operating system. True
- b. In GUI you need to type in commands for interactivity. false
- c. Icons are small pictures that represent command, files, windows, etc. True
- d. GUI is easier to learn. True
- e. Mac OSX is specially designed for Mac computers. True

3. Tick (✓) the correct option.

- a. Which of the following is not an Operating System?
- | | | | |
|------------------|-------------------------------------|-------------------|--------------------------|
| i. Windows | <input type="checkbox"/> | ii. Linux | <input type="checkbox"/> |
| iii. Spreadsheet | <input checked="" type="checkbox"/> | iv. None of these | <input type="checkbox"/> |
- b. Which of the following is not a function of the Processor Management?
- | | |
|--|-------------------------------------|
| i. Working as a traffic controller | <input type="checkbox"/> |
| ii. Keeping track of the file system | <input type="checkbox"/> |
| iii. Allocating the processor to a process | <input type="checkbox"/> |
| iv. All of these | <input checked="" type="checkbox"/> |
- c. Which of the following is the correct expansion of POST?
- | | |
|----------------------------|--------------------------|
| i. Power on System Test | <input type="checkbox"/> |
| ii. Power on Self Tracking | <input type="checkbox"/> |

- iii. Power On Self Test ☒
- iv. Both (i) and (iii) ☐
- d. Which among the following works by grouping together similar type of jobs before submitting it to the CPU?
 - i. Batch Processing System ☒
 - ii. Time Sharing System ☐
 - iii. Multiprogramming System Sharing ☐
 - iv. Time System ☐
- e. Which among the following system uses two or more CPUs within a single computer system?
 - i. Multi-Tasking System ☐
 - ii. Multiprocessor System ☒
 - iii. Time Sharing System ☐
 - iv. Batch Processing System ☐

4. Short answer type questions.

- a. Name two ways by which you can protect unauthorized access to data and programs. ^{① password. ② write}
- b. State one function of File-Management in an Operating System. ^{eg. 3 file management - 1 point}
- c. What is I/O controller? ^{is a program that keeps track of all devices.}
- d. Write two examples of Single user and Multi user systems. ^{MS DOS, Free DOS | ① Linux, ② UNIX}
- e. Write two real world systems or applications where you use a GUI. ^{ATM, SMART phones, Household devices.}

5. Long answer type questions.

- a. What are Open Source systems? How is it different from proprietary software?
- b. What are Distributed Operating Systems. Give two examples. ^{→ Page No. 5 → Example → LOCUS write paragraph MICROS}
- c. Write four functions of Operating System, that an OS does to manage memory. ^{→ page No. 2, write points of Memory Management}
- d. How do the users utilize the resources in a Time Sharing System? ^{→ Page No. 4}
- e. What are Multiprogramming Systems? In this context explain Processes Context Switching. ^{→ page No. 4 → write multi programming Batch system → whole paragraph}

Lab Zone

1. Collect the look and feel pictures of various versions of Windows and Mac OS.
2. List the Operating Systems used in your school, in a bank, in a departmental store, in a cyber café and in your parents' or relatives' office. Ask them the system used to network their computers and why they like to use this system. Do this survey and make a presentation project in your class.