(Pages : 2)

FIFTH SEMESTER B.TECH. (ENGINEERING) DEGREE
EXAMINATION, NOVEMBER 2013

EC 09 505-MICROPROCESSORS AND MICROCONTRO

Time: Three Hours

Maximum: 70 Marks

## Part A

Answer all questions.

Each question carries 2 marks.

- 1. What is the difference between 8086 and 8088?
- 2. Distinguish between the idle state and a wait state.
- 3. Write the status register format of 8255.
- 4. What is the function of PSW in 8051.
- 5. Where DMA controllers are used?

 $(5 \times 2 = 10 \text{ marks})$ 

## Part B

Answer any four questions. Each question carries 5 marks.

- 6. Explain the I/O space of 8088 system.
- Explain the organisation of address space of 8086.
- 8. Why are segment registers provided in 8086? State the function of each segment register.
- Explain the BSR mode of 8255.
- 10. Explain the port 3 configuration of 8051.
- Explain the modes of operation of 8279.

 $(4 \times 5 = 20 \text{ marks})$ 

## Part C

Answer all questions.

Each question carries 10 marks.

12. Discuss the software model of 8086.

Or

13. Write an Assembly language program to count, how many times a given number is present in an array of N numbers.

14. Describe the maximode mode configuration of 8086.

Or

- 15. Bring about the features of various memory devices in detail.
- 16. Describe the operation of 8237 with the help of a suitable diagram.

Or

- 17. Discuss the operation of 8251.
- 18. Explain the architecture of 8051.

Or

19. Discuss about ARM processors.

 $(4 \times 10 = 40 \text{ marks})$