Quiz No. _FOUR_   **FA22-BCE-B**

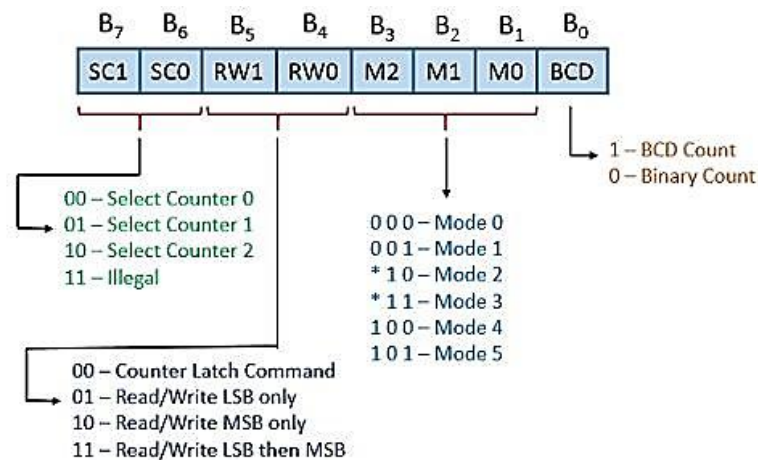| Name	
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Total Marks: 10   **Time: 15 Minutes**

Problem: Write an 8086/88 assembly language code that generates a pulse of 50 ms from counter 0 of 8254 counter. The counter is interfaced with CPU at ABCCH and onwards. Clock for 8254 is 10 MHz. Figure below shows the structure of control word register of 8254 counter,

Format of Control Word of 8254 Timer

Code:

```
; COUNTER 0, LSB THEN MSB, MODE 0 (HARDWARE ONE-SHOT), BINARY
MOV AL, 00110000B     ; SC0 (00), RW (11), MODE 1 (000), BCD (0)
MOV DX, 0ABCFH        ; CONTROL REGISTER ADDRESS
OUT DX, AL            ; WRITE CONTROL WORD


; LOAD COUNTER 0 WITH COUNT = 50,000 (C350H)
MOV AX, 50000         ; COUNT FOR 5 MS (ADJUST FOR 50 MS EXTERNALLY)
MOV DX, 0ABCCH        ; COUNTER 0 ADDRESS
OUT DX, AL            ; WRITE LSB
MOV AL, AH
OUT DX, AL            ; WRITE MSB
```