



DHARMSINH DESAI UNIVERSITY, NADIAD

FACULTY OF TECHNOLOGY

B.TECH. SEMESTER V [IT]

SUBJECT: (IT-505) COMPUTER & COMMUNICATION NETWORK

Examination : Block(Regular)

Seat No. : ____

Date : 17/10/2014

Day : Friday

Time :

Max. Marks : 36

INSTRUCTIONS:

1. Figures to the right indicate maximum marks for that question.
 2. The symbols used carry their usual meanings.
 3. Assume suitable data, if required & mention them clearly.
 4. Draw neat sketches wherever necessary.
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Q.1 Do as directed. [12]

- (a) Differentiate: TCP and UDP [2]
- (b) What is the difference between routing and forwarding? [2]
- (c) Define: (a) Encryption. (b) Confidentiality. [2]
- (d) If a computer host's dotted decimal representation is 192.228.17.57 and its subnet mask is 255.255.255.224. What are the corresponding subnet address, subnet number and host number, respectively? [2]
- (e) What is piggybacking? Give Example. [2]
- (f) What is optimality principle? [2]

Q.2 Attempt the following questions. [12]

- A** Which TCP timer is use for the following situation? [6]
- (1)To handle the zero window-size advertisement.
 - (2)To keeps track of the time between sending of a segment and the receipt of an acknowledgement
 - (3)To prevents long idle connection between two TCPs.
- B** Differentiate: Virtual Circuit subnet and Datagram subnet. [6]

Q.3 Attempt the following questions. [12]

- A** Host A is sending a 10,000-byte file to Host B using a sliding window protocol. Frames are limited to 1000 bytes each, frames are numbered by frame number starting at 1, and the window size is 5 frames. Frame 3 is lost. [6]
- (1)Which frames are retransmitted if Host A and Host B are using the Go-Back-N protocol?
 - (2) Which frames are retransmitted if Host A and Host B are using the selective repeat protocol?
- B** Explain IEEE-802.5 LAN standard in detail. [6]