

Branch: Instrumentation & Control

Semester: 4th

Subject Name: Microcontroller & Embedded Systems

Time Allowed : 3 Hrs.

MM:100

Section –A

Note: Multiple Choice questions. All questions are compulsory.

$$10 \times 1 = 10$$

Section-B

Note: Objective type questions. All questions are compulsory.

$$10 \times 1 = 10$$

- Q.11 What is MOV instruction?
 - Q.12 What is stack pointer?
 - Q.13 Addressing mode.
 - Q.14 Register.
 - Q.15 Stack
 - Q.16 What is Interrupt?
 - Q.17 Clock
 - Q.18 Define Embedded system?
 - Q.19 What is Compiler?
 - Q.20 Define microcontroller.

Section -C

Note: Short answer type Questions. Attempt any twelve questions out of fifteen questions.

$$12 \times 5 = 60$$

- Q.21 List the application of embedded system.
 - Q.22 Define addressing mode in brief.
 - Q.23 Write a short note on program computer and stack pointer.
 - Q.24 Write a short note loop instruction.
 - Q.25 What are microcontroller and their applications?
 - Q.26 What are the various intercepts of 8051?
 - Q.27 Explain the function of A and B PU register.
 - Q.28 Write a short note on PIC microcontroller.

- Q.29 Explain memory organization of 8051.
- Q.30 Define immediate and register addressing mode of 8051.
- Q.31 Compare the role of assemble and compiler.
- Q.32 Write a short note on arithmetic instruction.
- Q.33 What are the hardware unit in a system?
- Q.34 Give the brief idea about AVR.
- Q.35 What are application of Advanced microcontroller in the I & C.

Section-D

Note: Long answer questions. Attempt any two questions out of three questions.

2x10=20

- Q.36 Define embedded system and explain various applications of embedded system.
- Q.37 Explain pin diagram of 8051 micro-controller in detail.
- Q.38 Differentiate between microprocessor & microcontroller.