

**BACHELOR OF COMPUTER APPLICATIONS
(BCA) (Pre-Revised)**

Term-End Examination

00031

June, 2017

CS-69 : TCP/IP PROGRAMMING

Time : 2 hours

Maximum Marks : 60

Note : *Question number 1 is compulsory. Answer any three questions from the rest.*

1. (a) What is IP address ? Briefly explain IP address format. 5
- (b) Write all the steps performed by the ARP in the case where a host or a router needs to find the physical address of another host or router. 5
- (c) Explain the components of URL. 3
- (d) Explain the purpose for which *getservbyname* function is used in socket programming. 3
- (e) What is client server model ? Explain the activities of server in brief. 6
- (f) What is UDP ? Explain UDP header format with the help of a diagram. 8

2. (a) Write the syntax and meaning of two functions; one which converts data from the host format to the network format and the second from the network format to the data format respectively. 5
- (b) Explain the use of Fragment Offset in fragmentation of IP datagram. 5
3. Write the syntax and purpose of the following system calls : 10
- (a) socket()
- (b) bind()
- (c) accept()
- (d) listen()
4. (a) Briefly explain the method used by a user to connect to remote host using FTP. 5
- (b) What is class B network ? How many class B networks are possible when it uses 20 out of 32 bits to define the network address. 5
5. Explain the following briefly : 10
- (a) Telnet
- (b) Subnet mask
- (c) DNS
- (d) IP header
- (e) TCP connection
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