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Reg. No.

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**V Semester B.C.A.2 Degree Examination, October/November 2014**

**(RCU – Repeaters & Regular)**

**(BCA 504) : COMPUTER NETWORKS**

Time : 3 Hours]

[Max. Marks : 80

**Instructions :** 1) All questions are **compulsory**.

2) Draw neat diagrams wherever necessary.

SECTION – A

Answer **any ten**, each carries **2** marks :

**(10 × 2 = 20)**

1. What do you mean by Computer Networks?
2. What is protocol? Give examples.
3. What are 10base-T and 10base5?
4. Define TDM and FDM.
5. What is Flow Control?
6. What is Channel Allocation? Write its types.
7. Mention two differences between Pure ALOHA and slotted ALOHA.
8. Define Virtual circuit subnet and Datagram subnet.
9. What do you mean by Routing?
10. What is Quality of Service?
11. What is Internetworking?
12. What is DNS? Mention any two generic domains.



SECTION – B

Answer **any six**, each carries **5** marks :

**(6 × 5 = 30)**

13. What is Switching? Write any four differences between Packet Switching and Circuit Switching.
14. Explain Hamming code for Error correction.
15. What are CSMA protocols? Explain CSMA/CD.
16. Explain Token Bus.
17. Explain shortest Path Routing Algorithm.
18. With a neat diagram explain IPv4 Header.
19. What is Three-Way Handshake? Explain.
20. In general terms explain WWW.

SECTION – C

Answer **any three**, each carries **10** marks :

**(3 × 10 = 30)**

21. Write the comparison between OSI and TCP/IP reference models.
22. Explain the following :
  - (a) Unrestricted simplex protocol
  - (b) Simplex stop and wait protocol.
23. Compare 802.3, 802.4 and 802.5.
24. Explain the following congestion control algorithms :
  - (a) Leaky Bucket Algorithm
  - (b) Token Bucket Algorithm
25. Write short notes :
  - (a) TCP
  - (b) UDP