



SN – 666

V Semester B.C.A. Degree Examination, Nov./Dec. 2017  
(CBCS) (F+R) (2016-17 and Onwards)  
BCA – 505 : MICROPROCESSOR AND ASSEMBLY LANGUAGE

Time : 3 Hours

Max. Marks : 70

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

SECTION – A

Answer **any ten** questions. (10×2=20)

1. What is Microprocessor ? Give the word length of 8085 Microprocessor.
2. Explain Program Counter and Stack Pointer.
3. Write any two examples for 3 byte Instructions.
4. Explain Instruction DAD D.
5. What is a Subroutine ?
6. Define counting and looping.
7. Define Maskable and Non-maskable interrupts of 8085.
8. Explain SID and SOD Pins of 8085.
9. Compare POP and PUSH Instruction.
10. What are handshake signals ?
11. What is I/O Interfacing ?
12. Find the number of bytes required to store the following instructions :
  - 1) LXID, 8500
  - 2) CPI FFH.

P.T.O.



## SECTION - B

Answer any five questions.

(5×10=50)

13. Draw the architecture of 8085 microprocessor and briefly explain. 10
14. a) What are flags ? Draw the format of flag register and explain their function. 5  
b) Write a program to load 07F in the register B and find its 2's complement. 5
15. a) Write an assembly language program to multiply two digit BCD. 5  
b) Write a program to add two-16-bit nos. 5
16. a) What is a stack ? Explain PUSH and POP operation. 6  
b) Explain unconditional Jump Instructions. 4
17. a) Explain the following instructions of 8085 : 6  
i) STAXD  
ii) CMPM  
iii) XCHG.  
b) Explain nesting of subroutine with an example. 4
18. a) Explain CALL and RETURN operations in 8085. 5  
b) Explain RIM and SIM Instructions. 5
19. What is Interrupt ? Explain various interrupts of 8085. 10
20. Write short notes on :  
a) Addressing modes of 8085 5  
b) Data transfer instructions in 8085. 5
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