Reg. No. : ☐☐☐☐☐☐☐☐☐☐☐☐☐

M 2212

B.E./B.Tech. DEGREE EXAMINATION, APRIL/MAY 2008.

Seventh Semester

Information Technology

IF 451 — HIGH PERFORMANCE NETWORKS

Time : Three hours   Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. What is datagram service?

2. What is meant by QoS?

3. What data rates are offered by ISDN primary access?

4. Why does ATM use fixed and small size cells?

5. What are the transmission techniques of Wireless LAN?

6. What error correction schemes are used in Bluetooth base band?

7. What are the components of optical transmission system?

8. What are the advantages and limitations of optical transmission medium?

9. Define cell delay variation.

10. What is meant by cell transfer delay?

PART B — (5 × 16 = 80 marks)

11. (a) (i) Explain the different types of services provided by networks. (8)

    (ii) Write short notes on traffic characterization. (8)

Or

    (b) (i) Discuss in detail the Broadcast networks and the Point to Point networks. (8)

    (ii) Explain the application of communication networks. (8)

12. (a) Explain in detail B-ISDN system architecture and B-ISDN interfaces. (16)

Or

    (b) (i) Explain the cell format of ATM network. (8)

    (ii) Explain the procedure of connection setup and release in ATM networks. (8)

13. (a) (i) What are the different types of Infra-red Wireless LANs? Discuss it in detail. (8)

    (ii) Explain the different user scenarios of wireless Piconets. (8)

Or

    (b) Explain in detail the IEEE 802.11 MAC frame format. (16)

14. (a) Explain in detail the different types of WDM optical network architecture. (16)

Or

    (b) (i) Explain in detail the WDM wavelength cross connect optical networks. (8)

    (ii) Write short notes on optical LANS. (8)

15. (a) Explain in detail the various QoS parameters of ATM network. (16)

Or

    (b) List the various congestion control techniques adopted in ATM networks. (16)

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