

Exam.Code:0929

Sub. Code: 6356

1078

B.E. (Electronics and Communication Engineering)**Fifth Semester****EC-511: Computer Networks**

Time allowed: 3 Hours

Max. Marks: 50

NOTE: Attempt five questions in all, including Question No. 1 which is compulsory and selecting two questions from each Unit.

x-x-x

I. Attempt the following:-

- a) Give two reasons for layered protocols.
- b) Data link layer always put the CRC in trailer, rather than in header, why?
- c) Bit stuff the data 11011111110011111100001111101 111110111101
- d) A slotted ALOHA network transmits 200 bits frames using a shared channel with 200 Kbps bandwidth. Find the throughput if the system (all stations Together) produces 250 frames per sec.
- e) Compare switches and router.
- f) List the pros and cons of frame relay
- g) What is the default subnet mask for a class D network?
- h) What is the advantage of classless addressing?
- i) What is the name of protocol used for electronic mail over the internet?
- j) What is the purpose of POP and IMAP in electronic mail? (10x1)

UNIT - I

- II.
 - a) Which one of TCP/IP and OSI are more popular & widely developed. Why?
 - b) Explain briefly responsibilities of transport layers.
 - c) What is Internet? Explain basic design of APRA network and discuss its growth. (3,4,3)
- III.
 - a) Explain PPP in detail.
 - b) Describe with an example the SLIDING window protocol. (5,5)
- IV.
 - a) Bring out the differences between PURE & SLOTED ALOHA.
 - b) Explain the procedure of CSMA protocol in detail. (5,5)

P.T.O.

(2)

UNIT – II

- V. a) Compare IPv4 and IPv6 headers Extension headers.
b) With an example explain shortest path routing algorithm. (5,5)
- VI. a) Explain the meaning of various fields in UDP header.
b) What is the importance of NAT? Explain in Detail- (5,5)
- VII. a) Discuss various approaches describing how connection is established & released at Transport layer.
b) What is the difference between traffic policing & traffic shaping? Discuss any one algorithm for traffic shaping. (5,5)

x-x-x