100091

No. of Printed Pages : **3**

GS-649

IV Semester B.C.A. Examination, May/June - 2019
(Y2K8 Scheme) (Repeaters)

COMPUTER SCIENCE

BCA 404 : Data Communication and Networks

Time : 3 Hours Max. Marks : 100

Instruction : *Answer* ***all*** *sections.*

SECTION - A

Answer **any 10** questions. Each question carries **two** marks. **10x2=20**

1. What is a protocol ? Give example.

2. What is Network topology ? List any 2 network topologies.

3. Define single bit error and burst error.

4. What is Flooding ?

5. Compare FDMA and TDMA.

6. Define SNR.

7. Define Ethernet.

8. What is Routing ? Give the classification of Routing Algorithm.

9. What is piggybacking ?

10. What is the use of Repeaters ?

11. Write any 2 differences between Analog and Digital Signal.

12. Expand HDLC and PPP.

P.T.O.

SECTION - B

Answer **any 5** questions. Each question carries **5** marks. **5x5=25**

13. Explain the types of Errors.

14. Explain packet switching.

15. Differentiate Connectionless and Connection Oriented Services.

16. Explain the structure of HDLC Frame.

17. Explain the types of Transmission modes.

18. Explain various network topologies of Computer Network.

19. Write Bellman - Ford Algorithm.

20. Explain the channelization method of CDMA.

SECTION - C

Answer **any 3** questions. Each question carries **15** marks. **15x3=45**

21. Explain the following :

(a) Dijikstra's Algorithm **10**

(b) Token Bucket Algorithm **5**

22. (a) Write a note on ALOHA protocol. **7**

(b) Explain CSMA protocol. **8**

23. (a) Explain the types of Network. **7**

(b) Explain the functions of OSI model layer. **8**

24. (a) What is Digital Modulation ? Explain the types of Digital Modulation Technique. **7**

(b) Describe Selective Repeat ARQ. **8**

25. (a) What is a bridges ? Explain various types of bridges. **7**

(b) Illustrate polynomial code with example. **8**

SECTION - D

Answer **only one**. Each question carries **10** marks. **10x1=10**

26. Illustrate polar line encoding scheme. **10**

27. Compare Circuit Switching, Message Switching and Packet Switching. **10**

- o 0 o -