## **2008 ANDHRA UNIVERSITY**

## **B.E/B.TECH DEGREE EXAMINATIONS**

## **NETWORK ENGINEERING**

(ELECTRONICS AND COMMUNICATION ENGINEERING)

TIME: 3 HOUR **MARK: 70** 

## Question No.1 Is Compulsory And Answer Any Other 5 Questions All Ouestions Carry Equal Marks

| All Questions Carry Equal Marks                                                                                           |
|---------------------------------------------------------------------------------------------------------------------------|
| 1) a) what are sockets in a transport layer?                                                                              |
| b)explain hamma distance                                                                                                  |
| c)what is link state protocol                                                                                             |
| d)what is flooding?                                                                                                       |
| e)what is datagram?                                                                                                       |
| f)what is adaptive tree protocol?                                                                                         |
| g)Draw the header part of TCP protocols                                                                                   |
| 2) a)List advantages and disadvantages of having International standards for network protocols                            |
| b)why was SMPS designed as a connectionless network and frame relay as a connection oriented one                          |
| 3) a)compare the working of demodulator part of a modem and the codes part of cedes                                       |
| b)explain bus, star and ring topologies with their advantages and disadvantages                                           |
| 4)<br>a)Explain CSMA/CD sending and receiving algorithms                                                                  |
| b)what are the issues of Data link layer? Discuss one bit sliding window protocol                                         |
| 5)<br>a)Explain briefly the error detection and correction techniques used in data link layer                             |
| b)show the different fields of an ethernet frame and explain 802.3 MAC sublayer protocol                                  |
| 6)<br>a)explain secret key and public key algorithms in application layer                                                 |
| b)write the features of SMTP protocol and discuss the architecture of e-mail system                                       |
| 7)a)Explain how crash recovery is achieved in transport layer                                                             |
| b)Describe the token bucket algorith for congestion control                                                               |
| 8)write short notes on any 3 of the following<br>a)ALOHA protocol<br>b)FTP<br>c)protocols and their performance<br>d)FDDI |