

H 1352

B.E./B.Tech. DEGREE EXAMINATION, MAY/JUNE 2006.

Fourth Semester

Information Technology

IF 251 — TELECOMMUNICATION SWITCHING TECHNIQUES

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. Differentiate message switching from circuit switching.
2. What is the use of Echo suppressor?
3. Compare Central processor and Network processor.
4. State two special features of ISDN.
5. What is channel associated signalling?
6. Define GOS.
7. State the two main differences between DSL and ADSL.
8. Give two applications of SONET.
9. Distinguish between connection oriented and connectionless protocol.
10. Name any two satellite based data networks.

PART B — (5 × 16 = 80 marks)

11. (i) With Block diagram explain the ISO – OSI architecture in detail. (13)
- (ii) What are the limitations of ISO – OSI model? Explain. (3)

12. (a) With neat diagram explain the stranger switching system and its functions.

Or

(b) (i) With necessary diagrams explain the STS and TST switching. (10)

(ii) Explain the digital switching system hardware with suitable block diagram. (6)

13. (a) Explain SS7 protocol and its architecture in detail.

Or

(b) Name the two process used to model switching system. Explain them in detail.

14. (a) Explain in detail the FDM and TDM systems. State their advantages and disadvantages.

Or

(b) Discuss the concepts involved and the underlying principles of

(i) PDSH. (8)

(ii) SDH/SONET. (8)

15. (a) Explain in detail about connection oriented and connectionless protocols.

Or

(b) Write notes on :

(i) Packet Switching. (5)

(ii) ATM networks. (6)

(iii) TCP/IP. (5)

Time : T

1. I

2. v

3.

4.

5.

6.

7.

8.

9.

10