Printed Pages : 3

EEC809

(Following Paper ID and Roll No. to be filled in your Answer Book)

PAPER ID : 121801

Roll No.

B. Tech.

(SEM. VIII) THEORY EXAMINATION, 2014-15

DATA COMMUNICATION NETWORKS

Time : **3** Hours] [Total Marks : **100**

Note : Answer all the Questions:

1 Attempt any four parts. **5x4=20**

(a) Explain the different uses of computer network.

(b) List the various layers of OSI model. Briefly explain the working of each of them.

(c) What do you mean by Synchronous and asynchronous transmission?

(d) Explain the PCM in details. Discuss the specifications of Ethernet.

(e) What do you mean by computer architecture? Explain.

(f) Explain EIA RS 232 C. Write short notes on Transmission media.

2 Attempt any four parts. **5x4=20**

(a) Explain HDLG protocol with its frame structure.

(b) Explain GO-BACK-N ARQ mechanism for error and flow control.

(c) What do you mean by authentication protocol? Explain with flow diagram.

(d) What are the main data link layer design issues? Discuss briefly.

(e) What do you mean by 'Framing'? What are the methods of it?

3 Attempt any four parts. **5x4=20**

(a) What are the differences between router and gateways? Explain.

(b) What do you understand with congestion? Explain.

(c) Explain the following.

(i) Leaky bucket algorithm.

(ii) Token Bucket Algorithm.

(d) Compare and describe different generations of Ethernet used in wired LAN.

(e) Explain Internetworking in details.

4 Attempt any two parts. **10x2= 20**

(a) Describe ATM Protocol layers and compare them to the OSI protocol hierarchy.

(b) What do you mean by ALOHA protocol? Draw its flow chart diagram.

(c) Describe the various design issues of transport layers. What do you mean by Connection management?

5 Attempt any two parts : **10x2=20**

(a) What do you understand by TCP and UDP? Explain.

(b) Answer the following :

(i) Compare the salient features of HTTP and FTP.

(ii) Differentiate between TFTP and SMTP.

(c) Write short notes on any of two.

(i) DNS

(ii) WWW

(iii) Subneting.