QP CODE: 24027730

24027730

Reg No : .....

Name : .....

B.Sc DEGREE (CBCS) REGULAR / IMPROVEMENT / REAPPEARANCE EXAMINATIONS, OCTOBER 2024

Third Semester

B.Sc Physics Model III Electronic Equipment Maintenance

Core Course - PH3CRT25 - MICROPROCESSOR AND ITS APPLICATIONS

2017 Admission Onwards

5E53DD8C

Time: 3 Hours Max. Marks : 60

Part A

*Answer any **ten** questions.*

*Each question carries **1** mark.*

1. Why 8085 processor is called an 8 bit processor?
2. How is the READY signal used in 8085?
3. How many address lines are necessary on the chip of 2K byte memory?
4. Explain Opcode and Operand.
5. Explain the action taking place during the instruction DCX rp.
6. Write an instruction to clear Carry Flag.
7. Specify the opcode and operand in the instruction LDA 8010.
8. What is the difference between call and jump instructions?
9. Assume that register B contains 08H and register C contains 40H. Transfer the content of register C to register B. What is the suitable instruction for this operation?
10. What are the control pins in port C when port A of the 8255A is set up as Mode 2?
11. What are the input modes on 8279?
12. What are the advantages of automatic traffic light?

(10×1=10)

Part B

*Answer any **six** questions.*

*Each question carries **5** marks.*

13. What is interrupts? Explain the registers associated with interrupts.
14. Diffrentiate different computer languages with example.
15. Draw the timing diagram of OUT port instruction.
16. Exlain the different branching instructions of 8085 microcontroller.
17. Exlain the different machine control instructions of 8085 microcontroller. What is its applications in programming.
18. Write a program to add B9 and 89. Specify the contents of accumulator and the status of the flags S, Z, P, AC and CS.
19. Write a 8085 assembly language program to generate a 15ms delay. Assume clock frequency is 3MHz.
20. What are the control words of 8251? what are its function?
21. What is the working principle of stepper motor?

(6×5=30)

Part C

*Answer any **two** questions.*

*Each question carries **10** marks.*

22. Name the different control signals of 8085 microprocessor and explain the use of each one.
23. Write a program to find the largest number in a set of numbers.
24. Explain the working of digital clock.
25. With neat sketch explain the working of washing machine control system.

(2×10=20)