V Semester B.C.A. Degree Examination, April/May 2023
(CBCS) (Freshers + Repeaters)
COMPUTER SCIENCE
BCA 505T : Microprocessor and Assembly Language

Time : 3 Hours

Max. Marks : 70

*Instruction : Answer **all** Sections.*

SECTION – A

I. Answer **any ten** questions. **Each** question carries **two** marks. **(10×2=20)**

1) Define Microprocessor. Give any two examples.

2) What is an instruction format ?

3) Define Program Counter and Stack Pointer.

4) What is DAA and LDA instruction ?

5) What is Machine Cycle ?

6) What is Subroutine ?

7) What are counters and time delays ?

8) Define Indexing.

9) What is handshake signals ?

10) What is I/O interfacing ?

11) What is asynchronous data transfer ?

12) What is interrupt ?

P.T.O.

SECTION – B

II. Answer **any five** questions. **Each** question carries **ten** marks.   (5×10=50)

13) Explain the functional block diagram of 8085 microprocessor.   **10**

14) Explain in detail the various addressing modes.   **10**

15) a) Write an assembly program to multiply two-digit BCD.   5

    b) Write a program to add two 16-bit number.   5

16) a) What is a stack ? Explain PUSH and POP operation.   5

    b) Explain unconditional Jump Instructions.   5

17) a) Explain nesting of subroutine with an example.   5

    b) Explain CALL and RET instruction.   5

18) a) Explain SIM and RIM instruction.   5

    b) Differentiate between peripheral mapped I/O and memory mapped I/O.   5

19) a) Explain the functional block diagram of 8255 PPI.   5

    b) Explain the Interfacing Devices.   5

20) Write a short note on:

    a) DMA   5

    b) Data transfer instructions in 8085   5

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