SN – 662

V Semester B.C.A. Examination, November/December 2017
(CBCS Scheme) (F+R)
(2016 – 17 & Onwards)
BCA – 501 : DATA COMMUNICATION AND NETWORKS

Time : 3 Hours   Max. Marks : 100

Instruction : Answer all the Sections.

SECTION – A

Answer **any ten** questions. **Each** question carries **two** marks.   (10×2=20)

1. Define SNR.

2. What is modem?

3. What is FTP ?

4. What do you mean by IP utility ? Give an example.

5. What is Network Topology ? List out any two network topologies.

6. Define attenuation.

7. Write any two differences between analog and digital signals.

8. What is cellular telephone network ?

9. What is reservation ?

10. What do you mean by centralized polling ?

11. Define Ethernet.

12. What is flooding ?

SECTION – B

Answer **any five** questions. **Each** question carries **five** marks.   (5×5=25)

13. Explain packet switching.

14. Explain Shannon capacity.

P.T.O.

15. What is multiplexing ? Explain TDM.

16. Differentiate connectionless and connection oriented services.

17. Explain the structure of HDLC frames.

18. Illustrate CSMA.

19. Describe FDDI.

20. Write Bellman Ford Algorithm.

SECTION – C

Answer **any three** questions. **Each** question carries **fifteen** marks. (3×15=45)

21. a) Explain OSI reference model with a neat diagram.   8

    b) Illustrate polynomial code with an example.   7

22. a) Describe twisted pain cable.   8

    b) Explain SONET.   7

23. a) What is a bridge ? Explain the various types of bridges.   7

    b) Explain FDMA, TDMA and CDMA.   8

24. a) What is digital modulation ? Explain the types of digital modulation techniques.   7

    b) Describe selective repeat ARQ.   8

25. a) Illustrate the two sublayers of data link layer.   7

    b) Illustrate openloop congestion control.   8

SECTION – D

Answer **any one** question. **Each** question carries **ten** marks. (1×10=10)

26. Explain TCP/IP model with a neat diagram.

27. Illustrate polar line encoding scheme.