

**BACHELOR OF COMPUTER
APPLICATIONS (BCA)(REVISED)**

Term-End Examination

June, 2019

BCS-61 : TCP/IP PROGRAMMING

Time : 2 Hours

Maximum Marks : 60

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

1. (a) What is the role of 'grep' command in
* Unix? 3
- (b) What is the difference between physical
address (MAC) and IP address? 4
- (c) What are the advantages of TCP over
UDP? 5
- (d) Identify the class of IP-address of the
following : 6
 - (i) 220.2.5.7
 - (ii) 125.10.5.6
 - (iii) 191.10.8.17
 - (iv) 246.1.5.6

- (e) Write the significance and working of DNS. 5
- (f) What are the roles of HTTP, FTP protocols? 7
2. (a) Explain TCP segment header format in detail. 7
- (b) Draw the header format of UDP protocol. 3
3. (a) Write a C-language program in Unix to represent Data Transfer system calls : 6
- (i) Send
- (ii) Receive
- (b) What is socket? Explain the structure of the socket. 4
4. (a) Explain about the following Unix commands : 5
- (i) ls
- (ii) clear
- (iii) head
- (iv) tail
- (v) cd

- (b) Explain the method used by TCP to handle 'Out-of-order' segment situation. 5
- 5. Write short notes on the following : 10
 - (a) Voice over IP
 - (b) CIDR
 - (c) ICMP
 - (d) DHCP