

26 Lecture - CS302

Important Mcqs

1. **What is the maximum supply voltage for the 555 Timer?** a. 5V b. 10V c. 15V d. 20V

Solution: c. 15V

2. **In which mode does the 555 Timer operate as a free-running oscillator?** a. Astable mode b. Monostable mode c. Bistable mode d. None of the above

Solution: a. Astable mode

3. **What is the duty cycle of an astable 555 Timer circuit?** a. 50% b. 75% c. 25% d. 60%

Solution: a. 50%

4. **Which pin of the 555 Timer is connected to the timing capacitor?** a. Pin 1 b. Pin 2 c. Pin 3 d. Pin 5

Solution: b. Pin 2

5. **What is the function of the discharge transistor in the 555 Timer?** a. To discharge the timing capacitor b. To amplify the output signal c. To provide bias voltage to the comparators d. None of the above

Solution: a. To discharge the timing capacitor

6. **In which mode does the 555 Timer operate as a flip-flop?** a. Astable mode b. Monostable mode c. Bistable mode d. None of the above

Solution: c. Bistable mode

7. **What is the function of the reset pin in the 555 Timer?** a. To reset the timing cycle b. To trigger the timing cycle c. To control the output stage d. None of the above

Solution: a. To reset the timing cycle

8. **Which type of capacitor is preferred for use as the timing capacitor in the 555 Timer?** a. Ceramic capacitor b. Electrolytic capacitor c. Tantalum capacitor d. None of the above

Solution: b. Electrolytic capacitor

9. **What is the typical operating frequency range of an astable 555 Timer circuit?** a. 1 Hz - 10 Hz b. 10 Hz - 100 Hz c. 100 Hz - 1 kHz d. 1 kHz - 10 kHz

Solution: d. 1 kHz - 10 kHz

10. Which pin of the 555 Timer is connected to the timing resistor? a. Pin 1 b. Pin 2 c. Pin 3 d. Pin 5

Solution: c. Pin 3