MCA(6/7)/MX   5277
Linux and Shell Programming
Paper : MCA-403

Time : Three Hours]   [Maximum Marks : 50

Note :– Attempt any **FIVE** questions in all, selecting at least **ONE** question from each Unit.

UNIT–I

1. (a) Explain the process of logging in and logging out in Linux. 5

   (b) Explain the purpose of following commands with the help of examples :

   (i) script   (ii) man   (iii) ls   (iv) find   (v) ln

   5

2. (a) What do you understand by environment variables in Linux ? What is their significance ? Write and explain the purpose of various environment variables.   5

   (b) Explain various types of files in Linux/Unix. Also explain the Unix file system.   5

3. (a) Explain various control structures in shell programming.   5

   (b) Write down a shell program to copy a file without overwriting.

   5

UNIT–II

4. (a) Write and explain the extended regular expression used by egrep anf awk and IRE and TRE regular expressions used by grep and sed.   6

   (b) Explain the various option utilized by sed with the help of examples.   4

5. (a) Explain the various privileges given to the administrator in Linux.

   5

   (b) Explain the rc Scripts used by init in brief.   5

6. (a) Explain how job control is done with the help of at, batch, cron and time.   5

   (b) Discuss various features of perl in Linux.   5

UNIT–III

7. (a) Explain the working modes in vi editor. What are the various regular expressions character used by vi ?   5

   (b) Explain how gdb is useful in debugging in Linux.   5

8. (a) Explain how static and dynamic libraries can be built and used in Linux.   5

   (b) Write short notes on ldd and soname.   5

9. Explain how makefile is useful in managing large 'C' projects with the help of an example.   10

10. (a) Write a short note on Linux I/O system.   5

    (b) Write short notes on Signals and Signal Handler in Linux. 5