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SEAT No. :

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APR - 18/TE/Insem. - 145

T.E. (Information Technology)

COMPUTER NETWORK TECHNOLOGY

(2015 Course) (Semester - II) (314450)

Time : 1 Hour] *[Max. Marks : 30*

Instructions to the candidates:

1)   *Answers Q1 or Q2, Q3 or Q4, Q5 or Q6.*

2)   *Neat diagrams must be drawn wherever necessary.*

3)   *Figures to the right side indicate full marks.*

4)   *Assume suitable data, if necessary.*

Q1) a)   Explain distance vector routing algorithms with example.   **[6]**

b)   Compare between RIPv1 and RIPv2.   **[4]**

OR

Q2) a)   Consider a Class - C network 192.168.14.0 with default subnet mask.**[6]**

How many actual hosts can be connected in that network?

Divide that network into 8 equal subnets?

What is the new subnet mask?

What is the starting address of the 6th Subnet?

What is the last address of the 6th Subnet?

How many hosts can be connected in each subnet?

b)   Compare between IPv4 and IPv6.   **[4]**

Q3) a)   What is silly window syndrome? How to overcome it?   **[5]**

b)   What is a Socket? Explain various socket primitives used in client-server interaction.   **[5]**

OR

P.T.O.

Q4) a) How Nagle algorithm helps in TCP transmission policy? Explain the Clark's solution to overcome the silly window syndrome. **[6]**

b) Explain the three way handshake algorithm for TCP connection establishment. **[4]**

Q5) a) Explain how name resolution happens in DNS. Enlist all the resource records and its functions. **[5]**

b) Explain between persistent and non-persistent HTTP Connection. **[5]**

OR

Q6) a) What is FTP? Where and when it is used? Why does it require 02 ports? Explain at least 04 user commands used in FTP? **[6]**

b) Differentiate between POP3 and IMAP. **[4]**

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