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Roll No.

**4th Sem. Branch : ECE, Automation & Robotics, ECE
(For Speech and Hearing Impaired)
Sub. : Microprocessor and Micro-Controllers**

Time : 3 Hrs.

M.M. : 60

SECTION-A

Note: Multiple type Questions. All Questions are compulsory. (6x1=6)

Q.1 8085 is _____ bit microprocessor

- a) 16 b) 08
- c) 20 d) None

Q.2 8051 microcontroller has _____ I/O ports.

- a) 4 b) 6
- c) 5 d) None

Q.3 Total no of interrupts in 8051 has

- a) 4 b) **6**
- c) 5 d) None

Q.4 The size of RAM used in 8051 is

- a) 128 bytes b) 4K bytes

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Q.5 Which pin is provide a reset option in 8051.

- a) 1 b) 8
- c) 12 d) 9

Q.6 External access is used to permit _____.

- a) Peripherals b) Power supply
- c) ALE d) Memory Interfacing

SECTION-B

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

Q.7 Define Microcomputer.

Q.8 Write the name of one addressing mode used in 8051.

Q.9 Define program counter of 8051.

Q.10 Expand ADC.

Q.11 Define SCON register.

Q.12 Define baud rate.

SECTION-C

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

Q.13 Explain the internal memory organization of 8051.

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- Q.14 Draw and explain pin diagram of 8051.
- Q.15 List four advantages of programming in C.
- Q.16 Write steps to generate hex file.
- Q.17 Explain two types of Timer Modes used in 8051.
- Q.18 What are various interrupts of 8051?
- Q.19 Explain any one special function register.
- Q.20 Explain interfacing of LED with 8051.
- Q.21 Explain DAC interfacing with 8051.
- Q.22 Compare Microprocessor and microcontroller?

SECTION-D

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

- Q.23 Draw architecture of 8051 microcontroller and explain its working.
- Q.24 What are various addressing modes of 8051 microcontroller? Explain with examples.
- Q.25 Write short note on (Any two).
- a) Key board Interfacing
 - b) 8051 connection of RS232
 - c) Selection of microcontroller