

Madras University

B.C.A Computer Application Microprocessor and it applications Question paper

PART-A(2 marks)

- 1.what is a microcomputer?
- 2.what is an assembler?
- 3.list the four operations of commonly performed by the mpu.
- 4.list the arithmetic operations related to memory.
- 5.list the various addressing modes of 8085.
- 6.write the steps for converting a 2-digit BCD number into its binary equivalent.
- 7.what is time delay?
- 8.define looping and indexing.
- 9.what is a subroutine?
- 10.what is a TRAP?
- 11.what are the two signals available on the 8085 for DMA controller?
- 12.what are the functions of the instruction SIM?

PART-B(5 marks)

- 13.discuss the internal data operations of 8085.
- 14.discuss any three instructions related to rotating the accumulator bits.
- 15.explain the three categories of branch instructions.
- 16.explain the concept of designing a counter
- 17.write a subroutine to subtract one packed BCD number. the minuend is placed in register B, and the subtrahend is placed in register C by the calling program. return the answer into the accumulator.
- 18.explain the three steps to communicate with peripherals through 8255A.
- 19.explain the two DMA execution modes.

PART-C(10 marks)

- 20.discuss the internal architecture of the 8085
- 21.explain the arithmetic instructions with example.
- 22.discuss about subroutine documentation and parameter passing.
- 23.write a program to count continuously in hexadecimal from FFH to 00H in a system with a 0.5 micro second clock period. use register C to set up a one millisecond delay between each count and display the numbers at one of the output ports.
- 24.explain the various 8085-vectorized interrupts