

C 23323

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Name.....

Reg. No.....

**SECOND SEMESTER M.Sc. DEGREE (REGULAR/SUPPLEMENTARY)
EXAMINATION, APRIL 2022**

(CBCSS)

Computer Science

CSS 2C 08—COMPUTER NETWORKS

(2019 Admission onwards)

Time : Three Hours

Maximum : 30 Weightage

General Instructions

1. *In cases where choices are provided, students can attend **all** questions in each section.*
2. *The minimum number of questions to be attended from the Section / Part shall remain the same.*
3. *The instruction if any, to attend a minimum number of questions from each sub section / sub part / sub division may be ignored.*
4. *There will be an overall ceiling for each Section / Part that is equivalent to the maximum weightage of the Section / Part.*

Section A

*Answer any **four** questions.
Each question carries 2 marks.*

1. Explain inverse multiplexing.
2. Name the advantages of optical fiber over twisted-pair and coaxial cable.
3. What are the three important characteristics of a periodic signals ?
4. Distinguish between multilevel TDM and pulse-stuffed TDM.
5. Compare the FM bandwidth with the AM bandwidth in terms of the modulating signal.
6. Explain pure ALOHA protocol.
7. Explain briefly FTP.

(4 × 2 = 8 weightage)

Turn over

Section B

*Answer any **four** questions.
Each question carries 3 weightage.*

8. Briefly describe the following networks with example and application : (a)Wired networks ; (b) Wireless networks ; and (c) Ad hoc networks.
9. Explain message authentication.
10. Explain packet-filter firewall.
11. Explain domain name spaces.
12. Distinguish between recursive and iterative resolution.
13. Explain stop-and-wait protocol algorithms.
14. Explain the services provided by PPP.

(4 × 3 = 12 weightage)

Section C

*Answer any **two** questions.
Each question carries 5 weightage.*

15. Explain symmetric and public key distributions.
16. Explain electronic mail architecture.
17. Illustrate error detection and correction using cyclic codes with example.
18. Describe the significance of IPV4 and IPV6 with examples.

(2 × 5 = 10 weightage)