

Total No. of printed pages = 4

63/2 (SEM-3) MCA 3.3

2021

(held in 2022)

MCA

(Theory Paper)

Paper Code : MCA- 3.3

(System Administration)

Full Marks – 75

Time – Three hours

The figures in the margin indicate full marks for the questions.

1. Answer the following questions : $2 \times 10 = 20$
 - (a) What are the primary work for a System Administration ?
 - (b) What is the purpose of physical layer in ISO/OSI reference model ?
 - (c) What are types of modem ?
 - (d) What is the uses of R-J-45 clip in Computer Network ?

[Turn over

- (e) What is RAID ?
- (f) What is Firewall ?
- (g) How a System Administration create user account and password for a user.
- (h) What is cloud ?
- (i) Give a name of Web Server of Linux OS.
- (j) What are the advantages of Open source software ?
- (k) What is shell ?
- (l) How a user can broadcast a message to all the users in the group ?

2. Answer any *five* of the following : $3 \times 5 = 15$

- (a) Write the procedure on command to write, save, exit from Vi editor and also write how a C program can be executed or run in Vi editor.
- (b) Explain the command to change file access permission mode with example.
- (c) Give a basic idea why Firewall is required in Network System.

- (d) Write the working principle of Fiber Optics Cable.
- (e) Give an overview of Network Security and Intrusion-Detection.
- (f) What is the function of Router in a Computer Network ?
- (g) How radio waves works in data communication ?

3. Answer any *two* of the following questions :
 $5 \times 2 = 10$

- (a) Write a shell program to check an integer number is Palindrome or not.
- (b) Write a shell program to find the digit sum of an integer number.
- (c) Write a shell program to check an integer number prime or not.

4. Answer any *three* of the following questions :
 $10 \times 3 = 30$

- (a) Give a brief overview about the installation procedure of Vmware and Centos Linux in a system.

- (b) Explain the types of Network address. And also give an overview how we can configure network address in a server system.
- (c) How the following server can be configured in Linux Server (any two) ?
- (i) FTP Server
 - (ii) TELNET Server
 - (iii) Proxy Server.
- (d) Give an Overview of Linux File System.