

Code No.: 54304

MR 15-2016-17 Admitted Students

## **MALLA REDDY ENGINEERING COLLEGE (AUTONOMOUS)**

(Affiliated to JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD)

Gundlapochampally (H), Maisammaguda (V), Medchal (M), Medchal-Malkajgiri (Dist), Hyderabad.

### **M.TECH I SEMESTER SUPPLEMENTARY EXAMINATIONS, JANUARY-2018**

**SUBJECT: TCP/IP NETWORKS**

**Branch/Specialization: ECE/Embedded Systems**

**Time: 3 hours**

**Max. Marks: 60**

#### **PART – A**

**Answer All Questions**

**5 x 4Marks=20 Marks**

1. Differentiate IPv4 and IPv6.
2. What is Piggybacking? Explain the advantage of it.
3. List out the services and applications of UDP.
4. Explain the process of registration in mobile networks.
5. What are the problems with passive queue management? Also explain how they can be eliminated.

**Answer any five of the following questions**

**5 x 8 Marks= 40 Marks**

1. Draw the protocol suite diagram of TCP and compare it with OSI Model. (8M)
2. a) Explain about the connection establishment in TCP. (4M)  
b) With a neat sketch describe TCP header. (4M)
3. Explain about flow control in SCTP. (8M)
4. a) Write short notes on WTCP. (4M)  
b) Explain about indirect TCP. Give the advantages and disadvantages of it. (4M)
5. Illustrate the techniques to improve QoS. (8M)
6. a) Explain about IPv6 addressing. (4M)  
b) What is the problem in Go-Back-N protocol? How it can be solved. (4M)
7. a) Give a brief note tunneling and encapsulation in Mobile IP. (5M)  
b) Mention the services provided by SCTP. (3M)
8. Write short notes on any two of the following  
a) ICMPV6 Protocol (4M)  
b) Inefficiency in Mobile IP (4M)  
c) Congestion control in TCP (4M)