Roll No. .....

Exam Code : M-24

Subject Code—61416

B. Sc. EXAMINATION

(Main/Reappear) (Batch 2019 Onwards)

(Fourth Semester)

COMPUTER SCIENCE

CCsL-405

Computer Networks

Time : 3 *Hours* *Maximum Marks* : 80

Note : Attempt *Five* questions in all, selecting *one* question from each Unit. Q. No. **1** is compulsory. All questions carry equal marks.

1. Define the following : **8×2=16**

   (i) Types of Computer Networks

   (ii) Router

   (iii) Modem

   (iv) Token Ring

(v) Wi-Fi

(vi) IPv4

(vii) IPv6

(viii) Multiplexing.

Unit I

2. What is Network Topology ? Explain the types of topology in detail. **16**

3. Explain TCP/IP Model. Give similarities and differences with OSI reference model. **16**

Unit II

4. Describe data rate and bandwidth with example. Also write the advantages of digital communication over analog communication. **16**

5. Explain various Transmission Medias in detail. **16**

Unit III

6. What are Error detection and Error correction Techniques in computer network ? Explain in detail. **16**

7. Draw Bluetooth protocol stack and write down functionality of each layer. **16**

Unit IV

8. Explain the Distance vector routing algorithm with suitable example. **16**

9. Describe various types of congestion control algorithms in detail. **16**