19U651 (Pages: 2) Name: .....

Reg.No: .....

SIXTH SEMESTER B.Sc./B.C.A. DEGREE EXAMINATION, APRIL 2022

(CBCSS - UG)

CC19U BCS6 B13 / CC19U BCA6 B13 - COMPUTER NETWORKS

(Computer Science / Computer Application - Core Course)

(2019 Admission - Regular)

Time : 2.00 Hours Maximum : 60 Marks

Credit : 3

Part A (Short answer questions)

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

1. Define LAN, WAN, MAN.
2. List random access protocols.
3. What is broadcasting ?
4. Write a note on address space of IPV4 and IPV6.
5. List the various IPV4 to IPV6 transition strategies.
6. Define the usage of ARP protocol.
7. What are connection oriented protocols ? Give examples.
8. What are the functions of SCTP protocol?
9. Describe SMTP.
10. Suppose in a substitutional cipher, if key is 5, how will you encrypt BEAUTIFUL ?
11. Explain the purpose of keys in cryptography.
12. Describe message digest.

(Ceiling: 20 Marks)

Part B (Short essay questions - Paragraph)

Answer ***all*** questions. Each question carries 5 marks.

13. Write a note on store and forward mechanism in message switching.
14. Define Hamming code. Enumerate the steps needed to generate Hamming code for a 7-bit codeword.Demonstrate with an example.

15. Write a short note on Line discipline in Datalink layer.

16. Discuss IPV6 packet format with suitable diagram.

17. Define routing protocols. Explain distance vector routing protocol.

18. Write a detailed note on congestion control.

19. Explain different types of ciphers.

(Ceiling: 30 Marks)

Part C (Essay questions)

Answer any ***one*** question. The question carries 10 marks.

20. Define different layers in TCP/IP model with a neat diagram.

21. Explain the role of message digest in network security.

(1 × 10 = 10 Marks)

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