

School of Electrical Electronics and Communication Engineering

Electronics and Communication Engineering

ETE - Jun 2023

Time : 3 Hours

Marks : 100

Sem IV - G2UA401C - Microcontrollers and Embedded System

Your answer should be specific to the question asked

Draw neat labeled diagrams wherever necessary

1. What are the different levels of programming languages? K2 CO2 (5)
2. What are the general purpose registers of 8086? K2 CO3 (5)
3. Write a short note on evolution of Microprocessor. K1 CO1 (5)
4. Explain in detail system development environment. K2 CO1 (10)
5. write a simple program to illustrate the concept of programming the stack? K3 CO2 (10)
6. Explain in detail operating modes of 8255 PPI with control registers K3 CO3 (10)
7. Discuss the organization of internal RAM and special function registers of 8051 microcontroller in detail? K4 CO4 (10)

OR

- Design memory Interfacing for a microprocessor such that it should contain 4K byte of EPROM and 4 Kbyte of RAM K4 CO4 (10)
8. Explain the memory data transfer instruction and Stack memory instruction of 8051 microcontroller. K5 CO4 (15)
 9. Explain the structure of TMOD register and write a program to toggle all bits of po continuously. K4 CO3 (15)
 10. Write a 8051 based assembly language program for performing four basic arithmetic operations on two data. K5 CO4 (15)

OR

- Write a 8051 based assembly language program for performing four basic ROTATE AND SHIFT operations data. K5 CO4 (15)