Reg. No. | | | | | | | | | |

BCACAC 262

Credit Based IV Semester B.C.A. Degree Examination, May/June 2016
(New Syllabus) (2013-14 Batch Onwards)
PRINCIPLES OF TCP/IP

Time : 3 Hours Max. Marks : 80

***Note** : Answer **any ten** questions from Part – **A** and **one full** question from **each** unit of Part – **B**.*

PART – A

1. a) What is RFC ? **(10×2 = 20)**

   b) What is limited broadcast ?

   c) Expand IAB and ARPANET.

   d) List any two functions of IP.

   e) What are the functions of HELLO protocol ?

   f) What is routing table ?

   g) What is BGP ?

   h) Expand TCP and UDP.

   i) What do you mean by reliable stream delivery ?

   j) What is the use of Rlogin protocol ?

   k) What are the advantages of delayed acknowledgement scheme ?

   l) What is caching ?

P.T.O.

PART – B

Unit – I

2. a) Explain various classes of IP addressing scheme.
   b) Explain address resolution through direct mapping.
   c) Write a note on cache and ARP timeouts. **(6+5+4)**

3. a) Write a note on internet architecture.
   b) Explain TCP/IP 5 layer reference model.
   c) How RARP work ? Explain. **(5+6+4)**

Unit – II

4. a) Write IP forwarding algorithm.
   b) Explain subnet addressing with an example.
   c) Explain RIP operation. **(5+5+5)**

5. a) How the datagram can be forwarded using direct delivery ? Explain.
   b) Explain various characteristics of OSPF protocol.
   c) Explain routing with IP addresses. **(5+5+5)**

Unit – III

6. a) Explain sliding window technique with a diagram.
   b) Explain how TCP establishes connection using 3 way handshake.
   c) Explain various services offered by telnet protocol. **(5+5+5)**

7. a) Give UDP message format and explain various fields.
   b) Explain TCP acknowledgement retransmission and timeout.
   c) How application programs are used to implement telnet client and telnet server with a diagram ? **(5+5+5)**

Unit – IV

8. a) Explain FTP process model with diagram.
   b) Explain various characteristics of IP multicasting.
   c) Explain DNS message format fields. **(5+5+5)**

9. a) Explain NFS with diagram.
   b) Explain send-side silly window Avoidance.
   c) Write a note on MIME protocol. **(5+5+5)**
