Q.25 Explain Flags in 8051 Microcontroller.

Q.26 Explain all the Data Transfer instruction with Example.

Q.27 Define 8, 16 and 32 bit Microcontroller with Example.

Q.28 Explain Rotate and Swag operation.

Q.29 Write short note on applications of microcontroller in medical field.

Q.30 Explain Need of Interfacing.

Q.31 What is ALU? Explain.

Q.32 What is an interrupt? Explain its type.

Q.33 Explain all the arithmetic group instruction with Example.

Q.34 What is the function of Program counter?

Q.35 Explain PUSH instruction with program.

SECTION-D

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

Q.36 What do you mean by instruction? Explain the types of instructions of 8051 with the help of Examples.

Q.37 Explain the interfacing of A/D and D/A converter with 8051 with the help of Diagram.

Q.38 Draw and Explain Pin Diagram of 8051 Microcontroller.

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Roll No.....

4th Sem / Medical Electronics
Subject : Mirco controller App. In Med. Tech.

Time : 3 Hrs. **M.M. : 100**

SECTION-A

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

Q.1 Which of the following is the basic functions of a timer?

a) It can control the compare, capture mode

b) It provided a time delay.

c) It can act as a counter.

d) All of the mentioned.

Q.2 What is the order decided by a processor or the CPU of a controller to execute an instruction?

a) Decode, fetch, execute

b) Execute, fetch, decode

c) Fetch, execute, decode

d) Fetch, decode, execute

Q.3 The internal RAM memory of the 8051 is:

a) 32 bytes b) 64 bytes

c) 128 bytes d) 256 bytes

Q.4 The address space of the 8051 is divided into four

distinct areas: internal data, external data, internal code, and external code

a) True b) False

Q.5 An alternate function of port pin P3.4 in the 8051 is:

a) Timer 0 b) Timer 1

c) Interrupt 0 d) Interrupt 1

Q.6 Micro controllers often have:

a) CPU's b) RAM

c) ROM d) All of the above

Q.7 The total external data memory that can be interfaced to the 8051 is:

a) 32K b) 64K

c) 128L d) 256K

Q.8 The I/O port that does not have a dual-purpose role is:

a) Port 0 b) Port 1

c) Port 2 d) Port 3

Q.9 The total amount of external code memory that can be inter faced to the 8051 is:

a) 32K b) 64K

c) 128K d) 256K

Q.10 A HIGH on which pin resets the 8051 mircocontroller?

a) RESET b) RST

c) PSEN d) RSET

SECTION-B

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

Q.11 The 8051 offers_____ level of interrupt priority.

Q.12 8051 Timer can operate in _____ number of modes.

Q.13 UART stands for _____.

Q.14 Timer mode '0' is a _____ bit mode.

Q.15 Expand UART_____.

Q.16 The accumulator is a special purpose and the versatile _____ bits register of 8051 microcontroller.

Q.17 Pcon stands for _____.

Q.18 The overlapping of instruction fetch and execution stages is known as _____.

Q.19 Internal RAM of 8051 is _____.

Q.20 ALE stands for _____.

SECTION-C

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

Q.21 Write five features of PIC 16C84.

Q.22 Write in Detail about the Interrupts of 8051 Microcontroller.

Q.23 Define Instruction. And its types.

Q.24 Explain POP instruction with a program.