

**MCA-21**

June - Examination 2016

**MCA IIIrd Year Examination****Linux System Administration****Paper - MCA-21****Time : 3 Hours ]****[ Max. Marks :- 80**

**Note:** The question paper is divided into three sections A, B and C. Write answers as per given instructions.

**Section - A****8 × 2 = 16**

(Very Short Answer Questions)

**Note:** Answer **all** questions. As per the nature of the question delimit your answer in one word, one sentence or maximum upto 30 words. Each question carries 2 marks.

- 1) (i) Which computer operating system based on the Debian Linux distribution?
- (ii) Which file contains the configuration for the sshd daemon?
- (iii) Where are the default system log files located in Linux?
- (iv) What do you get when you type “**echo \$PS1**” at the bash prompt?
- (v) Which option can you use with **read** to display a prompt for input?
- (vi) Which bash command displays the current shell?

(vii) Which file is used to pass information between applications for communication purpose?

(viii) Each inode describes a \_\_\_\_\_ on the hard disk.

### Section - B

4 × 8 = 32

(Short Answer Questions)

**Note:** Answer **any four** questions. Each answer should not exceed 200 words. Each question carries 8 marks.

- 2) Explain the architecture of the Linux operating system with diagram.
- 3) What are accounts and groups in Linux? How do you use them?
- 4) How do you copy, move and rename files in Linux?
- 5) Write the name of few commonly used Shells.
- 6) Write the command to do the following:
  - (i) Create a new directory “KKHSOU”
  - (ii) Create a user “abc”
  - (iii) Change the password of the existing user say “kkhsou”
  - (iv) Display IP address
  - (v) Extract “kkhsou.tar”
- 7) What does the “nslookup” utility do?
- 8) What is DHCP? Explain with an example.
- 9) What is Samba? Where do we use it give details with an example.

**Section - C****2 × 16 = 32**

(Long Answer Questions)

**Note:** Answer **any two** questions. You have to delimit your each answer maximum upto 500 words. Each question carries 16 marks.

- 10) What is Hard Disk partitioning for Linux? Explain how to create new partitions in the Linux Operating system.
  - 11) What is the Linux file system? Explain any five types of file systems available.
  - 12) What is a MTA? Which network protocol is used by MTAs to communicate with each other?
  - 13) Explain the various permissions used for files and directories in Linux. How the read, write and execute permission attached with a file are different from that attached to a directory?
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