

- [illegible]

Fig 1.

- P.T.O. —

9. Two sets of three readings each are stored in memory. Write a program and draw the flowchart to sort the readings in descending order, assuming that the two sets are separated by word FFH. [4]

10. Write a program to insert a string of four characters from the tenth location in the given array of 50 characters. [4]

11. Read the following program and answer the questions. [2]

2000 LXI SP, 2100 H
2003 LXI B, 0000 H
2006 PUSH B
2007 POP PSW
2008 LXI H, 200B H
200B CALL 2064 H
200E OUT 01 H
2010 HLT

DELAY:

LOOP:

2064 PUSH H
2065 PUSH B
2066 LXI B, 80FF H
2069 DCX B
206A MOV A, B
206B ORA C
206C JNZ LOOP
206F POP B
2070 RET

- What is the status of the flags and the contents of the accumulator after the execution of the pop instruction located at 2007 H?
- Specify the stack locations and their contents after the execution of the call instruction (not the call subroutine)
- What are the contents of the stack pointer register and the program counter after the execution of call instruction?
- Specify the memory location where the program returns after the execution of subroutine?