22524/ E 240

Reg. No. | | | | | | | | |

V Semester B.C.A.2 Degree Examination, November 2015

(Regular & Repeaters)

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** of the following : **(10 × 2 = 20)**

1. List the advantages of computer network.
2. Name any two network Topologies for broadcast LAN.
3. What is packet switching?
4. List the functions of Application layer.
5. What do you mean by static & dynamic Channel allocation?
6. What is Optimality principle with respect to routing?
7. What are drawbacks of flooding?
8. What are Collision free protocols? Give examples.
9. What is WWW?
10. Mention the applications of computer network?
11. List the advantages of Bluetooth.
12. List the characteristics of Infrared waves.

SECTION – B

Answer **any six** of the following : **(6 × 5 = 30)**

13. Define framing. Explain any one framing method.

14. With a neat diagram explain the optical fibre transmission medium.

15. Explain stop and wait protocol.

16. Discuss the various CSMA protocols.

17. What are routing algorithms? Explain Distance vector routing.

18. What is transport entity? Explain the different transport service primitives.

19. Differentiate between virtual circuit and datagram subnet.

20. Write a note on MAN.

SECTION – C

Answer **any three** of the following : **(3 × 10 = 30)**

21. Explain OSI reference model.

22. What are polynomial codes? Explain cyclic redundancy check method for Error detection with example.

23. Explain the IEEE 802.3 Ethernet LAN Standard.

24. Define Congestion. Explain the leaky bucket algorithm and contrast it with token bucket algorithm.

25. Write short notes on following :
    (a) TCP segment header
    (b) DNS