C14-CM-404/C14-IT-404

4452

BOARD DIPLOMA EXAMINATION, (C-14)

OCT / NOV-2017

DCME-FOURTH SEMESTER EXAMINATION

MICROPROCESSORS

Time : 3 Hours]

[Total Marks : 80

 $3 \times 10 = 30$

PART - A

- *Instructions* : (1) Answer all questions.
 - (2) Each question carries **three** marks.
 - (3) Answers should be brief and straight to the point and shall not exceed five simple sentences.
- 1. Define the terms Micro Processor and Micro Computer.
- 2. Define the terms Instruction cycle and Machine cycle.
- **3.** List any three instruction formats of 8086.
- 4. List any three assembler directives.
- 5. Write a short note on 8086 software interrupts.
- 6. List the of 8086 interrupts.
- 7. List the advantages of Assembly Language programs.
- 8. List the schemes of programmed data transfer.

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- **9.** Differentiate between BSR and Parallel I/O modes of 8255.
- 10. What are the functional units of 80386?

PART - B
$$10 \times 5 = 50$$

Instructions : (1) Answer any **five** questions.

- (2) Each question carries **ten** marks.
- (3) Answers should be comprehensive and the criteria for valuation is the content but not the length of the answer.
- 11. a) Draw the pin diagram of 8086 microprocessor and represent each pin.
 - b) Explain the execution process of 8086 Assembly language program.
- 12. List and explain any five arithmetic instructions of 8086 with examples.
- **13.** List and explain 8086 Addressing modes.
- 14. Draw the functional block diagram of 8259A and explain each block of it.
- **15.** Write and explain an assembly language program to arrange a given series of hexadecimal bytes in ascending order with example.
- **16.** Draw the internal block diagram of 8255 PPI and explain the function of each unit.
- 17. Briefly explain the Operating modes of 8257.
- **18.** Explain the architecture of Pentium-II Processor.

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