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Name..... Reg.No.....

SECOND SEMESTER M.Sc. DEGREE EXAMINATION, APRIL 2023 (Regular/Improvement/Supplementary)

COMPUTER SCIENCE FCSS2C08-COMPUTER NETWORKS

Time: 3 Hours

Maximum Weightage: 30

Section A: Short answer questions. Answer any *four* questions. Each carries 2 weightage.

- 1. What are the different types of networks?
- 2. Explain HTTP.
- 3. What is DNS?
- 4. Elaborate on message switching.
- 5. Define ARQ.
- 6. What are switches?
- 7. Write a short note on digital signature.

 $(4 \times 2 = 8 \text{ weightage})$

Section B: Short essay questions. Answer any *four* questions. Each carries 3 weightage.

- 8. Explain CSMA/CD.
- 9. Compare IPv4 and IPv6.
- 10. Describe three way handshaking.
- 11. Explain the goals of security in Computer network.
- 12. Differentiate between TCP and UDP.
- 13. Explain firewall.
- 14. What is socket? Explain the structure.

 $(4 \times 3 = 12 \text{ weightage})$

Section C: Essay questions. Answer any two questions. Each carries 5 weightage.

- 15. Describe open and closed loop congestion controls.
- 16. What is cryptography? Explain public and private key to be used for cryptographic techniques.
- 17. Explain ISO-OSI reference model and explain the functionalities of each layer with a neat diagram.
- 18. Describe TCP congestion control mechanism in detail.