

### SECTION-C

**Note:** Long answer type questions. Attempt any three questions. 3x10=30

- Q.3 Draw the pin diagram of 8051 and explain the function of various pins.
- Q.4 Explain the interfacing of LCD with 8051.
- Q.5 Explain the block diagram of PIC micro controller.
- Q.6 Explain the architecture of 8051 micro controller with the help of block diagram.
- Q.7 Write note (on any two)
- a) De bugger.
  - b) Serial port operation.
  - c) Compiler Operation.

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No. of Printed Pages : 4

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**6th Sem. / Power Eltx.**

**Subject : Micro Contr. & Applications**

Time : 3 Hrs.

M.M. : 100

### SECTION-A

**Note:** Very Short Answer type questions. Attempt any 15 parts. (15x2=30)

- Q.1
- a) What do you mean by interfacing.
  - b) Define machine language.
  - c) Define Simulator.
  - d) What is an embedded system?
  - e) Write any two data transfer instructions.
  - f) What is a Program counter?
  - g) Write and explain any MOV instruction.
  - h) Describe LCALL instruction.
  - i) Explain ORG directive.

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- j) List different special function registers of 8051.
- k) Write any two single bit instructions.
- l) What is asynchronous method of serial data communication?
- m) Expand ISR as used in 8051.
- n) What is an interrupt?
- o) The E pin is \_\_\_\_\_ pin for the LCD.
- p) Expand PCON and SCON.
- q) Explain the function of RST pin of 8051.
- r) What is a compiler?

### SECTION-B

**Note:** Short answer type questions. Attempt any ten parts  
10x4=40

- Q.2
- i) What are assembler directives? Explain any two.
  - ii) Explain the I/O port structure of 8051.

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- iii) Write about RTC interface with 8051.
- iv) Explain PUSH instruction of 8051.
- v) Write applications of micro controller.
- vi) Differentiate between Assembler and Compiler.
- vii) What is a debugger? Explain.
- viii) Write a short note on Interrupts of 8051.
- ix) Explain memory organisation of 8051.
- x) Write a note on serial data communication in micro controller.
- xi) Name different addressing models. Explain any one.
- xii) Differentiate between micro controller and microprocessor.
- xiii) Explain any two arithmetic instructions of 8051.
- xiv) What are the main features of ARM?
- xv) Briefly explain the power supply circuit of 8051.

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