CBCS Scheme

Second Semester M.Tech. Degree Examination, June/July 2017
Advances in Computers Networks

Time: 3 hrs.   Max. Marks: 80

Note: *Answer FIVE full questions, choosing one full question from each module.*

Module-1

1   a. List and explain the requirements for building computer Networks.   **(10 Marks)**
     b. Explain how the stop and wait algorithm provides reliable transmission.   **(06 Marks)**

OR

2   a. Illustrate the sliding window algorithm. Also explain sending side procedure for sliding window protocol.   **(10 Marks)**
     b. Explain TCP/IP reference model.   **(06 Marks)**

Module-2

3   a. With a proper example, explain how bridges use spanning tree algorithm to handle loops.   **(10 Marks)**
     b. With an example explain three ways to handle header for source Routing.   **(06 Marks)**

OR

4   a. Explain the fragmentation and reassembly of datagram's in IP datagram delivery service model.   **(06 Marks)**
     b. With an example explain the need of subnetting.   **(10 Marks)**

Module-3

5   a. Describe briefly about the BGP characteristics.   **(10 Marks)**
     b. What are the general characteristics of mobile IP Technology?   **(06 Marks)**

OR

6   a. Draw and explain IPV6 packet header format.   **(06 Marks)**
     b. Explain the Distance Vector Routing algorithm with an example.   **(10 Marks)**

Module-4

7   a. Explain the process to process UDP communication with header format and message queue.   **(10 Marks)**
     b. Explain different end – to – end issues in TCP protocol.   **(06 Marks)**

OR

8   a. Draw and explain TCP header format.   **(06 Marks)**
     b. Explain principle of bit – by – bit algorithm under Round – Robin scheme in Fair Queuing.   **(10 Marks)**

Module-5

9   a. Explain how RED algorithm avoids congestion.   **(10 Marks)**
     b. Explain the Mapping of domain names to addresses.   **(06 Marks)**

OR

10   a. Briefly explain the characteristics of HTTP.   **(06 Marks)**
     b. With neat diagram, explain structure and representation of MIB object names.   **(10 Marks)**

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