

NOVEMBER/DECEMBER 2020

**BCS53 — DATA COMMUNICATION AND
NETWORKS**

Time : Three hours

Maximum : 75 marks

SECTION A — (10 × 2 = 20 marks)

Answer ALL questions.

1. State the purpose of layering in networks.
2. What is WAN?
3. What are the responsibilities of data link layer?
4. What are the fundamental ways by which network performance is measured?
5. What is the need of internetworking?
6. What are the types of class full addressing?
7. What is UDP?
8. List the three types of addresses in TCP/IP.
9. What are the two types of user agents in the electronic system?
10. What is the function of HTTP?

SECTION B — ($5 \times 5 = 25$ marks)

Answer ALL questions.

11. (a) Elaborate Twisted Pair Cable.

Or

- (b) Describe about Local Area Network.

12. (a) What are the services provided by data link layer to network layer?

Or

- (b) List the different types of carrier sense protocols and explain.

13. (a) Explain store and forward switching with a diagram.

Or

- (b) Explain flooding.

14. (a) What are the services provided by the transport layer to its upper layer?

Or

- (b) Discuss about TCP service model.

15. (a) What are the five functions of e-mail?

Or

- (b) Brief the different methods of audio compression.

SECTION C — ($3 \times 10 = 30$ marks)

Answer any THREE questions.

16. Explain OSI reference model.
17. Discuss about the ALOHA protocol.
18. Explain Dijkstra's algorithm with diagrams.
19. Elaborate Remote Procedure call technique.
20. Explain the parts of web model.
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