Consider AX = 1212h; BX= 1B1Bh; CX=2323h; DX=2C2Ch; SI= 0050h; DI = 0110h; SP=23h; BP= 0100h; DS=1010h

Calculate the effective address/physical address of the following instructions:

(i) MOV AX, [2000h]

(ii) MOV AX, 20h[BP]

(iii) MOV AX, 40h[BX][DI]

(iv) MOV AX, 500h

(v) MOV AX, BX

(i) Effective Address = Base + Offset = DS x 10 + Offset = 10100 + 2000 = 12100 h

(ii) Effective Address = DS x 10 + [BP] + 20 = 10100 + 0100 + 20 = 10220 h

(iii) Effective Address = DS x 10 + [BX] + [DI] + 40 = 10100 + 1B1B + 0110 + 40 = 11D6B h

(iv) No effective or physical address

(v) No effective or physical address