IV Semester B.C.A. Examination, May/June 2018
(Y2K8 Scheme)
COMPUTER SCIENCE
BCA – 404 : Data Communications and Networks

Time : 3 Hours　　　　　　　　　　　　　　　　　　Max. Marks : 100

Instruction : *Answer all Sections.*

SECTION – A

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

1. Define Topology.

2. Define LAN, WAN.

3. Why DNS is used ?

4. What is use of IP-CONFIG ?

5. Define Amplitude shift keying.

6. What is parity bit ?

7. Define – SNR.

8. Define Unicast and Multicast physical address.

9. What is routing ?

10. Briefly explain the functions of a packet switch.

11. Compare virtual circuit and data gram.

12. Define congestion.

SECTION – B

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

13. Differentiate TCP/IP and OSI-ISO Model.

14. Differentiate between star and bus topology.

15. Represent 10110111 is ASK, FSK and PSK.

16. Write a note on token passing rings.

17. Write a note CDMA.

18. Explain distance vector routing (Bellmon Ford routing).

19. Explain wireless LANS.

20. Write a note on channelization.

SECTION – C

Answer **any 3** questions **each** question carries **15** marks.   (15×3=45)

21. Define Network topology. Explain the merits and demerits of each.   15

22. a) Explain the evaluation of network architecture and service.   10

    b) Explain pipelining.   5

23. With neat diagram explain.   15

    a) Pure Aloha Protocol.

    b) Slotted Aloha Protocol.

24. With neat diagram explain the working of OSI-ISO reference model.   15

25. a) Explain with a neat figure –803.3 frame format.   7

    b) Compare link state-routing and distance vector routing.   8

SECTION – D

Answer only **one** question carries **10** marks.   (10×1=10)

26. a) Write short notes on internetworking.   5

    b) Write short notes on FDDI.   5

27. Compare circuit switching, message switching and packet switching.   10