BACHELOR OF COMPUTER APPLICATIONS (BCA) (Revised)

Term-End Examination

June, 2018

00475

BCS-061 : TCP/IP PROGRAMMING

Time : 2 hours   *Maximum Marks : 60*

Note : *Question no. 1 is **compulsory**. Answer any **three** questions from the rest.*

1. (a) Which field(s) in IP header is/are used for congestion control ? Explain how they are used in congestion control.   7

    (b) Discuss the significance of different fields in the DNS message.   7

    (c) Differentiate between ARP, RARP and BOOTP.   6

    (d) Explain the features and functions of 802·11 MAC Sublayer.   6

    (e) Compare between point-to-point channels and broadcast channels with the help of an example for each.   4

2. (a) What is Byte Ordering ? Explain the function used by byte ordering conversion. *5*

   (b) Explain the working of FTP. Give reason, why FTP uses two connections of TCP. *5*

3. (a) Differentiate between Distance Vector Routing and Link State Routing. *6*

   (b) Write the syntax along with the parameters used by the following socket system calls : *4*

   (i) shutdown()

   (ii) bind()

   (iii) listen()

   (iv) htons()

4. Write an algorithm for both UDP client and UDP server, based on the following requirements : *10*

   • Client program prompts the user to enter any three numbers and send these numbers to the server program.

   • Server will return back the largest number to the respective client.

5. Write short notes on the following : $4 \times 2\frac{1}{2} = 10$

    (a)   TCP/IP Model

    (b)   SNMP

    (c)   TCP Header

    (d)   ICMP

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