Reg. No. :

Question Paper Code: 35802

B.E. / B.Tech. DEGREE EXAMINATION, NOV 2019

Fifth Semester

Information Technology

01UIT502 – COMPUTER NETWORKS

(Common to Computer Science and Engineering)

(Regulation 2013)

Duration: Three hours   Maximum: 100 Marks

Answer ALL Questions

PART A - (10 x 2 = 20 Marks)

1. State the issues of data link layer.

2. Compare error detection and correction.

3. How does a bridge differ from a repeater?

4. What is piconet?

5. Give the difference between packet switching and circuit switching.

6. Mention the uses of ARP and RARP protocols.

7. Why "A priority queue can provide better QoS than the FIFO queue"?

8. List some of the quality of service parameters of transport layer.

9. Mention the different levels in domain name space.

10. Define WWW and SMTP.

PART - B (5 x 16 = 80 Marks)

11. (a) Explain sliding window flow control and stop and wait flow control with neat diagram. (16)

Or

(a) Explain in detail about the network architecture with a neat diagram. (16)

12. (a) Explain in detail about CSMA/CD and CSMA/CA. (16)

Or

(b) (i) Explain in detail the architecture and addressing mechanism of IEEE 802.11. (8)

(ii) Illustrate how RTS/CTS signals can be used to overcome the hidden terminal problem. (8)

13. (a) Explain in detail various error reporting and query messages of ICMP. (16)

Or

(b) Explain distance vector routing and link state routing. (16)

14. (a) Discuss TCP congestion avoidance algorithm in detail. (16)

Or

(b) Why does congestion occur in a network? Explain in detail about one congestion control technique. (16)

15. (a) Illustrate the classification of firewalls. (16)

Or

(b) Explain in detail about RSA algorithm with suitable example. (16)

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