C09-EC-**606(A)**

3762

BOARD DIPLOMA EXAMINATION, (C–09)

JUNE—2019

DECE – SIXTH SEMESTER EXAMINATION

DATA COMMUNICATIONS 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.   List the different transmission media.

2.   Explain infrared wave transmission.

3.   Classify the computer network.

4.   What is the function of session layer?

5.   What is the function of switching in computer network?

6.   What is meant by digital subscriber line?

7.   What is the role of Gateways in computer communication?

8.   What are the functions of PORTS in computer network?

9.   Draw the web browser architecture.

10.   What is the TELENT?

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)* Explain the *(i)* simplex, *(ii)* half duplex and *(iii)* full duplex communication.

(b) Compare STP and UTP cables.

12. *(a)* Define channel capacity and explain shannon capacity.

(b) Compare characteristics of transmission media.

13. *(a)* Draw the ethernet frame format (IEEE 802.3)

(b) Explain the functions of *(i)* application layer, *(ii)* data link layer and *(iii)* transport layer.

14. *(a)* Explain the store and forward and adaptive switch mechanism in computer communication.

(b) Explain the circuit switch mechanism in computer communication.

15. Explain the high level architecture of ISP.

16. Explain the concept of IP address and how to classify IP address.

17. *(a)* Explain the working of WEB server.

(b) Explain the role of DNS server.

18. *(a)* Explain the purpose of proxy server.

(b) Explain how the SMTP server function in e-mail transfer.

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