

B. Voc Robotics and Automation
Subject: Microprocessors and Microcontrollers
Subject Code: ECE-601
Semester: Third
Session: September 2022
Theory (External): 35 Marks
Time: 03 Hours

Instructions to the Students

1. This Question paper consists of two Sections. All sections are compulsory.
2. Section A comprises 10 questions of short answers type in nature. All questions are compulsory. Each question carries 1 mark.
3. Section B comprises 8 essay type questions out of which students need to do any 5. Each question carries 5 marks.
4. Read the questions carefully and write the answers in the answer sheets provided.
5. Do not write anything in the question paper.
6. Whenever necessary, the diagram drawn should be neat and properly labelled

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SECTION – A (OBJECTIVE TYPE QUESTIONS)
(10 × 1 = 10 Marks)

- A. Mostly ____ bit is an 8051 microcontroller.
- B. Expand PSEN Full form ____?
- C. What is an instruction ?
- D. What is TXD ?
- E. Define stack ?
- F. What is the use of ALE?
- G. Explain the difference between a JMP instruction and CALL instruction..
- H. List the major components of the Keyboard/ Display interface.
- I. What are the different types of methods used for data transmission?
- J. Write a program to add two 8-bit numbers using 8051?

SECTION – B (ESSAY TYPE QUESTIONS)

(5 × 5 = 25 Marks)

1. With suitable example, discuss about 8085 microprocessor instructions used for data manipulation.
2. Draw the pin diagram of 8051 microcontroller
3. What is the signal classification of 8085?
4. Explain the program memory and data memory structure of 8051 microcontroller

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5. Why do we need A/D converter and D/A converter?
6. Draw the block diagram to interface 8085 microprocessor with A/D converter and D/A converter
7. Difference between memory mapped I/O and peripheral I/O
8. Compare Microprocessor and Microcontroller.

END OF PAPER