AZETECH SOLUTIONS

Level -1 Test (Timers)

1. What are the applications of timer0, 1, 2?
2. What is maskable and un-maskable interrupts?
3. What is the need of Sync with internal clocks block in timer0?
4. Draw the system model of Timer1.
5. What is synchronous and asynchronous counter?
6. What is prescalar and postscalar? Why FOSC is divided by 4 for internal peripherals?
7. Which flip flop is mostly used in prescalar?
8. Write the calculation for 200ms using timer0.
9. What is watchdog timer?
10. What is the main principle of timers?
11. What is glitchless operation in PWM?
12. What is the resolution of PWM? Write the registers where each bits are stored.
13. What are the special events will be executed during Compare mode?
14. Write the applications of capture mode.
15. What is the necessary of external oscillator for timer1?
16. How many interrupts in PIC16f877a? Name all of those interrupts.
17. What is vectored & Non vectored interrupts?
18. Difference between interrupt, polling and exceptions?
19. What will be happen if 2 interrupts are involved and raised on same time?
20. What is ISR and IRQ?Address location of interrupt &reset
21. What are the modes available in capture & compare.
22. Write the calculation for obtaining 1500 Hz Frequency from PWM.
23. What is PR2 register? Where it’s used ?
24. Draw the block diagrams for timer0,1,2 and CCP modules and defines Formulas for all timers.
25. What is PSA and what it is used in timer?
26. Write pwm program for 77%duty cycle and Draw thw waveforms.