

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

Term-End Examination

June, 2016

00676

**BCS-052 : NETWORK PROGRAMMING AND
ADMINISTRATION**

Time : 3 hours

Maximum Marks : 100

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

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1. (a) A block of address is granted to a small organisation. One of its addresses is 205.16.27.39/28. What is the first address in the block ? 5
- (b) Explain the management components of SNMP. 8
- (c) Explain the 'MAC Sub-layer format' and 'Addressing mechanism'. 8
- (d) Find the error, if any, in each of the following IPv4 addresses : 4
- (i) 111.56.036.89
- (ii) 226.14.8.5.3
- (iii) 75.14.14.14
- (iv) 111100.1110.111.001

- (e) What is a DNS Server ? Differentiate between Primary and Secondary DNS Servers. 10
- (f) Differentiate between POP and IMAP. 5
2. Draw the header of TCP and UDP. Compare the header fields of TCP and UDP. Explain the purpose of fields which are similar between TCP and UDP. 20
3. (a) Why is remote administration needed ? Explain. 5
- (b) Explain the different components of a *Passwd* file in Unix/Linux. 5
- (c) Discuss the various Disk Management functions in Windows. Write the step-by-step procedure to open disk management option. 10
4. Write an algorithm (using socket programming system calls) each for UDP client and UDP server, as per the following specifications : 20
- (a) UDP client will initiate the communication and send any alphanumeric character to the server.
- (b) UDP server accepts that character and as a reply sends the ASCII value of that character to the client.

Note : Make suitable assumptions, if any.

5. Write short notes on the following :

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- (a) **FTP**
 - (b) **Byte Ordering**
 - (c) **Gateways**
 - (d) **Distance Vector Routing**
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