

Total No. of Questions : 6]

SEAT No. :

**P41**

[Total No. of Pages : 2

**APR - 18/TE/Insem. - 43**

**T.E. (Computer Engineering)**

**COMPUTER NETWORKS**

**(2012 Course) (Semester - II)**

*Time : 1 Hour]*

*[Max. Marks : 30*

*Instructions to the candidates:*

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

**Q1) a)** What is the difference between persistent & non persistent HTTP? Explain HTTP message format. **[6]**

b) Can we specify file transfer in a Web page? Explain with the help of suitable example. **[4]**

OR

**Q2) a)** Define Socket? Explain Socket primitives at client and server side for TCP communication with diagram. **[7]**

b) When web pages containing emails are sent out they are prefixed by MIME Header, Why? Explain MIME Header. **[3]**

**Q3) a)** What are four general techniques to improve quality of service? Explain any one in detail. **[5]**

b) Explain Three-Way Handshake Mechanism used by TCP for connection establishment. **[2]**

c) How does TCP achieves reliability? **[3]**

OR

**Q4) a)** What is the silly window syndrome problem? Suggest solution to overcome the problem. **[6]**

b) Explain TCP header format. **[4]**

*P.T.O.*

- Q5)** a) What are the various address Translation schemes used? Explain ARP message format? [6]
- b) Explain distance vector routing algorithm. [4]

OR

- Q6)** a) Consider sending a 3000-byte datagram into a link that has an MTU of 500 bytes. Suppose the original datagram is stamped with the identification number 422. How many fragments are generated? What are their characteristics? [4]
- b) Differentiate between IPV4 and IPV6 with respect to header format. [6]

