

Quiz 1:

1. What is an embedded system?

- A. A general-purpose computer
- B. A system designed to perform a specific task
- C. A cloud-based application
- D. A mobile phone network

2. Which of the following is an example of an embedded system?

- A. Laptop computer
- B. Desktop PC
- C. Washing machine controller
- D. Web browser

3. What is the main role of a microcontroller in an embedded system?

- A. Display graphics
- B. Connect to the internet only
- C. Control hardware and execute a specific program
- D. Store photos and videos

4. The BH1750 sensor is used to measure which physical quantity?

- A. Temperature
- B. Humidity
- C. Light intensity
- D. Sound level

5. What unit does the BH1750 measure light intensity in?

- A. Candela
- B. Lumen
- C. Lux
- D. Watt

6. How does the BH1750 communicate with a microcontroller?

- A. UART
- B. SPI
- C. I2C
- D. Analog signal

7. Which two pins are mainly used for I2C communication with the BH1750?

- A. TX and RX
- B. SDA and SCL
- C. VCC and GND
- D. A0 and D0

8. Why is the BH1750 suitable for embedded systems?

- A. It outputs analog voltage
- B. It has a built-in display
- C. It provides digital light measurements directly
- D. It requires high power

9. Which microcontroller board is commonly used with the BH1750 in embedded projects?

- A. Arduino Uno
- B. ESP8266 / ESP32
- C. Raspberry Pi Pico
- D. All of the above

10. In an embedded smart lighting system, what can the BH1750 be used for?

- A. Measuring temperature
- B. Detecting motion
- C. Automatically controlling light brightness based on ambient light
- D. Playing audio