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BCACAC 262

Credit Based Fourth Semester B.C.A. Degree Examination, April/May 2018
(Common to all Batches)
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) Name any two organizations related to evolution of open networks. **(10×2=20)**
- b) What is RARP and when is it used ?
- c) What is default router ?
- d) What is loop back address ?
- e) What is Border Gateway Protocol ?
- f) List any two functions of IP.
- g) Give the structure of IP datagram.
- h) Compare telnet and rlogin protocols.
- i) Differentiate FTP and TFTP.
- j) What do you mean by IP multicasting ?
- k) Give the format of IPV6 datagram.
- l) What is the purpose of MIME protocol ?

PART – B

Unit – I

2. a) Write a note on evolution of open networks.
- b) Explain various classes of IP addressing scheme.
- c) Explain address resolution through dynamic binding with the help of a diagram. **(5+5+5)**



- 3. a) Explain application level and network level interconnection schemes.
- b) Write a note on IAB and its reorganization.
- c) Explain Directed and limited broadcast. (5+5+5)

Unit – II

- 4. a) Give the IP-routing algorithm.
- b) Explain routing information protocol operation.
- c) Explain implementation of subnet with subnet mask. (5+5+5)
- 5. a) Explain characteristics of OSPF protocol.
- b) Explain any five characteristics of BGP.
- c) Explain classless inter domain routing concept and its uses. (5+5+5)

Unit – III

- 6. a) Explain sliding window technique with a diagram.
- b) Give the UDP message format and explain various fields.
- c) Explain how TCP establishes connection using 3 way hand shake. (5+5+5)
- 7. a) Explain how domain name resolution is done.
- b) Explain the Telnet protocol with the help of a diagram.
- c) Explain TCP acknowledgement retransmission and timeout. (5+5+5)

Unit – IV

- 8. a) Explain FTP process model with diagram.
- b) Explain the working of SMTP.
- c) Explain changes introduced in IPV6 compare to IPV4. (5+5+5)
- 9. a) Write a note on Network File System.
- b) Give the format of IPV6 base header and explain its fields.
- c) Write a note on MIME. (5+5+5)