

C 80139

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Name.....

Reg. No.....

**SIXTH SEMESTER B.A./B.Sc. DEGREE EXAMINATION, MARCH 2020**

(CUCBCSS—UG)

BCA

BCA 6B 13—COMPUTER NETWORKS

(2017 Admissions)

Time : Three Hours

Maximum : 80 Marks

**Part A**

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

1. Give any disadvantage of Bus network topology.
2. How many layers are there in OSI model ?
3. What are the different ways of handling error correction ?
4. What is burst error ?
5. What is logical address ?
6. What is a bridge ?
7. What is the main function of transport layer ?
8. Name any one Application layer protocol.
9. What do you mean by the term Cipher text ?
10. What is passive attack ?

(10 × 1 = 10 marks)

**Part B**

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

11. Write a brief note on computer network.
12. Briefly explain Burst error.
13. Write a short note on data link layer.
14. What do you mean by the term Polling ?
15. What is packetizing ?
16. Write a brief note on Network address translation.

Turn over

17. Differentiate between TCP and UDP.
18. What is substitution cipher ?

(8 × 2 = 16 marks)

### Part C

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

19. Explain packet switching.
20. What is Ethernet and why it is used ?
21. Explain the error detecting code CRC with an example.
22. What are the responsibilities of data link layer ? Explain briefly.
23. What is the range of addresses in the classes of internet addresses ?
24. What is address mapping ? Explain briefly any dynamic address mapping protocol.
25. Differentiate between Connectionless Iterative Server and Connection-Oriented Concurrent Server.
26. Explain simple substitution cipher with example.
27. Briefly explain Message Authentication Code with appropriate figure.

(6 × 4 = 24 marks)

### Part D

*Answer any three questions.  
Each question carries 10 marks.*

28. Explain the functionalities of all the layers in TP/IP protocol suite.
29. Explain CSMA/CD medium access technique.
30. What is subnet mask ? How it is represented ?
31. Explain the following : (i) Message transfer agent ; (ii) Message access agent.
32. Describe RSA Algorithm and Estimate the encryption and decryption values for the RSA algorithm parameter.

(3 × 10 = 30 marks)