Roll No. Total No. of Questions: 07]

[Total No. of Pages: 01

BCA (Sem. 3rd) INTRODUCTION TO MICROPROCESSOR SUBJECT CODE: BC - 305 Paper ID: [B0213]

[Note: Please fill subject code and paper ID on OMR]

Time: 03 Hours Maximum Marks: 60

Instruction to Candidates:

- 1) Section A is Compulsory.
- 2) Attempt any **Four** questions from Section B.

Section - A

 $(10 \times 2 = 20)$

- a) What are various arithmetic instructions? Explain with examples.
- b) What is DMA? Explain its working.
- c) What is need of clock generator? Explain.
- d) What is co processor? Explain the working of arithmetic co processor.
- e) What is micro instruction? Explain with example.
- f) What is interrupt cycle? Explain.
- g) What is basic principle of 8237 DMA Controller?
- h) List any five latest microprocessors available in commercial market.
- i) What are logical instructions? Explain with example.
- j) What are various types of pins in 8086 microprocessor?

Section - B

 $(4 \times 10 = 40)$

- **Q2**) What are basic components of 8085 microprocessor? Explain the need and functionality of each component.
- Q3) Define instruction? What is its format? Explain various data transfer instruction available in 8085 microprocessor with examples.
- **Q4**) What is interrupt? Explain its types? Draw and explain working of 8257 interrupt controller.
- **Q5**) Write note on the following:
 - Branch instructions
 - Real and protected memory addressing.
- **Q6**) What are addressing modes? Why we have number of addressing modes. Explain the difference between immediate, relative and index addressing modes.
- **Q7**) What is microprocessor? How it is different from microcontroller? Discuss the evolution of microprocessors.

- - -