

**MCA-21**  
June - Examination 2017  
**MCA IIIrd Year Examination**  
**Linux System Administration**  
**Paper - MCA-21**

**Time : 3 Hours ]**

**[ Max. Marks :- 80**

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**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) Define kernel.
- (ii) What do you understand by open source?
- (iii) What does rwx r-x-r-- mean in octal?
- (iv) What do you mean by LILO boot loader?
- (v) Write the command to remove all 'doc' files in the system.
- (vi) What is the mail server?
- (vii) What do you understand by x-window system?
- (viii) Write the command to list all processes in the system.

**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) Write the differences internal and external commands in Linux.
- 3) Explain the meaning of wild card. List the different types of wild cards.
- 4) Write the command to do the following:
  - (i) Count the number of lines and words in file.
  - (ii) Sort a file and remove the duplicate lines
  - (iii) Create a file named book that contains the contents of other two files part 1 and part 2.
  - (iv) List the files in working directory in the reverse alphabetic order.
- 5) Discuss the comparison of various shells.
- 6) Explain configuration of FTP server and client.
- 7) Explain about file security in Linux.
- 8) What is the difference between a job and a process?
  - (i) How do you suspend the foreground job?
  - (ii) Move a suspended job to the background
  - (iii) Bring back a suspended job to the foreground?
- 9) Explain the X window System. How it is different from other Windows?

**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 a variable in Linux? Write a shell script to lock your terminal till you enter a password.
  - 11) Write a short note on the following:
    - (i) File types and permission
    - (ii) Partitioning the hard drive
  - 12) Explain installation and configuration of DNS server.
  - 13) Explain Linux file system with inode table structure.
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