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BOARD DIPLOMA EXAMINATION, (C–09)
MARCH/APRIL—2016
DECE—SIXTH SEMESTER EXAMINATION

DATA COMMUNICATION AND COMPUTER NETWORKS

Time : 3 hours]   [*Total Marks* : 80

PART—A   3×10=30

Instructions : (1) Answer **all** questions.

(2) Each question carries **three** marks.

(3) Answers should be brief and straight to the point and shall not exceed *five* simple sentences.

1. State the need for data communication networking.

2. Write a short note on infrared transmission.

3. What is network topology? List different network topologies.

4. Write the applications of WAP.

5. Write the advantages of star topology.

6. List the different layers of TCP/IP protocol stack.

7. State the functions of ISP.

8. What is a point-to-multipoint network?

9. Write the purpose of proxy server.

10. What is HTTP? List any four HTTP commands.

Instructions : (1) Answer *any* **five** questions.

                (2) Each question carries **ten** marks.

                (3) Answers should be comprehensive and the criterion for valuation is the content but not the length of the answer.

11. *(a)* Define simplex, half duplex and full duplex communication.   6

     (b) Explain Shannon capacity.   4

12. Explain the following with cross-sectional diagram and list applications of each :

     (a) Coaxial cable

     (b) Optical fiber cable

13. Draw the OSI 7 layer model and write the functions of each OSI layer.

14. Describe circuit switching and packet switching.

15. Explain the operation of *(a)* repeater and *(b)* bridge.

16. Explain the IP addressing concepts.

17. Describe the Web Browser architecture.

18. Explain how email is transferred.

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