



BRAINWARE UNIVERSITY

Term End Examination 2018 - 19

Programme – Master of Science in Hardware and Networking

Course Name – Operating System Technologies

Course Code – MCSE010604

(Semester – 1)

Time allotted: 3 Hours

Full Marks : 70

[The figure in the margin indicates full marks. Candidates are required to give their answers in their own words as far as practicable.]

Group –A

(Multiple Choice Type Question)

10 x 1 = 10

1. *Choose the correct alternative from the following*

(i) The Taskbar runs along the _____ of all windows desktops.

- a. top
- b. left
- c. bottom
- d. right

(ii) Operating System is a type of _____ Software.

- a. Application
- b. System
- c. Utility
- d. None of the above

(iii) A process is a _____.

- a. Basic entity
- b. Passive entity
- c. Static entity
- d. Active entity

(iv) Users communicate with Linux through _____.

- a. shell
- b. kernel
- c. applications
- d. all of the above

- (v) The state of a process after it encounters an I/O instruction is
- Ready
 - Waiting/Blocked
 - Running
 - Idle
- (vi) The BIOS code is built into the _____.
- Hard Disk
 - RAM
 - Motherboard
 - None of the above
- (vii) _____ is the default location to store files and folders in windows OS.
- My Documents
 - C Drive
 - Control Panel
 - Program Files
- (viii) _____ is the tool for managing device driver.
- System Tool
 - Command Prompt
 - Device Manager
 - Administrative Tool
- (ix) _____ window shows application errors.
- Safe Mode
 - Event Viewer
 - Task Manager
 - All of the above
- (x) TCP/IP reference model has _____ layers
- Three
 - Four
 - Six
 - Seven

Group – B

(Short Answer Type Questions)

3 x 5 = 15

Answer any *three* from the following

- 2.a Explain Device Management function of OS. 2
- b Explain File Management Function of OS 3
3. Explain RTOS and its types 5
4. Write about the various editions of WindowsXP operating system. 5
- 5.a Define BIOS. 2
- b. Explain the POST process of BIOS. 3
6. Explain multiprogramming batch processing operating system. 5

Group – C

(Long Answer Type Questions)

3 x 15 = 45

Answer any *three* from the following

- | | | | |
|-----|-----|---|-----|
| 7. | (a) | Explain any five functions of operating system. | 10 |
| | (b) | Explain RTOS with its types. | 5 |
| 8. | (a) | Why operating system generates a System call? Explain fork() and exec()system call. | 3+5 |
| | (b) | What is the difference between orphan and zombie process. Write a program in C to implement orphan process. | 4+3 |
| 9. | (a) | Write a shell program to find whether a number is leap year or not. | 5 |
| | (b) | Explain the difference between ls,ls -l and ls -a with suitable example. | 6 |
| | (c) | Explain the difference between rm and rm -r with suitable example. | 4 |
| 10 | (a) | What are the various types of guided transmission media? | 5 |
| | (b) | Explain unguided transmission media. | 4 |
| | (c) | Explain baseband and broadband topology | 6 |
| 11. | (a) | Explain the various network topologies. | 8 |
| | (b) | Explain IP addressing in a computer network. | 7 |
