



C14-EE-605

4747

BOARD DIPLOMA EXAMINATION, (C-14)

MARCH / APRIL - 2019

DEEE - VI SEMESTER EXAMINATION

MICRO CONTROLLERS & APPLICATIONS

Time : 3 Hours]

[Total Marks : 80

PART - A

3×10=30

Instructions :

- (1) Answer **ALL** questions.
- (2) Each question carries **THREE** marks.
- (3) Answer should be brief and straight to the point and shall not exceed five simple sentences.

- 1 State the features of INTEL-8085.
- 2 Distinguish between RISK and CISK processors (any three points).
- 3 Define the following terms :
 - (a) word
 - (b) byte
 - (c) nibble
 - (d) bit
- 4 List the features of 8051 microcontroller.
- 5 List any six special function registers of 8051 microcontroller.
- 6 Explain the bit significance of PSW.
- 7 Distinguish between machine language and assembly language (any four points).
- 8 Define fetch cycle, execution cycle, instruction cycle.
- 9 Define subroutine and mention its use.
- 10 List the various symbols used in flow charts.

4747]

1

[Contd...

PART - B

10×5=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 the basic fundamental blocks of 8085-microprocessor.
- 12 Draw the functional block diagram of 8051. Explain the functions of each block.
- 13 Explain various addressing modes supported by 8051 with suitable examples.
- 14 Explain any five arithmetic instructions of 8051 by giving one example for each.
- 15 Write a programme to generate a time delay of 5ms assume crystal frequency is 11.0592 MHz.
- 16 Write a program to convert a given HEX number to BCD number.
- 17 Explain the working of 8051 microcontroller in traffic light controller.
- 18 Explain the working of 8051 microcontroller as keyboard interface.