## 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