D 30953 (Pages : 2) Name.....

Reg. No.....

FIFTH SEMESTER B.TECH. (ENGINEERING) DEGREE EXAMINATION
OCTOBER 2012

EC 09 505—MICROPROCESSORS AND MICRO CONTROLLERS

(2009 Scheme)

Time : Three Hours Maximum : 70 Marks

Part A

1. What is the difference between 8086 and 8088 ?
2. What is the function of 8289 bus arbiter in a maximum mode 8086 system ?
3. What is 2-key lock out ?
4. When an interrupt is activated, what is the first step taken by 8051 ?
5. What is the difference between instruction pointer and a program counter ?

(5 × 2 = 10 marks)

Part B

6. Explain the function of BIU.
7. Explain the read and write cycle of DRAM.
8. Compare the performance of serial and parallel communication techniques.
9. Describe the organisation of memory in 8051.
10. Explain the mode 2 operation of 8255.
11. Distinguish between ARM7 and ARM9 processor.

(4 × 5 = 20 marks)

Part C

12. Discuss the functional block diagram of 8088 processor.

Or

13. (a) Write an assembly language program to find the average of N numbers. (5 marks)

    (b) Explain about I/O space of 8086. (5 marks)

14. Describe low the co-processor is interfaced with 8086. Also explain its operation.

Or

Turn over

15. Discuss the system memory circuit interface and its operation.

16. Describe the modes of operation of timer 8253.

Or

17. Discuss the working of interrupt controller.

18. Discuss about the timer, serial port and analog to digital converter of 8051.

Or

19. Describe in detail about ARM processor.

(4 × 10 = 40 marks)