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Fifth Semester B.E. Degree Examination, Jan./Feb. 2021
Computer Networks

Time: 3 hrs.

Max. Marks: 100

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

Module-1

1 a. Many networks, including internet, provide more than one transport layer protocol. When you develop an application you need to choose one of the available transport layer protocol and consider various parameters. Explain the parameters and protocols to be considered while designing an application. **(08 Marks)**

   b. True or False :
   i) Processes on two different systems communicate with each other by exchanging messages across the computer networks
   ii) A client servser architecture achieves perfect security
   iii) Socket is a hardware interface through which a process sends message into, and receives messages from the network
   iv) No data loss is tolerated in multimedia applications such as conversational audio/video
   v) Developing a new network application for the internet offen requires one to decide whether to choose UDP or TCP. **(05 Marks)**

   c. With a simple sketch, explain how SMTP operate when A send mail to B where mail server of A and B are different. Show the sequence of events. **(07 Marks)**

OR

2 a. HTTPRequest message
   GET/somedir/page.html HTTP/1.1
   HOST : www.someschool.edu
   Connection : close
   User_agent : Mozilla/5.0
   Accept_language : fr
   Interpret the meaning of each line in few sentences. **(05 Marks)**

   b. Explain meaning of each line of
   HTTPResponse message given below :
   HTTP/1.1 200 ok
   Connection : close
   Date : Tue, 09 Aug 2011 15 : 44 : 04 GMT
   Server : Apache/2.2.3
   Last modified : Tue, 09 Aug 2011 15 : 11 : 03 GMT
   Content_Length : 6821
   Content_type : text/html
   (data data - - - - -). **(07 Marks)**

   c. What is the service provided by DNS system? Explain the meaning of root DNS server, Top Level Domain Servers (TLD), Authoritative DNS servers. Explain the meaning of the following DNS records
   (relay1.bar.foo.com, 145.37.93.126, A)
   (foo.com, mail.bar.foo.com, MX). **(08 Marks)**