15521

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

V Semester B.C.A. Degree Examination, March - 2021

COMPUTER SCIENCE

Data Communication and Networks

(CBCS Scheme)

Time : 3 Hours **Maximum Marks : 100**

Instruction to Candidates:

Answer **All** the Sections.

SECTION - A

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

1. Explain the characteristics of DCN.
2. List the modes of data transmission.
3. Define PING.
4. Differentiate between Baseband and Broadband transmission.
5. Define guided and unguided transmission media.
6. What is Data rate and bit error rate.
7. What is Forward error correction?
8. What is pipelining?
9. Define polling?
10. What is Channelization?
11. Name the three types of physical addresses.
12. What is Bridge?

SECTION - B

Answe any **Five** questions. Each question carries **Five** marks. **(5×5=25)**

13. Explain the goals of computer network.
14. Explain IP addressing.
15. Explain 2 dimensional parity check method with example.
16. What is Multiplexing? Explain different types of multiplexing.

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17. Explain wireless transmission.
18. Discuss sliding - window method.
19. Compare FDMA and TDMA.
20. Differentiate between Datagram and UDP.

SECTION - C

Answe any **Three** questions. Each question carries **Fifteen** marks. **(3×15=45)**

21. a) What is switching techniques? Compare and contrast the different types of switching techniques.
    b) Explain TCP/IP model.

22. a) Explain the types of polar encoding.
    b) Explain CRC method of error detection with an example.

23. a) Explain Go-Back-N ARQ protocol.
    b) Explain Point-to-Point (PPP) protocol.

24. a) Write a note on Token-ring.
    b) Explain the frame structure of IEEE 802.3 MAC format.

25. a) What is routing? Explain Distance Vector routing.
    b) What is Congestion? Explain Leaky Bucket Algorithm.

SECTION - D

Answe any **One** questions. Each question carries **Ten** marks. **(1×10=10)**

26. Explain OSI Reference model in detail.
27. Write short notes on
    a) HDLC.
    b) ALOHA