9. Write notes on : 20

   (i)   TCP/IP reference Model

   (ii) Domain Name Service

   (iii) Combo chips

   (iv) Internet addresses

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B. Tech 7th Semester (ECE)
Examination – May, 2018

DATA COMMUNICATION

Paper : ECE-407-F

Time : Three Hours]   *[Maximum Marks : 100*

Before answering the questions, candidates should ensure that they have been supplied the correct and complete question paper. No complaint in this regard, will be entertained after examination.

Note : Attempt *five* questions in all, selecting *one* question from each Section. Question No. 1 is *compulsory.*

1. (a) Differentiate between analog and digital communication systems. 5

   (b) Name standard organization for data communication and explain their functions. 5

   (c) Briefly explain the functions of each layer of OSI model for networking. 5

(d) Differentiate between intranet & extranet, state examples. 5

SECTION – A

2. Draw & explain the transmitter and the scheme to recover the baseband signal in BPSK. Also, explain the geometrical representation of BPSK signal. 20

3. (a) Draw the blocks of a generalized digital communication system and explain the functions of each block. 10

(b) What is quadrature amplitude modulation technique ? Draw the transmitter to generate QAM signal and explain. 10

SECTION – B

4. (a) What are the various errors occuring in data communication systems ? Explain that how these error in bits are removed. 10

(b) Differentiate between serial and parallel interfaces, state examples of each. 10

5. Write notes on : 20

(i) DDD Network

(ii) Synchronous Modems

(iii) Modem Synchronization

(iv) Telephone circuit.

SECTION – C

6. Explain the complete model of ISDN. State its applications. 20

7. (a) Differentiate between LAN, MAN and WAN. 10

(b) Define RFID technology. 10

SECTION – D

8. Write notes on : 20

(i) T-Carriers

(ii) AT & T's FDM hierarchy

(iii) Time Division Multiplexed carrier System

(iv) Frame Synchronization