

Q.21 What is PSW? Explain the function of each bit of PSW Register.

Q.22 Give general Idea about Embedded system.

SECTION-D

Note: Long answer type questions. Attempt any two questions out of three questions. (2x8=16)

Q.23 What do you mean by AVR? Explain architecture of AVR.

Q.24 With the help of block diagram. Explain the working of different block of 8051.

Q.25 Explain various addressing modes in detail with example.

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No. of Printed Pages : 4
Roll No.

221543

4th Semester/Instrumentation & Control Subject : Microcontroller & Embedded Systems

Time : 3 Hrs.

M.M. : 60

SECTION-A

Note: Multiple choice questions. All questions are compulsory (6x1=6)

Q.1 Which of the following is an application of microcontroller?

- a) Personal Computer
- b) Embedded Systems
- c) Mainframe computer
- d) super Computer

Q.2 What is the function of ALU in a Microprocessor

- a) To control the flow of Data
- b) To store Data
- c) Perform Arithmetic & Logic function
- d) To Provide supply data

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- Q.3 Embedded systems are _____.
- General purpose system
 - Special purpose system
 - Both A & B
 - None of these
- Q.4 The Internal RAM memory of the 8051 is
- 32 bytes
 - 64 bytes
 - 128 bytes
 - 256 bytes
- Q.5 The 8051 has _____ pins.
- 28
 - 36
 - 44
 - 40
- Q.6 Give the name of the bus used in microcontroller for transferring data from one place to another?
- Address bus
 - Control bus
 - Data bus
 - All of the above

SECTION-B

Note: Objective/ Completion type questions. All questions are compulsory. (6x1=6)

- Q.7 What is an embedded system?

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- Q.8 Expand ROM
- Q.9 What is Microcontroller/
- Q.10 Write the full form of PIC.
- Q.11 Define Opcode.
- Q.12 Program counter is a _____ Bit register.

SECTION-C

Note: Short answer type questions. Attempt any eight questions out of ten questions. (8x4=32)

- Q.13 Differentiate between Micro processor and Microcontroller.
- Q.14 Write various application of PIC microcontroller.
- Q.15 Name Different types of Instructions used in 8051 with example.
- Q.16 Write a short note on A & B Register of 8051.
- Q.17 Explain embedded Hardware units & Devices in a systems.
- Q.18 What are different portions of Internal Ram?
- Q.19 Give brief idea about overview of the 8051 family.
- Q.20 Explain Timer and counter of 8051 Microcontroller.

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