

Roll No.

Exam Code : J-21

Subject Code—53412

B. Sc. EXAMINATION

(Batch 2018 Onwards)

(Main & Re-appear)

(Fourth Semester)

COMPUTER SCIENCE

CCsL-405

Computer Networks

Time : 3 Hours

Maximum Marks : 80

Note : Attempt *Five* questions in all. Q. No. **1** is compulsory. All questions carry equal marks.

1. Attempt the following : **8×2=16**

- (a) Explain the term Computer Network ?
- (b) Discuss Network Devices in Computer Networks ?
- (c) What are Analog and Digital signals ?

(1-31-21-0821) **J-53412**

P.T.O.

- (d) Define Multiplexing.
- (e) What is Congestion in Network ?
- (f) How Modem works in communication ?
- (g) What is Topology ? Define any *two* types of Topologies ?
- (h) Explain the Structured diagram of IPV4 ?

Unit I

- 2. Explain different types of Computer Network. **16**
- 3. Discuss various Layers and working of each Layer of OSI Reference Model ? **16**

Unit II

- 4. Explain the Guided and Wireless Transmission with the types of media used in both Transmission ? **16**
- 5. What is Switching ? Elaborate Circuit Switching and Packet Switching. **16**

Unit III

6. Discuss the following :
- (a) Devices used for conversion of Analog Signals to Digital Signals and vice-versa ? 16
 - (b) Token Ring Vs Token Bus. 16
7. What are the functions provided by Data Link Layer ? 16

Unit IV

8. What is Routing ? Discuss any two Routing Algorithms. 16
9. Explain Shortest Path Routing with appropriate example. 16