Q.33   Explain the Call and jump instruction.

Q.34   Compare AVR and PIC microcontroller.

Q.35   Write a short note on push and pop instruction.

SECTION-D

Note: Long answer type questions. Attempt any two questions out of three Questions.   (2x10=20)

Q.36   Describe the function of various pin of 8051 with pin diagram.

Q.37   Explain the memory organization in 8051 microcontrollers.

Q.38   Explain the all types of addressing mode and flag register in 8051 micro controllers.

4th Sem.
Branch : IC
Sub : Microcontroller & Embedded System

Time : 3 Hrs.   M.M. : 100

SECTION-A

Note: Multiple choice Questions. All Questions are compulsory.   (10x1=10)

Q.1   1 byte equal to

a) 8 bit   b) 4 bit

c) 1 bit   d) 16 bit

Q.2   Random access memory hold storage of memory is

a) 127 bytes   b) 128 bytes

c) 256 bytes   d) 324 bytes

Q.3   In micro controller is 8 bit here 8 bit denotes size of

a) Data bus   b) ALU

c) Control bus   d) Address bus

Q.4   Size of program counter in 8051

a) 16 bit   b) 8 bit

c) 4 bit   d) 32 bit

Q5.   Register that is used to hold the memory address of next instruction to be executed.

a) Program memory   b) Program counter

c) Control Unit   d) None of these

Q.6 How many timer/counter 8051.

    a) 1   b) 5

    c) 8   d) 2

Q.7 Which register is used to make the interrupt level or and edge trigger pulse

    a) TCON   b) IE

    c) IPR   d) SCON

Q.8 How many interrupt signal exits in 8051

    a) 1   b) 2

    c) 4   d) 5

Q.9 What is the meaning of the instruction MOV A, 05H

    a) Data 05H stored in the accumulator

    b) Fifth bit of the accumulator set to one

    c) Address 05H stored in the Accumulator

    d) None of these

Q.10 Logic 1 means of the power supply is ?

    a) 1V   b) 2V

    c) 20V   d) 5V

SECTION-B

Note: Objective type questions. All questions are compulsory. **(10x1=10)**

Q.11 Expand PSW?

Q.12 What is Program Counter?

Q.13 What is address bus.

Q.14 How many number of pin in 8051 IC.

Q.15 What is the meaning of carry flag?

Q.16 Write the name of data transfer instruction?

Q.17 What is the frequency of clock in 8051?

Q.18 ALU stands for.

Q.19 Write hardware interrupt name.

Q.20 Which pin connect with power supply in 8051.

SECTION-C

Note: Short answer type Questions. Attempt any twelve questions out of fifteen Questions. **(12x5=60)**

Q.21 Write the difference between microprocessor and micro controller.

Q.22 Explain the address bus, control bus and data bus.

Q.23 What are application of Advanced micro controller in the I & C.

Q.24 Write a short note in jump instruction.

Q.25 What is embedded system and write its application.

Q.26 Write a short notes, AVR, PIC and ARM mc.

Q.27 Explain the different flag in 8051.

Q.28 Explain two types of RTOS.

Q.29 Explain Ports-3 of 8051 microcontroller.

Q.30 Define direct and indirect addressing mode of 8051.

Q.31 Explain the bit contain of IE and IP register.

Q.32 Write a short note on logical instruction.