SF—54—2022

FACULTY OF COMPUTER STUDIES

B.Sc. (Third Semester) EXAMINATION

MAY/JUNE, 2022

(CBCS Pattern)

COMPUTER SCIENCE

(Data Communication)

(Wednesday, 6-7-2022)   **Time : 2.00 p.m. to 5.45 p.m.**

Time— 3.45 *Hours*   *Maximum Marks*—75

N.B. :—   (*i*)   *All* questions are compulsory.

      (*ii*)   Figures to the right indicate full marks.

1. Attempt any *five* of the following :   15
   - (*a*) Data communication model
   - (*b*) Multiplexing
   - (*c*) Bus topology
   - (*d*) Message Switching
   - (*e*) Repeaters
   - (*f*) E-mail
   - (*g*) LAN.

2. Attempt any *two* of the following :   10
   - (*a*) Describe any *five* data communication task.
   - (*b*) Explain peer to peer network.
   - (*c*) Explain Analog and Digital Signals.

3. Attempt any *two* of the following :   10
   - (*a*) Explain OSI model.

P.T.O.

(*b*) What is multiplexing ? Explain FDM.

(*c*) Explain connection oriented and connectionless services.

4. Attempt any *two* of the following : 10

(*a*) What is transmission media ? Explain Co-Ax cable.

(*b*) Explain Ring and Star Topology.

(*c*) Discuss infrared and microwave.

5. Attempt any *two* of the following : 10

(*a*) Explain Ethernet.

(*b*) Explain switching technology in detail.

(*c*) Write a short note on ESMA/CD.

6. Attempt any *two* of the following : 10

(*a*) Explain Hub and Switch devices function.

(*b*) Explain FTP and DNS protocol.

(*c*) Discuss IPAddress.

7. Attempt any *two* of the following : 10

(*a*) Write a short note on Internet.

(*b*) Explain token ring in detail.

(*c*) Explain ISDN.