**Q.3: Assume SP=0100h before the start of very first instruction “CALL 0107” in the following program. Answer the questions given at the end: [10]**

177F:0100 E80400 CALL 0107

177F:0103 B44C MOV AH,4Ch

177F:0105 CD21 INT 21

177F:0107 50 PUSH AX

177F:0108 53 PUSH BX

177F:0109 DIE0 SHL AX,1

177F:010B B0A1 MOV AL,A1

177F:010D 5B POP BX

177F:010E 58 POP AX

177F:010F C3 RET

1. What is the value of IP after the execution of instruction CALL 0107?

0107

1. What would be in SP after the execution of “CALL 0107” instruction?

00fe

1. What is in SP after the execution of PUSH AX instruction?

00fc

1. What is in SP after the execution of RET instruction?

0100

1. What is in IP after the execution of RET instruction?

0103