

Rahul K.

Date → 02/11/16

Roll - 16055

Sub - Introduction to CS

SEM - 1st SEM (BCA)

52+4
70

56
70

Answer

Ans 1)

An operating system is a collection of system programs which controlled the computer system. It is very acts a main role in computer system. It is based on user interface. User interface is interact with the computer to take some various tasks. It is an interface between computer & users. The input like keyboard, mouse are use for them.

There are two types of OS (based on User interface) :-

(1) GUI (Graphical User interface) :- GUI is commonly work form in graphical form. Usually command is given to the computer by clicking in mouse in the icon. It is very easy to learn & use. It provide multitask in the separate window. It is difficult to perform not well in difficult task. There is no learning command and their format.

(2) CLI (Command line User interface) :- CLI is commonly command prompt given by the user by typing in the keyboard. It is not easy to interact with computer. It provide only one user in the and one task at a time in a separate window. It is well perform in difficult task as compare to GUI.

(8)

Ans:- 2) There are following type of Operating system:-

(i) Batch operating System:- The Batch Operating system is not interact with the Computer directly. They prepare job on an offline device like ~~punch~~ punch Card and submitted to the Computer operators. The operator, their operating their jobs with similar needs on together and run as a group. Thus, the user leaves their program with the operator.

(ii) Time-Sharing OS:- A time sharing OS is used in a Computer network. It is used to allow to user to use same data and application program in a same network. It is also provide a user to interact & communicate each other. The main features of time sharing operating system is to minimize the response time where as in multiprogramming Batch systems. It This OS is define rights of the user which are given by the resources of system.

(iii) Network Operating System:- Network Operating System runs on the server and provides the server the capability to manage data, groups, users and other related function. It allows the user to access file sharing and printer from any single computer system in a network.

(iv) Distributed Operating system:- In this operating system use multiple central processor and multiple real-time application and multiple users. Data processing jobs are distributed among the processors according to which one can perform each job more efficiently. Distributed operating system communicates which one another through communication line (like high speed buses & telephone lines), processors is very in size and functions.

(v) Real time - Operating System:- In this type of operating system the ratio of response time to input is so small that it contains the environment.

There are two type of Real time operating system:-

(i) Hard real time operating system:- In this OS tasks will complete

at a time. at a time. In this
Operating system virtual memory is not
present.

(ii) Soft real time operating systems:- In this
tasks gets priority of ^{other} tasks & holds
the priority until it completes. There
is no time limit.

Ans: (B) (a) MS-Word:- Application Software ✓

(b) Android:- System Software. ✓

(c) Mac Macintosh:- operating system software. ✓

(d) Quick Heal Antivirus:- Utility software. ✓

(e) Dos:- System software. ✓

(f) printer driver:- Utility software. ✓

(g) Office Automation system:- System software. ✓

(h) Adobe photoshop:- Application software. ✓

(i) Graphics driver:- Utility software. ✓

(j) CAD:- Application software. ✓

Name - Rahul Kumar Sani
Roll - 16055
Sub - Introduction to CS
Sem - 1st Sem (BCA)

Ans: (4)

$$(i) (4785)_{10} = (12B1)_{16}$$

16	4785	1
16	299	B
16	18	2
	1	

4

$$(ii) (475)_8 = (BD)_{16}$$

4 7 5
010 111 101

$$(\underline{000010111101})_2 = BD$$

$$(iii) (10101011)_2 = (171)_{10}$$

$$1 \times 2^7 + 1 \times 2^5 + 1 \times 2^3 + 1 \times 2^1 + 1 \times 2^0$$

$$= 128 + 32 + 8 + 2 + 1$$

$$= 171$$

4

$$(iv) (ABC)_{16} = (2748)_{10}$$

$$10 \times 16^2 + 11 \times 16^1 + 12 \times 16^0$$

$$= 2560 + 176 + 12$$

$$= 2748$$

$$\begin{array}{r} 2560 \\ 176 \\ 12 \\ \hline 2748 \end{array}$$

$$(v) (A11C)_{16} = (\cancel{305370})_8 = (305370)_8$$

$$A = 10$$

$$C = 12$$

2	101112	0
2	50556	0
2	25278	0
2	12639	1
2	6319	1
2	3159	1
2	1579	1
2	789	1
2	394	0
2	197	1
2	98	0
2	49	1
2	24	0
2	12	0
2	6	0
2	3	1
	1	

$$= (01100010101111000)$$

$$305370$$

OR

8	101112	0
8	12638	7
8	1579	3
8	197	5
8	24	0
	3	

4

Ans:-(5) The functions of Operating System are:-

- (i) It act as a interface between the user and the machine.
- (ii) It takes input into human language and convert it into machine language and often processing again. Converts into machine languages to human language and display the output.
- (iii) It provides an environment for often program and applications to works.
- (iv) Operating system manages and supervises the functions of various Computers Components.
- (v) Input Output operation, Scheduling.
- (vi) It provided often services are:-

- * Networking
- * Program execution.
- * Protection
- * Communication.
- * Error Handling.
- *