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# M. Sc. IT-10 (Master of Science in Information Technology) Fourth Semester Examination 2012 MIT-4001 Linux Administration

Time: 3 Hrs Maximum Marks: 60

Note: the question paper has been divided in three sections – A, B and C. Answer the questions as per instructions given in each section.

# Section-A (Long Answer's Questions)

Answer any two questions. Each question carries 15 marks.

 $2 \times 15 = 30$ 

- 1. Discuss architecture of Linux Operating System. Differentiate between single user and multi user operating system.
- 2. Which are three levels of permissions of files and directories in Linux? Explain each of them.
- 3. Explain services in Linux. How services are selected for startup in Linux? How do we install and uninstall a new package?
- 4. What is a file system? Explain the steps to mount and unmount the file system manually and automatically. What is a network file system?

### Section-B (Short Answer's Questions)

Answer any four questions. Each question carries 5 marks.

 $4 \times 5 = 20$ 

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- 1. List the steps used to create a working multi OS system that include Linux and windows XP.
- 2. Write the characteristics of ext2 file system with suitable diagram.
- 3. Explain the bootstrapping.
- 4. Differentiate between SetUID and SetGID.
- 5. Explain quota management in file system
- 6. What is the purpose of shadow password files?
- 7. What is init service? Differentiate between inetd and xinetd processes.
- 8. What is X-windows?

## Section-C (Objective Type Questions)

Answer all questions. Each question carries 01 mark.

10 x 1= 10

#### **Choose the correct option**

- 1. What terminology is not used in Linux?
  - a. Shell
  - b. Process
  - c. File
  - d. Folder
- 2. What do you mean by Linux utilities?
  - a. System Software
  - b. Application Software
  - c. Both
  - d. None
- 3. Why do we use shell?
  - a. communication media between user and Linux OS
  - b. communication media between user and Hardware
  - c. communication media between user and application
  - d. None
- 4. What is System Call in Linux?
  - a. Function
  - b. Predefined Function

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- c. Properties
- d. None
- 5. Why do we use ps command in Linux?
  - a. Generate a list of processes and their attributes
  - b. Generate a list of actions and their attributes
  - c. Generate a list of processor and their attributes
  - d. None
- 6. Why do we use kill command?
  - a. Stop the process
  - b. Terminate the process
  - c. Wait the process
  - d. None
- 7. Which facilities are provided by the kernel?
  - a. Memory Management
  - b. Process Management
  - c. Interprocess Communication (IPC)
  - d. All
- 8. Who developed the Linux?
  - a. Charls Babbage
  - b. Linus Torvalds
  - c. Alan Turing
  - d. None
- 9. What is knoppix?
  - a. CD version of the Linux
  - b. Version of the Linux
  - c. Properties of Linux
  - d. None
- 10. What are the tasks not done by system administrator?
  - a. starting and stopping Linux
  - b. maintaining the file system
  - c. maintaining the user accounts
  - d. Compilation of program

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