B.E./B.Tech. DEGREE EXAMINATION, NOV/DEC 2012.

Sixth Semester – Regulation 2008

Electrical and Electronics Engineering

EE9354 — Data communication and Networks

Time : Three hours   Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. What is the primary function of Data Link Layer?

2. What do you meant ISO/OSI Model?

3. What is the purpose of ICMP?

4. How IPV6 differs from IPV4?

5. Draw the format of TCP segment.

6. What are the main features of UDP?

7. Write the basic component of E-Mail.

8. How files can be transferred using FTP?

9. What are the requirements of network security?

10. Why digital signatures are important in network security?

PART B — (5 × 16 = 80 marks)

11. (a) Discuss in detail the functions seven different layers in OSI/ISO model.   (16)

12. (a) Explain in detail about distance vector routing and link state routing.   (16)

(OR)

(b) Write briefly about the functions of internet protocol and routers.   (16)

13. (a) Draw the structure of TCP and explain its functions in detail.   (16)

(OR)

(b) Explain the concept of leaky bucket and token bucket algorithm.   (16)

14. (a)   Explain in detail about the function of SMTP.   (16)

(OR)

(b)   Explain the concept of WWW in detail.   (16)

15. (a)   Explain in detail the principle of RSA algorithm.   (16)

(OR)

(b)   Discuss in detail about secret key encryption algorithm.   (16)