

Roll No. ...203112310013

Exam Code : J-22

Subject Code—56870

B. Sc. EXAMINATION

(Main & Re-appear)

(Batch 2018 Onwards)

(Fourth Semester)

COMPUTER SCIENCE

CCsL-405

Computer Networks

Time : 3 Hours

Maximum Marks : 80

Note : Q. No. 1 is compulsory. Out of remaining eight questions (divided in 4 Units), attempt *four* questions by selecting either *one* question from each Unit or by selecting *two* questions from any one Unit and remaining *two* questions from two different Units out of remaining three Units.

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Compulsory Question

1. (a) Define Topology. Give any two types of topologies.
 (b) Discuss the working of Modem.
 (c) What is Bandwidth, Data Rate and Baud Rate ?
 (d) Define Guided and Wireless Media.
 (e) Explain the concept of Flooding.
 (f) Write a short note on ISDN.
 (g) Discuss any two protocols of Application layer in OSI reference model.
 (h) What are the major issues in network security ?
 $8 \times 2 = 16$

Unit I

2. Explain LAN, MAN and WAN in Computer Networks.
16
3. Differentiate OSI Reference Model and TCP/IP Model. Also explain the various protocols in layers of TCP/IP Model.
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Unit II

4. Discuss Transmission Medium. Also explain different types of Transmission Media used for communication.
16
5. Explain FDDI. Compare FDDI with Token Ring.
16

Unit III

6. Discuss the following :
 (a) Sliding Window Protocols
 (b) Protocols used in Data Link Layer.
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7. What is the need of Error and Flow Control in Data Link Layer ? Explain various Error and Flow Control techniques in detail.
16

Unit IV

8. Define the following :
 (a) Routing Protocols
 (b) Distance Vector Routing Protocol.
16
9. Explain Congestion Control. What are different techniques used to handle Congestion Control in network ?
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