

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

Term-End Examination

00563 December, 2018

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) What is the significance of ARP and RARP Protocols ? 6
- (b) Explain the system calls used for data transfer. 6
- (c) What is the purpose of Pipes in Unix ? 4
- (d) What is the role of POP Protocol ? 4
- (e) What are the advantages of UDP over TCP ? 4
- (f) Define the following : 6
 - (i) Port number
 - (ii) MAC address
 - (iii) IP address

2. (a) Explain IP datagram format in detail. 5
- (b) Why does an IP datagram have a variable size header ? Explain how an IP datagram is hit to its death. 5
3. (a) Write a C language program in Unix to show the use of the following system calls : 6
- (i) Bind
- (ii) Connect
- (b) What is unicasting ? Differentiate between broadcasting and multicasting. 4
4. (a) Explain about the following Unix commands : 5
- (i) ls
- (ii) cat
- (iii) mkdir
- (iv) cd
- (v) mv
- (b) What is the 'Quality of Service' (QoS) in Internet protocol ? 5

5. Write short notes on the following :

$$4 \times 2 \frac{1}{2} = 10$$

- (a) Byte Order Conversion
 - (b) Network File System
 - (c) Distance Vector Routing
 - (d) HTTP
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