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Uni. Roll no. _____

Program/ Course: B.Tech. (Sem. 5th / 2018)

Name of Subject: Computer Networks

Subject Code: PCEC-114

Paper ID: 16421

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Time Allowed: 02 Hours

Max. Marks: 60

NOTE:

1. Each question is of 10 marks.
2. Attempt any six questions out of nine
3. Any missing data may be assumed appropriately

Q1 Define the term congestion. Explain various causes of congestion. List its prevention policies.

Q2 Discuss various types of networks topologies in computer network. Also discuss various advantages and disadvantages of each topology.

Q3 What is pure ALOHA and slotted ALOHA? Consider the delay of both at low load. Which one is less? Explain your answer.

Q4 What is TCP/IP Model? Explain the functions, protocols and services of each layer? Compare it with OSI Model.

Q5 A digital signature is a mathematical scheme for verifying the authenticity of digital messages or documents. Justify this statement.

Q6 Differentiate between ARP and RARP?

Q7. Explain the following:-

- a) LAN
- b) MAN
- c) WAN

Q8 Explain the Shortest Path routing Algorithm with the help of an example.

Q9 Describe the concept of Sliding Window Protocols.
