## MCA-20A

# Linux System Administration Master of Computer Application (MCA-11/16/17) 

$5^{\text {th }}$ Semester Examination June 2022
Time : 2 Hours
Max. Marks : 80

Note: This Paper is of Eighty (80) marks divided into two (02) Section A and B. Attempt the questions contained in these sections according to the detailed instructions given there in.

> Section-A
> (Long Answer-type questions)

Note: Section 'A' contains Five (05) Long-answer type questions of Twenty (20) marks each. Learners are required to answer any two ( 02 ) questions only.

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(2 \times 20=40)
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Q.1. Describe various features of UNIX operation System.
Q. 2 What do you mean by system calls? Describe various types of system calls.
Q. 3 Write a shell script which will receive any number of filenames as arguments. The shell script should check whether every argument supplied is a file or a directory. If it is a directory, it should be appropriately reported. If it is a filename then name of the file as well as the number of lines present in it should be reported.
Q. 4 How does inter process communication occur in Unix? Describe in detail.
Q. 5 a. What is the structure of a shell script of a C program in Unix?
b. Write a shell script which deletes all lines containing the given word in the files supplied as arguments to this shell script.
P.T.O.

## Section-B

(Short Answer-type questions)
Note: Section 'B' contains Eight (08) Short-answer type questions of ten (10) marks each. Learners are required to answer any four (04) questions.

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(4 \times 10=40)
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Q. 1 In grep command, what does "grep" stand for? Also explain its mechanism.
Q.. 2 Describe Logical Operators in Unix with suitable examples.
Q. 3 Explain chmod command with suitable examples.
Q. 4 Discuss the concept of Time Sharing in Unix operating system.
Q. 5 What is the role of a boot block?
Q. 6 What is an Inode table?
Q. 7 What do you mean by semaphore?
Q. 8 Explain the following commands with example: sort cut

