G 1270

Reg. No....................................

Name....................................

B.TECH. DEGREE EXAMINATION, MAY 2016

Eighth Semester

Branch : Electrical and Electronics Engineering

COMPUTER NETWORKS (E) Elective III

(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. What is TCP/IP protocol architecture ? Explain.

2. Write a short technical note on LAN and WAN.

3. Briefly describe the services provided by the data link layer.

4. What is framing ? Explain the frame format of PPP.

5. Explain the functions of a bridge in computer network.

6. What is the access method used by wireless LANs ?

7. What do you mean by congestion control ?

8. Find the class of the following IP addresses :

    (a) 208.34.54.12

    (b) 114.34.2.8

    (c) 129.14.6.8

    (d) 238.34.2.1

9. Explain about e-mail architecture and services.

10. What is meant by FTP ? Explain.

(10 × 4 = 40 marks)

Part B

Answer **all** *questions.*
Each full question carries 12 marks.

11. (a) What is packet switching ?

    (b) Explain two different approaches of packet switching ?

Or

12. Draw the OSI reference model and explain the functions of different layers.

Turn over

13. (a) What is sliding window protocol ?

(b) Differentiate between stop-and wait ARQ and Go-back-N protocol.

Or

14. Explain the various error detection and error correction methods.

15. Distinguish between CSMA/CA and CSMA/CD.

Or

16. (a) Explain the architecture and Frame format of FDDI.

(b) What are the different types of cabling supported by Ethernet standard ?

17. (a) What are the various classes of IP addressing ?

(b) Calculate the maximum number of class A, B and C network Ids.

Or

18. (a) Why transport layer protocols like TCP and UDP are called end-to-end protocols. What is the difference between them ?

(b) What is routing. Explain any one routing algorithm.

19. (a) How does DNS work ? Which are the generic domains ?

(b) Explain about URL.

Or

20. (a) Describe the various network management concepts.

(b) What is cryptography ?

(5 × 12 = 60 marks)