15525

Reg. No. | | | | | | | | |

V Semester B.C.A. Degree Examination, April - 2022

COMPUTER SCIENCE

Microprocessor & Assembly Language

Paper : BCA 505 T

(CBCS Scheme)

Time : 3 Hours **Maximum Marks : 70**

Instructions to Candidates:

Answer all sections.

SECTION - A

Answer any **Ten** questions. Each question carries **Two** marks. **(10×2=20)**

1. What is microprocessor.
2. Define program counter and stack pointer.
3. Mention compare instructions.
4. What is mnemonic. Give example.
5. What is the difference between MOV and MVI instructions.
6. Name any 4 addressing modes of 8085.
7. Briefly explain PUSH and POP instructions.
8. What is a counter? Mention its types.
9. What are handshake signals?
10. Explain SID and SOD pins of 8085.
11. What is memory interfacing?
12. What is DMA?

SECTION - B

Answer any **Five** questions. Each carries **10** marks. **(5×10=50)**

13. Explain the architecture of 8085 with a neat diagram. **(10)**
14. a) Explain instruction set classification based on word size. **(5)**

    b) Explain any 5 data transfer operations. **(5)**

[P.T.O.

15. a) Write a program to subtract two 16 bit numbers. (5)

b) Explain conditional jump instructions. (5)

16. a) Write a program to find square root of a number using look up table. (5)

b) Explain the different types of flags. (5)

17. a) Define subroutine. Explain CALL and RET instructions. (5)

b) Write a short note on demultiplexing of address bus in 8085. (5)

18. a) Explain the following instructions. (5)

1. XCHG.
2. LHLD
3. ADC M
4. INR R
5. DCR M

b) Compare memory mapped I/O and peripheral I/O. (5)

19. Explain the different addressing modes. (10)

20. a) Explain the different types of buses. (5)

b) Briefly explain error checking methods. (5)
