

Q.29 Write five important Biomedical application of microcontroller?

Q.30 Explain software tools used in Embedded system development?

Q.31 Write a note on logical instruction set of 8051?

Q.32 Write a note on type of interrupts used in 8051?

SECTION-D

Note: Long answer type questions. Attempt any three questions out of four questions. 3x10=30

Q.33 Draw PIN diagram of 8051 microcontroller and describe each pin in detail?

Q.34 Explain all the applications of microcontroller?

Q.35 Define embedded system, explain applications of embedded system?

Q.36 Write note on following:

- a) Instruction set b) Addressing modes

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5th Sem. / Medical Electronics

Subject : Microcontrollers and embedded system

Time : 3 Hrs.

M.M. : 100

SECTION-A

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

Q.1 8051 series has how many 16 bit registers?

Q.2 PSW stands for.

Q.3 If we push data onto stack then the stack pointer _____?

Q.4 How many bytes of addressable memory is present in 8051 based microcontroller?

Q.5 CISC stands for _____?

Q.6 How many number of input output ports in 8051 microcontroller?

Q.7 IS RAM is used for storing data storage?

Q.8 Which pin provides reset option in 8051?

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Q.9 How many interrupt are there in microcontroller?

Q.10 LCALL instruction takes _____ bytes.

SECTION-B

Note:Very short answer type questions. Attempt any ten questions out of twelve questions. 10x2=20

Q.11 Write name of interrupts of Microcontroller?

Q.12 SFRs stands for _____?

Q.13 Auxillary carry is set during which condition?

Q.14 What is the order decided by processor or the CPU of microcontroller to execute an instruction?

Q.15 Give the name of buses present in a controller and transmission of data from one place to another?

Q.16 Define Microcontroller?

Q.17 Define Embedded system?

Q.18 What is the file extension that is loaded in a microcontroller for executing any instruction?

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Q.19 Which technology is preferred over HMOS for designing the device of MCS-51 family?

Q.20 What do you mean by interfacing?

Q.21 List important registers used in 8051?

Q.22 Define Stack pointer?

SECTION-C

Note:Short answer type questions. Attempt any eight questions out of ten questions. 8x5=40

Q.23 Define Immeditate, Register, direct, indirect and Indexed Addressing mode of 8051?

Q.24 Define 8051 Assembler directives?

Q.25 Lists 8051 Simulators?

Q.26 How to interface LCD with microcontroller?

Q.27 Explain interfacing of DAC (digital to analog converter)?

Q.28 Explain PIC microcontroller in detail?

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