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SEAT No. :

P58

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TE/INSEM/APR-64
T.E. (Computer Engg.) (Semester - II)
310251 : COMPUTER NETWORKS
(2012 Pattern)

Time : 1 Hours]

[Max. Marks : 30

Instructions to the candidates:

- 1) *Neat diagrams must be drawn wherever necessary.*
- 2) *Figures to right indicates full marks.*
- 3) *Assume suitable data if necessary.*

Q1) a) With neat diagram explain example of using FTP for retrieving a list of items in a directory. **[6]**

b) Explain importance DHCP protocol. List different DHCP messages? **[4]**

OR

Q2) a) Draw & explain request and response header of FTP protocol. **[4]**

b) Explain the Resolution (Iterative and Recursive Resolution)? **[6]**

Q3) a) What is socket? Explain any 4 socket primitives with examples. **[6]**

b) Explain BGP routing protocol. **[4]**

OR

Q4) a) Imagine a TCP connection is transferring a file of 5000 bytes. The first byte is numbered 10010. What are the sequence numbers for each segment if data is sent in five segments with the first four segments carrying 1,000 bytes? **[4]**

b) Explain Three way handshaking in connection establishment of TCP with suitable diagram. **[6]**

Q5) a) Explain ARP message format? What are the various address Translation schemes used? **[6]**

b) Draw and Explain UDP protocol Header. **[4]**

P.T.O.

OR

Q6) An organization is granted a block of addresses 14.24.74.0/24. The organization needs to have 3 subblocks of addresses to use in its three subnets as shown below:

- One subblock of 120 addresses.
- One subblock of 60 addresses
- One subblock of 10 addresses.

Find out the first address, last address of each subblock and their respective subnet masks. Also draw diagram showing all the subblocks. Mention how many address are still unused. **[10]**

