B.A./B.Sc 4th Semester (Honours) Examination, 2019 (CBCS)

Subject : Mathematics

Paper : BMH4SEC 22

(Operating System : Linux)

Time: 2 Hours   **Full Marks: 40**

The figures in the margin indicate full marks.
Candidates are required to give their answers in their own words
as far as practicable.

Group-A

Marks : 10

1. Answer *any five* questions: 2×5=10

   (a) What do you mean by swap space of Linux OS?

   (b) What is shell script?

   (c) What is 'x-window system'?

   (d) What do you mean by Kernel of Linux OS?

   (e) What is boot loader? Give example.

   (f) Write two features of Linux.

   (g) What do you mean by super user?

   (h) How to add a user in linux?

Group-B

Marks : 10

2. Answer *any two* questions: 5×2=10

   (a) (i) State the purposes of the following commands:

      (I) *cp*

      (II) *mv*

      (III) *rm*

      (ii) What is the role of Richard Stallman with respect to Linux?   3+2=5

(b)   (i) Explain different file-types in Linux.

(ii) Differentiate between hard-link and soft-link.

3+2=5

(c)   (i) What is the purpose of home directory?

(ii) Discuss Linux directory structure.

1+4=5

(d)   (i) What is the purpose of an editor?

(ii) Discuss three commands of Vi editor.

2+3=5

Group-C

Marks : 20

3. Answer *any two* questions:

10×2=20

(a)   (i) With suitable diagram, explain Linux System Architecture.

(ii) What do you mean by "*run-level*" of Linux OS during booting?

8+2=10

(b)   (i) Explain different types of users and user management in Linux.

(ii) How would you broadcast a message to all users?

8+2=10

(c)   (i) What are the different advantages of Linux over UNIX?

(ii) Discuss the role of root in Linux Operating System.

5+5=10

(d) Discuss the purposes of the following commands in brief:

(i) *cut*

4+4+2=10

(ii) *grep*

(iii) *ls*