

B.E.(with Credits)-Regular-Semester 2012-Computer Science and Engineering Sem V
CSE502 - Computer Network

P. Pages : 2

Time : Three Hours



GUG/W/16/3699

Max. Marks : 80

- Notes :
1. All questions carry equal marks.
 2. Illustrate your answers wherever necessary with the help of neat sketches.
 3. Due credit will be given to neatness and adequate dimensions.
 4. Assume suitable data wherever necessary.

1. a) Explain TCP/IP reference model in detail. 8
b) What are types of cable media used in Networking. Explain with neat sketches of each. 8

OR

2. a) Explain stop and wait protocol in Data link layer. 8
b) What are the services provided by network layer? 8
3. a) What is PPP? Explain Transition state diagram of PPP.in detail. 8
b) Write a note on following Network Hardware components.
 - i) Bridges 4
 - ii) Repeaters. 2
 - iii) Switches. 2

OR

4. a) Explain pure ALOHA & slotted in detail with proper sketch. 8
b) Discuss 802.3 (cabeling) standard in detail. 8
5. a) Compare Datagram subnet & virtual circuit considering following issues. 8
 - i) Circuit setup. ii) Addressing.
 - iii) State information. iv) Routing.
 - v) Effect of router failures. vi) Congestion control.
- b) Discuss shortest path Routing and flooding in Network Layer. 8

OR

6. a) Explain following algorithms. 8
 - i) Leaky bucket. ii) Token bucket.

- b) Explain following Network Layer protocols. 8
i) ARP.
ii) Mobile IP.
7. a) What is socket? Explain socket primitives in detail. 8
b) Explain Layout of a TCP segment header. Discuss all of header fields briefly. 8
- OR**
8. a) Why does UDP exist? Explain wireless TCP in detail with neat sketch. 8
b) Write a note on following elements of Transport protocol. 8
i) Connection.
ii) Flow control & Buffering.
9. a) Why DNS was invented? Explain DNS. 8
b) What are two e-mail subsystems? What are the basic functions of E-mail. 8
- OR**
10. a) Write a note on following with respect to world wide web. 12
i) HTTP
ii) URL
iii) HTML.
b) Explain DHCP with neat sketch. 4
