2021

(held in 2022)

CSIT '

(Theory Paper)

Paper Code: CSIT-3.6

(EL-5 System Administration)

Full Marks - 80

Time – Three hours

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

- 1. Answer any ten of the following questions:  $2 \times 10 = 20$ 
  - (a) What are the primary task for a system Administration?
  - (b) What are the Linux Shell available in Linux OS?
  - (c) What are the advantages of Open Source Software? Give a name of Open Source Software.

Turn over

- (d) Write the Commands (Linux) to create an user account and password.
- (e) What are uses of HIC Card?
- (f) What is cloud?
- (g) What are types of communication in Computer Network?
- (h) Name the command to run a Java program in vi edition.
- (i) What is RAID?
- (j) Write the anatomy of co-axial cable.
- (k) Write the command to broadcast a message in Linux.
- (1) What is the purpose of 'Switch' in a computer Network?
- 2. Answer any five of the following questions:  $3\times 5=15$ 
  - (a) Explain how to change the file access permission mode for user, group and others in Linux.
  - (b) Give an overview of Network Security and Intrusion Detection.

- (c) What is the function of Gateway in a Computer Network?
- (d) What are the basic differences between a hub and a switch.
- (e) Explain the working principle of Fiber Optics Cable.
- (f) Write a brief overview of Firewall.
- (g) How Radio waves works in Computer Nertwork?
- 3. Answer any *three* of the following questions:  $5\times 3=15$ 
  - (a) Write a shell program to display Fibonacci numbers upto n term.
  - (b) Write a shell program to reverse the digits of an integer number.
  - (c) Write a shell program to find the biggest between three integer numbers.
  - (d) Write a shell program to check an integer number is prime or not.

(3)

- 4. Answer any two of the following questions: 10×2=20
  - (a) Write the instalation procedure of any Virtual Machine in your system and also write the instalation procedure of any operating system in your Virtual Machine
  - (b) Give an overview of Linux File System.
  - (c) Explain the configuration procedure of FTP Server in your system.
- 5. Write short notes on any two:  $5 \times 2 = 10$ 
  - (a) TELNET
  - (b) DHCP Server
  - (c) Proxy Server.