

Roll No.

Total No. of Pages : 02

Total No. of Questions : 09

B.Tech. (ECE) (2012 to 2017) (Sem.-7,8)

COMPUTER NETWORKS

Subject Code : BTCS-403

M.Code : 71909

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTION TO CANDIDATES :

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.
3. SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.

SECTION-A

1. Answer briefly :

- a) Various network topologies
- b) ALOHA
- c) What is hidden node problem in wireless networks?
- d) Carrier Sense Multiple Access
- e) ARP and RARP protocols
- f) LAN, MAN and WAN
- g) Jitter Control in congestion
- h) Broadcast Routing
- i) Virtual Private Networks
- j) Factors affecting congestion control algorithms

SECTION-B

2. Explain in detail the TCP/IP protocol suite.
3. Discuss about Selective Repeat ARQ protocol. What are its advantages over Go-Back-N ARQ?
4. What is congestion control? Explain **any one** of the congestion prevention policies.
5. Discuss about the various modes of working in IPSec.
6. What is IP address? What is its use? Also discuss about the classful IPv4 addressing.

SECTION-C

7. Explain how the token bucket algorithm is used for congestion control, with an example.
8. Explain link state routing protocol in detail. Compare it briefly with distance vector routing protocol.
9. Explain briefly about :
 - a) IPv6
 - b) Virtual LANs
 - c) Node lookup in peer-to-peer networks

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.