



K16U 0166

Reg. No. :

Name :

VI Semester B.Sc. Degree (CCSS – Reg./Supple./Improv.)
Examination, May 2016
Core Course in Computer Science
6B14 CSC : DATA COMMUNICATION AND COMPUTER NETWORK

Time : 3 Hours

Max. Weightage : 21

SECTION – A

Answer **all** questions. Weightage for a bunch of **four** questions is **1**.

1. Wireless transmission can be done via
 - a) Radio waves
 - b) Microwaves
 - c) Infrared
 - d) All of the mentioned
2. Which transmission media has the highest transmission speed in a network ?
 - a) Coaxial cable
 - b) Twisted pair cable
 - c) Optical fiber
 - d) Electrical cable
3. A single channel is shared by multiple signals by
 - a) Analog modulation
 - b) Multiplexing
 - c) De multiplexing
 - d) None of these
4. The Hamming distance between 001011 and 010111 is
 - a) 2
 - b) 3
 - c) 4
 - d) 1
5. What does OSI stand for ?
 - a) Open Systems Interconnect
 - b) Operating System Interconnection
 - c) Organization Standards International
 - d) Open System Interface

P.T.O.



6. TCP Port number _____ is reserved for FTP.

7. The TCP/IP has _____ Layers.

8. CRC Stands for _____ (2×1=2)

SECTION – B

Answer **any five** questions. Weightage **1** for **each**.

9. Define ring topology. What are its advantages ?

10. What is a Bridge ? How it differ from a gate way ?

11. Write short note on LAN.

12. What is segmentation ?

13. What is Hamming distance ? What is the minimum hamming distance ?

14. Draw the structure of UDP.

15. What is Character stuffing ?

16. Discuss optimality principle. (5×1=5)

SECTION – C

Answer **any five** questions. Weightage **2** for **each**.

17. Explain guided transmission media. Why optical fiber is preferred ?

18. Discuss about different modes of data communication.

19. Explain various uses of Computer Network.

20. Explain three way handshake protocol to establish the transport level connection.



- 21. Discuss about Leaky bucket algorithm.
- 22. Explain Distance vector routing with a suitable illustration.
- 23. Explain different protocols used in Data link layer.
- 24. Discuss about RSA algorithm, with an example. (5×2=10)

SECTION – D

Answer **any one** question. Weightage 4 for **each**.

- 25. Compare OSI model with TCP/IP model.
- 26. What do you mean by Cryptography ? Discuss about different cryptographic Methods. (1×4=4)

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