

D 11205

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Name.....

Reg. No.....

FIFTH SEMESTER B.C.A. DEGREE EXAMINATION, NOVEMBER 2016

(CUCBCSS-UG)

BCA 5B 10—COMPUTER NETWORKS

Time : Three Hours

Maximum : 80 Marks

Part A

Answer all questions.

Each question carries 1 mark.

1. Protocol Data Unit concerned with the transport layer is _____.
2. IPV6 addresses are _____ bits long.
3. Number of links to connect n nodes in a mesh topology is _____.
4. In linear block code, the _____ of any two valid codewords creates another valid codeword.
5. The communication modes that support two-way traffic but in only one direction at a time is called _____.
6. 10BASE2 uses _____ cable while 10BASE5 uses _____.
7. DHCP stands for _____.
8. _____ is the size of host bits in Class B of IP address.
9. _____ protocol is used to convert IP address to MAC address.
10. The TCP and UDP protocols are used on _____ layer.

(10 × 1 = 10 marks)

Part B

Answer all questions.

Each question carries 2 marks.

11. What do you mean by Automatic Repeat Request ?
12. Why logical addressing and port addressing are essential ?
13. Differentiate multicast and anycast.
14. What is dynamic routing ? Give example.
15. Write notes on SMTP.

(5 × 2 = 10 marks)

Turn over

Part C

Answer any five questions.

Each question carries 4 marks.

16. Differentiate TCP and UDP.
17. Explain sliding window protocol.
18. Differentiate between ALOHA and Slotted ALOHA.
19. Explain the structure of IPV6 header.
20. Explain CSMA/CA.
21. What are the services provide by the datalink layer to the network layer ?
22. What is asymmetric key cryptography ? Explain with diagram.
23. Write notes on security services.

(5 × 4 = 20 marks)

Part D

Answer any five questions.

Each question carries 8 marks.

24. Perform a comparative study between the ISO-OSI model and TCP/IP reference model with neat diagram.
25. Explain the services provided by the transport layer. Explain TCP with its header format.
26. What is switching ? Explain different switching techniques used for internetworking in detail.
27. Explain different random access methods that have been used for multiple access.
28. What is shortest path routing ? Explain the Dijkstra's algorithm.
29. Discuss Wireless LAN standards in detail.
30. Write notes on (i) WWW ; (ii) HTTP ; (iii) DHCP ; (iv) TELNET.
31. (a) Explain the various protocol used in email service.
(b) Explain in detail about different file transfer protocols.

(5 × 8 = 40 marks)