



C14-EE-605

4747

**BOARD DIPLOMA EXAMINATION, (C-14)
OCTOBER/NOVEMBER-2018
DEEE-SIXTH SEMESTER EXAMINATION**

MICROCONTROLLERS AND ITS APPLICATIONS

Time : 3 Hours]

[Total Marks: 80

PART-A

3X10=30

- Instructions :**
1. Answer **All** questions.
 2. Each question carries **THREE** marks
 3. Answer should be brief and straight to the point

1. List any three differences between CISC and RISC.
2. What is Micro Processor and Microcontroller?
3. What is Nibble, Multiple Words, Byte?
4. List the interrupts of 8051.
5. List any six features of 8051.
6. List any six special function registers of 8051.
7. State the need for instruction set.
8. What is Machine Cycle and T-State?
9. List various symbols used in drawing flow charts.
10. Define subroutine.

PART-B

10X5=50

Instructions :

1. Answer any **five** questions.
2. Each question carries **ten** marks.
3. Answer should be comprehensive and the criterion for valuation is the content but not the length of the answer

11. Explain architecture of 8255 with the aid of a block diagram.
12. Draw the pin diagram of 8051 microcontroller and specify the purpose of each pin.
13. Explain the different group of instruction sets of 8051 with examples.
14. Explain addressing modes of 8051 with suitable examples.
15. Write program to sum up given N natural numbers with flow charts.
16. (a) Write a program to find sum of two 8-bit numbers.
(b) Write a program to find biggest data in an array.
17. Explain the working of a Stepper Motor interface with 8051.
18. Explain the working of a Traffic Light interface with 8051.
