et 6 sem computer communication and telecom networks dec 2015

(3 Hours) [Total Marks :80

N.B. : (1) Question **No.1** is **compulsory**
(2) Write any **three** question from Q. 2 to Q.6.
(3) Draw neat diagram if necessary.

1. Solve following   20
   (a) Compare between pure ALOHA and Slotted ALOHA
   (b) Explain working principle of selective repeat ARQ
   (c) What is the use of subnetwork in IP addressing
   (d) What is bit and byte stuffing explain with example.

2. (a) Discuss various scheduling methods used in MAC   10
   (b) Explain need of fragmentation and field related to fragmentation in IP datagram   10

3. (a) Solve the following related of IP datagram
   (a) Which field shows number of hop count   10
   (b) If HLEN value is 5 and length of data is 24 bytes. Calculate option
   (c) What are differentiate services?
   (d) Packet version of 010 is discarded. Justify.
   (b) Draw and explain connection establishment using 3 way handshaking in TCP.
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4. (a) What is DSL and HFC? Describe in brief
   (b) What is IEEE 802.11? Explain features of IEEE 802.11. Draw the architecture   10
       of IEEE 802.11   a2zSubjects.com   10

5. (a) What do you mean by decentralized peer to peer file sharing? How it is
       different from centralized system.   5
   (b) What are the components of ATM? Explain in brief.
   (c) What is the role of ICMP protocol? Explain the error messages of ICMP   5
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6. (a) An ISP are granted a block of address starting with 127.60.4.0/20. The ISP
       wants with each organization receiving 8 address only Design subblock and   10
       give the slash notation for each subblock.
   (b) Which protocol gives mapping of name with IP address? Explain working of
       such protocol with different records.   10