

**SECOND SEMESTER M.Sc. DEGREE EXAMINATION, JUNE 2019**

(CUCSS)

Computer Science

CSS 2C 03—COMPUTER NETWORKS

(2014 Admissions)

Time : Three Hours

Maximum 36 Weightage

**Part A***Answer all questions.**Each question carries 1 weightage.*

1. What are the different types of networks ?
2. Define Protocol.
3. What is DNS ?
4. List the advantages of optical fibre.
5. Explain FTP.
6. Differentiate between packet switching and circuit switching.
7. What do you mean by congestion control ?
8. Explain the functions of switches.
9. Define Checksum.
10. Define ARQ.
11. What is Snooping ?
12. Explain the role of firewalls in computer networks.

(12 x 1 = 12 weightage)

**Part B***Answer any six questions.**Each question carries 2 weightage.*

13. What are the different types of network topologies ? Explain.
14. Explain the basic model of FTP.
15. Write a short note on Bridges.
16. Differentiate between TCP and UDP.
17. Write a short note on Wireless network.
18. Give a brief account on different transmission media.

**Turn over**

19. Explain about any *two* domains in Domain Name System.
20. Explain the principles of security in Computer Networks.
21. What are the different types of attack in computer network ? Explain.

(6 x 2 = 12 weightage)

### **Part C**

*Answer any **three** questions.*

*Each question carries 4 weightage.*

22. Describe with neat diagram the functionalities of each layer in the ISO-OSI reference model,
23. Write a socket program to copy a file from one machine to another in a computer network.
24. What is an IP address ? Explain the different classes of IP addresses.
25. Explain any two — error detection and error correction mechanisms.
26. Explain TCP congestion control mechanism in detail.
27. What is cryptography ? Explain public and private key to be used for cryptography mechanism

(3 x 4 = 12 weightage)