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Code : 15EE43T

IV Semester Diploma Examination, Nov./Dec.-2018

COMMUNICATION AND COMPUTER NETWORKS

Time : 3 Hours] **[Max. Marks : 100**

Note : (i) Answer any **six** questions from Part-A. Each questions carries **5** marks.

(ii) Answer any **seven** questions from Part-B. Each questions carries **10** marks.

PART – A

1. Explain the Basic communication system with the help of Block diagram. 5

2. Explain the diode amplitude modulator with circuit diagram. 5

3. Explain the working of photodiode optical receiver with diagram. 5

4. Sketch the Strip line and Micro Strip used in microwave communication. 5

5. List the applications of satellite communication. 5

6. Differentiate serial and parallel Data transmission mode. 5

7. Draw the diagram of FSK modem. 5

8. List the advantages and disadvantages of Star network topology. 5

9. Draw the TCP/I model layer diagram. 5

PART – B

10. (a) Define Baseband transmission and modulation.   **4**

    (b) Explain the working of diode detector circuit diagram with wave forms.   **6**

11. Explain AM and FM modulation with wave forms.   **10**

12. (a) Explain with block diagram transmitting end of FDM system.   **8**

    (b) Write the expression for characteristic impedance of co-axial cable.   **2**

13. (a) List the different types of transmission lines.   **3**

    (b) Explain Sky wave and Space wave propagation with neat diagram.   **7**

14. (a) List the benefits of fiber optic cable over conventional electric cable.   **5**

    (b) Explain the basic construction of fiber optic cable with diagram.   **5**

15. Explain working of two cavity Klystron amplifier with diagram.   **10**

16. Explain the function of each block of Satellite Sub-system with a block diagram.   **10**

17. Explain GSM System architecture with a neat block diagram.   **10**

18. (a) Compare 2G and 3G technology of Mobile Communication.   **4**

    (b) Explain working of the BPSK modulator with Circuit diagram.   **6**

19. (a) Define with an example to each :   **6**

        (i) LAN

        (ii) MAN

        (iii) WAN

    (b) List the different types of Ethernets.   **4**