18U566S (Pages: 2) Name: ……..

Reg. No……...…….

FIFTH SEMESTER B.C.A. DEGREE EXAMINATION, NOVEMBER 2020

(Supplementary/Improvement)

(CUCBCSS-UG)

CC15U BCA5 B10 - COMPUTER NETWORKS

(Core Course)

(2015, 2016 Admissions)

Time: Three Hours Maximum: 80 Marks

Part – A

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

1. The _____ is the connectionless unreliable protocol in the Transport layer.
2. The packet send by a node to the source to inform it about the congestion is called _____
3. DHCP stands for _____
4. The set of rules a computer must follow on a network is called _____
5. What is the size of a MAC address?
6. In _____ transmission, data can flow in both direction simultaneously.
7. Error detection is done in the _____ layer.
8. _____ is the throughput of slotted ALOHA.
9. NIC stands for _____
10. BOOTP is used in _____ layer of TCP/IP.

(10 x 1 = 10 Marks)

Part – B

Answer ***all*** questions. Each question carries 2 marks.

11. What is pure aloha protocol?
12. Define the term checksum.
13. Distinguish between a gateway and router.
14. What is an IP address?
15. What are trans-positional ciphers?

(5 x 2 = 10 Marks)

Part – C

Answer any ***five*** questions. Each question carries 4 marks.

16. Explain three-way handshaking protocol.
17. What is the purpose of using Humming code technique in Error control?
18. How does Address Resolution Protocol works?

19. Explain cryptography.
20. Explain VRC and LRC methods of error detection using suitable examples.
21. Write a detailed note on stop-and-wait protocol.
22. How does CSMA/CD detect collision in wired network?
23. Explain the RSA algorithm for asymmetric key cryptography.

(5 x 4 = 20 Marks)

Part – D

Answer any ***five*** questions. Each question carries 8 marks.

24. Write a detailed note on various switching techniques.
25. Explain about the layered model of OSI. Explain with suitable diagram.
26. Write a detailed note on Link state routing protocol.
27. Explain various random access protocols in details.
28. Define Topology. Explain various types of topologies?
29. Compare Go-Back-N-ARQ and Selective Repeat ARQ.
30. Write a detailed note on various encryption techniques.
31. Differentiate IPV4 and IPV6

(5 x 8 = 40 Marks)

****