

TOPIC NAME : _____

DAY : _____

TIME : _____

DATE : / /

(20) JMP BX

$$PA = DS * 10h + BX$$

$$= 1000 * 10 + 2000$$

$$= 10000 + 2000 = 12000h$$

$$IP = 2010h$$

$$PA \text{ of } \text{inc} = CS * 10h + IP$$

$$= 3000 * 10 + 2010$$

$$= 30000 + 2010$$

$$= 32010h$$

$$(17) a) PA = SS * 10h + [BP + SI + 2000h]$$

$$= 2000 * 10h + [2000 + 3000 + 2000]$$

$$= 2000 * 10h + 6000$$

$$= 27000h$$

$$b) 7856h$$

18) MOV BX, [BP + SI]

01M

$$\begin{aligned}
 PA &= SS * 10h + [BP + SI] \\
 &= 2000 * 10 + [0500 + 0100] \\
 &= 20000 + 0600 \\
 &= 20600h
 \end{aligned}$$

Data: 7856h

19)

$$\begin{aligned}
 PA &= DS * 10h + [SI + 1000h] \\
 &= 1000 * 10 + (2000 + 1000) \\
 &= 10000 + 3000 \\
 &= 13000h
 \end{aligned}$$

IP = ~~AB12h~~ 3412h

Physical address of JMP [SI + 1000h]

$$\begin{aligned}
 &= CS * 10h + IP \\
 &= 3000 * 10 + ~~AB12~~ 3412 \\
 &= 30000 + ~~12 AB12~~ 3412 \\
 &= ~~30012~~ ~~3AB12h~~ 33412h
 \end{aligned}$$