

**BACHELOR OF COMPUTER APPLICATIONS
(PRE - REVISED)**

Term-End Examination

December, 2012

CS-69 : TCP/IP PROGRAMMING

Time : 2 hours

Maximum Marks : 60

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

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1. (a) How does name resolution take place in DNS? Explain using an example. 5
- (b) Identify the address classes of the following IP addresses: 4
- (i) 194. 201. 92. 32
- (ii) 162. 102. 64. 21
- (iii) 10. 02. 02. 01
- (iv) 96. 192. 191. 101
- (c) Explain the working of Distance vector routing algorithm using an example. 5
- (d) The value of the total length field in an IPV4 datagram is 36, and the value of the heades length field is 5. How many bytes of data is the packet carrying ? 2
- (e) Which fields of the IPV4 header change from router to router ? 2
- (f) How are congestion control and quality of service related in context of TCP/IP. 4

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- (g) Explain the similarities between following: 6
 (i) HTTP and SMTP
 (ii) HTTP and FTP
- (h) What is an URL and what are its components? 2
2. (a) How many TCP connection (s) is/are used in TELNET ? Explain the Remote login process of TELNET. 5
 (b) RARP and ARP both map addresses from one space to another. Explain their differences and significances. 5
3. (a) Draw and explain how does TCP handle the lost acknowledgement segment and the corrupted segment. 8
 (b) Write the number of bits used to represent the network ID and host ID part of IPV4 address classes (class A, B, C and D). 2
4. (a) Explain the different stages and functions performed by TCP/IP protocols to transfer the data from source to destination. 7
 (b) Write the services offered by SMTP. 3
5. Differentiate between the following pairs : 10
 (a) Multicasting and Broad casting
 (b) TCP/IP and OSI model
 (c) IMAP and POP
 (d) Static and Dynamic Rating.