

Code No: SS30702E

Sub. Code: SSCA4A

B.C.A. (CBCS) DEGREE SPECIAL SUPPLEMENTARY EXAMINATION, APRIL 2020

FOURTH SEMESTER

COMPUTER APPLICATION

SKILL BASED SUBJECT – MICROPROCESSOR

(For those who joined in July 2017 onwards)

Time : Three hours

Maximum: 75 marks

Part – A (10 X 1 = 10 marks)

Answer all questions, choose the correct answer

Answer the Following:

1. A ^{Central} processing unit fabricated on a single chip of semiconductor is called:
 - a) Microprocessor
 - b) RAM
 - c) ROM
 - d) None of these
2. Which of these is the Components of Computer?
 - a) System Bus
 - b) CPU
 - c) Memory Unit
 - d) All of these
3. The signal sent to the device from the processor to the device after receiving an interrupt is
 - (a) Interrupt-acknowledge
 - (b) Return signal
 - (c) Service sigma
 - (d) Permission signal
4. The time between the receiver of an interrupt and its service is
 - (a) Interrupt delay
 - (b) Interrupt latency
 - (c) Cycle time
 - (d) Switching time
5. The _____ ensures that only one IC is active ^{at} a time to avoid a bus conflict caused by two ICs writing different data to the same bus.
 - (a) Control bus
 - (b) Control instructions
 - (c) Address decoder
 - (d) CPU
6. CMA _____ the accumulator content.
 - (a) Counts
 - (b) Complements
 - (c) Cycles
 - (d) Rotates
7. RET instruction transfers the control from _____ to _____.
 - (a) main routine to sub routine
 - (b) sub routine to main routine
 - (c) subroutine to SP
 - (d) subroutine to IP
8. Stack Pointer is initialized with the _____ instruction
 - (a) PUSH
 - (b) LXI
 - (c) RET
 - (d) Pop
9. CALL BCD7SEG
 - (a) BCD7SEG is OPCODE
 - (b) CALL is subroutine
 - (c) BCD7SEG is a subroutine
 - (d) None of the above
10. RLC means
 - (a) Rotate Accumulator Right through carry
 - (b) Rotate Accumulator Left
 - (c) Rotate Accumulator Right
 - (d) Rotate Accumulator Left through carry

Part-B (5 x 5 = 25 Marks)

11. a) Write a note on Memory and Instruction Fetch.
Or
b) Explain about the compiler and an interpreter.
12. a) Explain Peripheral or externally initiated operations.
Or
b) Write note on ALE, CS, RD and WR, CS, WR, RD?
13. a) Explain the execution of Sort Program.
Or
b) What is the interrupt? How the interrupts are classified?
14. a) Write about Conditional Call and return instructions.
Or
b) Write about ROM and memory mapped I/O.
15. a) write a note on Subroutine documentation and parameter parsing.
Or
b) Explain BCD addition and multi byte subtraction.

Continuation Sheet

PART - C (5 x 8 = 40 Marks)

16. a) Explain the various memory classification in detail.

Or

b) Explain the instruction format of 8085.

17. a) 17. a) Describe the various logic operations of 8085.

Or

b) Discuss about the internal data operation and the 8085/8088A register.

18. a) Explain the following with example.

(a) BCD to Binary

(b) Binary to BCD

Or

b) Explain an 8085 assembly language program to find smallest number from an array of numbers.

19. a) Discuss in detail about 8085 multiple interrupt.

Or

b) Explain about the call & return instruction in detail.

20. a) With an assembly language program and explain the BCD to seven segment LED code conversion.

Or

b) Explain about the 8085 assembly language program to multiply two BCD numbers.