

COURSE CODE: - 10B11EC611

MAX. MARKS: 50

COURSE NAME: - Telecommunication Networks

COURSE CREDITS: 4

MAX. TIME: 2 Hrs.

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*Note: All questions are compulsory. Carrying of mobile phone during examinations will be treated as case of unfair means.*

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- Q1.** How do IPv4 and IPv6 headers differ? Discuss the possible strategies for transition from IPv4 to IPv6. (2.5\*2=5)
- Q2.** How is Dynamic Host Configuration Protocol (DHCP) better than BOOTP and RARP? (5)
- Q3(a).** Change the following Ipv4 multicast address to Ethernet multicast physical address:  
222.255.45.88. (2.5)
- Q3(b).** How much time in a Bluetooth one-slot frame is used for the hopping mechanism? What about a three-slot frame and a five-slot frame? (2.5)
- Q4.** Draw and discuss in brief a TCP segment. (5)
- Q5.** Discuss the working of various random access protocols for multiple accessing. (10)
- Q6.** What are the shortcomings of Distance Vector Routing (DVR)? Discuss in detail the functioning of Link State Routing (LSR). (5\*2=10)
- Q7.** An organization is granted the block 130.56.0.0/16. The administrator wants to create 1024 subnets.
- Find the subnet mask.
  - Find the number of addresses in each subnet.
  - Find the first and last addresses in subnet 1.
  - Find the first and last addresses in subnet 1024. (2.5\*4=10)