

B.TECH. DEGREE EXAMINATION, MAY/JUNE 2009

Eighth Semester

Branch : Electronics and Communication/Applied Electronics and Instrumentation and
Electronics and Instrumentation Engineering

COMPUTER NETWORKS (LAS)

(Regular/Supplementary)

Time : Three Hours

Maximum : 100 Marks

Part A

Answer all questions.

Each question carries 4 marks.

1. What are the roles of the network layer in OSI model ?
2. Differentiate between baseband and broadband transmission.
3. What are datagrams ?
4. Explain what are modems.
5. What do you understand by client server networks ? How are they superior ?
6. Discuss the issues in recovering from a network crash.
7. What are the roles of the presentation layer ?
8. What are remote procedure calls ? Explain.
9. What are virtual terminals ?
10. Explain SONET.

(10 × 4 = 40 marks)

Part B

Answer all questions.

Each question carries 12 marks.

11. Discuss the OSI network model in detail highlighting the functions of each layer.

Or

12. (a) Discuss the various network topologies.
- (b) Explain what is Internet.

13. What is meant by routing ? What are the problems in implementing a good routing strategy ?

Or

14. Discuss (i) Congestion control ; (ii) Error control ; and (iii) Polling.

Turn over

15. What do you understand by the term flow control ? What are the issues in flow control ?

Or

16. Discuss (i) buffering ; (ii) crash recovery ; and (iii) shared memory.

17. Explain the need, principle and implementation issues of cryptographic techniques in networks.

Or

18. Discuss the role of session layer and its design issues.

19. Discuss the DES standard.

Or

20. Explain the concept of a distributed system. Highlight its goals and issues.

(5 × 12 = 60 marks)