Q.26 What are the uses of PIC Micro controller. (CO4)

Q.27 Write a short note on Compiler Operation. (CO2)

Q.28 What do you understand by Assembly directive. Explain 3 directives with examples. (CO2)

Q.29 How External Memory is Interfaced with 8051 Microcontroller. (CO1)

Q.30 Define SFR. Explain function of any 5 SFR along with its address location. (CO1)

Q.31 How Many Timers are there in 8051 Micro controller. Explain one operation of Timer. (CO2)

Q.32 Explain the working of ADC. (CO3)

Q.33 Explain the difference between synchronous and asynchronous mode of communication. (CO2)

Q.34 What is Stack Explain POP and PUSH Instruction. (CO2)

Q.35 Explain difference between CISC and RISC processor. (CO2)

Section-D

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

Q.36 Draw the Architecture Block Diagram of 8051 Micro controller and explain it in detail. (CO1)

Q.37 Explain various addressing modes of 8051 Micro Controller. (CO2)

Q.38 What is Inter facing. Explain the Inter facing of key board with 8051 Micro Controller with its schematic diagram. (CO4)

Roll No. .....

5th Sem., Branch : Eltx, Power Eltx
Sub. : Microcontrollers/ Microcontrollers & Applications

Time : 3 Hrs. M.M. : 100

SECTION-A

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

Q.1 A Microcontroller is a VLSI IC that contains a CPU (Processor) along with some other peripherals like _____. (CO1)

a) Memory (RAM & ROM)
b) I/O Ports
c) Timer/Counter
d) All of the above

Q.2 Intel 8051 is based on (CO1)

a) Harvard Architecture
b) Von Neuman Architecture
c) 3 Layers Architecture
d) Network Architecture

Q.3 Program Memory of 8051 Microcontroller is of capacity _____. (CO1)

a) 2KG b) 4KB
c) 10KB d) 12KB

Q.4 Few Instruction and few addressing Modes are there in _____. (CO2)

a) RISC Processor b) CISC Processor
c) None d) Both A & B

Q.5 Program which is associated with the interrupt is called_____. (CO2)

a) Task b) Interrupt Service Routine

c) Interrupt Program d) Interruption

Q.6 _____ is used to control transmit and receive operations in serial Communication in 8051 microcontroller. (CO2)

a) PCON b) SCON

c) TCON d) DPTR

Q.7 Total Interrupt in 8051 Microcontroller are (CO2)

a) 3 b) 4

c) 7 d) 6

Q.8 PSW stands for _____. (CO1)

a) Program Standard Wing

b) Program Status Word

c) Peripheral Special Word

d) None

Q.9 RTC Stands for _____. (CO4)

a) Real Transmission Circuit

b) Real Time Clock

c) Receiver Transmitter Circuit

d) Range terminal circuit

Q.10 ANL, ORL, XRL, CLR comes under _____.

a) Data transfer Instructions

b) Arithmetic Instructions

c) Logical Instructions

d) Program Branching Instructions

Section-B

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

Q.11 SPI Stands for _____. (CO2)

Q.12 8051 microcontroller is _____ bit microcontroller. (CO1)

Q.13 UART Stands for _____. (CO2)

Q.14 Define Interrupt. (CO2)

Q.15 _____ SFR is used to hold the data for almost all the ALU Operations. (CO1)

Q.16 The 7 Segment display consists of _____ LEDs(CO3)

Q.17 ALE stands for _____. (CO1)

Q.18 Program which translates assembly language in to machine languages is called_____. (CO2)

Q.19 PIC Stands for _____. (CO4)

Q.20 Mention two types of memory in 8051 micro controller is . (CO1)

Section-C

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

Q.21 List some features of 8051 Micro controller. (CO1)

Q.22 Draw the PIN diagram of 8051 Micro controller. (CO1)

Q.23 Explain the organization of Data Memory of 8051 Micro controller. (CO1)

Q.24 Draw the diagram of Port P1 and explain its working. (CO1)

Q25 Define Instruction. Explain Data Transfer Instruction of 8051 Micro controller. (CO2)