

17P268

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Name:.....

Reg. No.....

SECOND SEMESTER M.Sc. DEGREE EXAMINATION, MAY 2018

(CUCSS - PG)

(Computer Science)

CC17P CSS2 C03 - COMPUTER NETWORKS

(2017 Admissions: Regular)

Time: Three Hours

Maximum: 36 Weightage

PART A

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

1. Differentiate network edge and network core.
2. What is DNS?
3. Discuss briefly about IP address.
4. Differentiate unicast routing, broadcast routing and multicast routing.
5. Differentiate forwarding and routing.
6. What is 10baseT?
7. What is ARP?
8. What is byte stuffing?
9. What is hamming code distance?
10. Differentiate point-to-point link and broadcast link.
11. What are the four principles of cryptography?
12. What are the causes of congestion in a network?

(12 × 1 = 12 Weightage)

PART B

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

13. Explain the working principles of HTTP and FTP.
14. What are the different types of Ethernet?
15. Explain various congestion control mechanisms.
16. Compare IPv4 and IPv6. Discuss the transition from IPv4 to the other.
17. Differentiate hub, bridges, switches and gateways.
18. Explain Ethernet frame structure.
19. Explain CRC method with an example.
20. Explain any two cryptographic techniques to ensure integrity of data in the network world.
21. What is firewall? Explain any two methods of implementing firewalls to ensure security.

(6 × 2 = 12 Weightage)

PART C

Answer any *three* questions. Each question carries 4 weightage.

22. Compare and contrast TCP/IP Reference Model and OSI Reference model.
23. Explain various routing algorithms.
24. Explain principles and methods of reliable data transfer.
25. Explain various services offered by the link layer.
26. Explain various multiple access layer protocols.
27. Explain Key Distribution and Certification in cryptography with example.

(3 × 4 = 12 Weightage)
