SN – 662

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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.
