Q.31 Discuss the present trend in embedded system.

Q.32 Draw & explain the block diagram of 8051 micro controller.

Q.33 Explain the times of 8051 with proper address?

Q.34 Write five applications of advanced micro controller.

Q.35 Explain briefly ARM micro controller.

Section-D

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

Q.36 Draw and Explain the Pin diagram of 8051. Explain the various interrupts of 8051 Micro controller.

Q.37 Explain in detail PIC and AVR Mirco controller.

Q.38 Explain in detail call and loop instructions of 8051.

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4th Sem. Branch: Instrumentation & Control
Sub : Micro Controller and embedded system

Time : 3 Hrs. M.M. : 100

SECTION-A

Note: Multiple type Questions. All Questions are compulsory. (10x1=10)

Q.1 8051 has an internal RAM of ?

a) 128 bytes b) 512 bytes
c) 256 bytes d) None of the above

Q.2 8051 has how many timers?

a) 2 b) 3
c) 1 d) 0

Q.3 Number of pins in 8051 microcontrollers with dual in line package is _____.

a) 30 b) 40
c) 60 d) 50

Q.4 LCALL instruction in 8051 takes _____ bytes

a) 2 b) 4
c) 3 d) 1

Q.5 Stack pointer of 8051 is of how many bits?

a) 4 b) 8
c) 16 d) None of the above

Q.6 Which of the following is an addressing mode of 8051?

a) Direct addressing b) Register addressing

c) Indexed addressing d) All of the above

Q.7 The instruction MOVA, R5 is an example of

a) Register addressing b) Indexed addressing

c) Indirect addressing d) None of the above

Q.8 Which of the following is not a logical instruction?

a) XOR b) SUB

c) AND d) None of the above

Q.9 Which of the following is not an advanced micro controller?

a) PIC b) 8052

c) AVR d) ARM

Q.10 8051 based embedded system are not used for _____.

a) Special purpose b) General purpose

c) Both A & B d) None of the above

Section-B

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

Q.11 Define micro controller.

Q.12 Give one application of micro controller.

Q.13 Expand ALU.

Q.14 What is interrupts?

Q.15 Function of SCON is?

Q.16 What is PIC micro controller?

Q.17 Give one example of arithmetic instruction.

Q.18 What is stack pointer?

Q.19 Expand RTOS.

Q.20 What is jump instruction?

Section-C

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

Q.21 What is micro controller? Give its advantages.

Q.22 What is embedded system? Give its Application.

Q.23 What do you mean by data pointer in 8051?

Q.24 Explain briefly A & B CPU registers of 8051 micro controller.

Q25 What do you mean by Flags in 8051?

Q.26 What do you mean by loop and jump instruction?

Q.27 Explain addressing modes of 8051?

Q.28 Explain internal memory of 8051?

Q.29 What are the design parameters and importance of embedded system?

Q.30 Give the overview of 8051 family.