

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

00194

**Term-End Examination
December, 2014**

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) Explain the situations in which hosts need to know its IP address through its physical address. Also, explain the working of protocol used for this purpose in TCP/IP. 4
- (b) What is the size of TCP header ? Explain the process in termination of a TCP connection with the help of a diagram. 6
- (c) What is Sliding Window Protocol ? Explain at which layers of TCP/IP stack the Sliding Window Protocol is used and why. 6

- (d) What is User Datagram Protocol (UDP) ?
Explain the purpose of different fields in
UDP header. 6
- (e) Briefly explain the services and functions
of TCP/IP layers. 4
- (f) What is connection oriented service ? How
is it different from connectionless service ? 4
2. (a) What are the different classes of IP
addresses ? Identify the address classes of
the following IP addresses : 6
- (i) 190.190.10.20
- (ii) 194.190.10.10
- (iii) 96.192.90.100
- (iv) 10.192.90.100
- (b) What is a proxy server ? How is it related
to HTTP ? 4
3. (a) What is TELNET ? How many TCP
connection(s) is/are used in TELNET ?
Also, explain the login process of TELNET. 5
- (b) What is broadcast communication ?
Explain with the help of an example. 5

4. (a) What is the need of IP header checksum ?
How is it calculated ? Explain with the help
of an example. 5
- (b) What is DNS ? Describe the DNS message
format. 5
5. Differentiate between the following pairs : 10
- (i) UDP and TCP
 - (ii) IMAP and POP
 - (iii) Authentication and Authorization
 - (iv) TELNET and FTP
-