

G 1078

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Reg. No.....

Name.....

B.TECH. DEGREE EXAMINATION, MAY 2016

Sixth Semester

Branch : Applied Electronics and Instrumentation Engineering

DATA COMMUNICATION (A)

(Old Scheme—Prior to 2010 Admissions)

[Supplementary/Mercy Chance]

Time : Three Hours

Maximum : 100 Marks

Part A

Answer all questions.

Each question carries 4 marks.

1. Explain the requirements of a good transmission media in detail.
2. Enumerate and explain the features of Hamming codes.
3. What is the principle of multiplexing ? Explain in detail.
4. What is the difference between circuit switching and packet switching ? Explain in detail.
5. What is the difference between LAN and WAN ? Explain.
6. Explain the advantages and applications of optical fiber bus.
7. Discuss the principle of internetworking in detail.
8. Explain the structure of OSI model in detail.
9. What are the potential advantages of ISDN ? Explain.
10. Explain the different types of ISDN in detail.



(10 × 4 = 40 marks)

Part B

Answer all questions.

Each question carries 12 marks.

11. Explain the concept of data transmission and its terminologies in detail.

Or

- 12 (i) Explain the analog and digital signals with neat diagrams.
- (ii) Explain the need for error detection and error correction codes, in detail.

Turn over

13. Explain the concept of FDM with a neat block diagram. Explain the advantages and applications of it.

Or

14. Discuss in detail the digital switching concepts with neat diagrams.

15. Explain the different topologies of MAN in detail.

Or

16. Discuss in detail the standards of LAN and MAN.

17. (i) Explain the principle of routing with bridges.

- (ii) Give an account on "Connection oriented internetworking".

Or

18. Explain the TCP/IP protocol I in detail with a neat diagram.

19. Explain the ISDN protocols in detail.

Or

20. Explain the concept of ISDN and its potential applications in detail.

(5 × 12 = 60 marks)

