Modi Institute of Technology, Kota

First Midterm

III Year VI Sem

Branch: Electronics & Communication

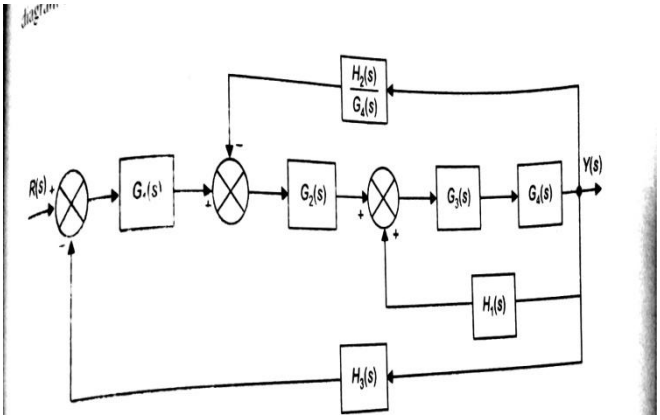
Sub: Control System

Time: 1 hr. **M.M.:10**

Attempt any two Qus. Each Qus. Carries two marks.

Q.1 Explain open loop and close loop control system. [5]

Q.2 Obtain the transfer function by using block reduction technique. [5]



Q.3 Check the stability by using routh Hurwitz criterion. [5]

$$s^4 + 10s^3 + 16s^2 + 14s + 8 = 0$$

of the system

Modi Institute of Technology, Kota
First Midterm
III Year VI Sem
Branch: Electronics & Communication
Sub: Digital Communication

Time: 1 hr. **M.M.:10**

Attempt any two Qus. Each Qus. Carries five marks.

Q.1 Explain uniform and non-uniform quantization. **[5]**

Q.2 Describe Pulse code modulation with suitable diagram. **[5]**

Q.3 Wrote short note on: **[5]**

(a) Matched Filter

(b) Inter symbol interference

Modi Institute of Technology, Kota

First Midterm

III Year VI Sem

Branch: Electronics & Communication

Sub: Industrial Electronics

Time: 1 hr. **M.M.:10**

Attempt any two Qus. Each Qus. Carries two marks.

Q.1 Explain basic characteristics and working of power diodes. [5]

Q.2 Explain bridge reactifiers. [5]

Q.3 Write short note on- [5]

(a) SCR

(b) TRIAC

Modi Institute of Technology, Kota
I[st] Midterm
III Year VI Sem
Branch: Electrical & Electronics Engineering
Sub: Microprocessor & Microcontroller
(Common with ECE)

Time: 1 Hr **MM: [10]**

Attempt any two questions. Each question carries five marks.

Q1. Explain the various types of signals & pins used in 8085 Microprocessor?

Q2. Describe the Bus organization? Also explain various types of Interrupts.

Q3. Explain, with suitable functional diagram, 8259 interrupt controller and its working.

*****Best of Luck*****

Modi Institute of Technology, Kota

First Midterm

III Year VI Sem

Branch: Electronics & Communication

Sub: Microwave Engg.-2

Time: 1 hr. **M.M.:10**

Attempt any two Qus. Each Qus. Carries two marks.

Q.1 Explain V-I characteristic of detector diode . **[5]**

Q.2 Explain gunn diode effect and principle of operation. [5]

Q.3 Explain varactor diode characteristic and circuit applications. [5]

Modi Institute of Technology, Kota

Ist Midterm

III Year VI Sem

Branch: Electronics & Communication Engineering

Sub: Neural Network

Time:1 Hr
MM:[10]

Attempt any two questions. Each question carries five marks.

Q1. What is the artificial neural network and also explain the biological neural network.

Q2. Explain the different types of model in neural network.

Q3. Write short note on:

a) **Learning process**
b) **Supervised and unsupervised learning**