

1. What is instruction set? Explain the various kinds of instruction of 8085 microprocessor. 5
2. Explain the addressing modes of 8085 microprocessor with examples. 5
3. What is flag? Explain the flags that are present in 8085 processor. 5
4. What are the instructions available in 8085 microprocessor for arithmetic and logic operation? Explain each with examples. Also, mention how the flags are affected by these instructions. 10
5. Explain the application of different flags with suitable examples. 5
6. Write and Explain the assembly language Program to multiply 05H and 06H.
7. Describe different types of 8085 instructions sets, based on word size, with suitable examples. Write instructions to load two hexadecimal numbers 32H and 48H in register A and B. Add the numbers and display the sum of LED output PORT 1. 10
8. Draw and explain the functional block diagram of 8085 microprocessor. 10
9. Write a program in 8 bit microprocessor to multiply 16 bit numbers and store the result in the memory location starting from 3500H. Save the carry bits in the location starting from 3600H. 10
10. Compare and contrast microprocessor, CPU and microcontroller. 5
11. Define bus. Describe the functions of different types of buses in reference to the 8085 microprocessor. 5
12. Define maskable and non-maskable interrupt. Explain the role of TRAP in microprocessor. 5
13. Explain the operation of 8085 microprocessor using block diagram. Justify that design of control unit is more difficult. 10
14. What do you mean by addressing mode? Discuss different types of addressing modes with example. 10
15. Write a program in 8 bit Microprocessor to store 68H, B3H, C0H and 11H in the memory location starting from 3000H. Move these data and store in the memory location starting from 3200H. 10
16. Explain the importance of addressing modes in the microprocessor? Discuss different types of addressing modes with suitable examples. 10
17. Write a program in 8 bit Microprocessor to multiply two 16 bit Numbers (ABCDH and 1234H) and store the result in the memory location starting from 3000H. 10

18. Write an assembly language program to add two 16 bit numbers (3467H and ACDCH). 5
19. Explain three types of Flags with Suitable Examples. 5
20. Explain the application of flags in the microprocessor. Discuss different types of flags with suitable examples. 10
21. Write a program in 8-bit Microprocessor to Store 60H, BAH, 7CH and 10H in the memory location starting from 2000H. Add these data and store the result in 300H and Carry Flag in 5001H. Explain all the steps. 10
22. Draw the block diagram of basic microprocessor and explain it. Which block design is simple and explain it. 10
23. Why addressing modes are required in microprocessor? Discuss the different types of addressing modes with suitable examples. 10
24. Write a program in 8 bit Microprocessor to multiply two 16 bits numbers and store in the memory location starting from 3500H. Save the carry bits in the location starting from 3600H. 10
25. Explain LXI and CMP instructions. Write an assembly language program for 8 bit microprocessor to divide 8-bit data stored in memory location 8085 by 8 bit data stored in 8085 and store the quotient in 8052 and remainder in 8053. 10
26. Explain the different types of instruction groups of 8085. 5