LED-LDR-SENSORS-26MCQ-EM-11

ITI Quiz - - -2026 03:50 PM

Q. ID: ITISKILL7832FR

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Duration: 30 Mins | **Total Marks: 26** | **ID: ITISKILL7832FR**

Student Name: _____ Roll No: _____

1. Which measuring instrument is used to check the working condition of a photo resistor (LDR)?

A) Voltmeter
B) Ohmmeter
C) Oscilloscope
D) Ammeter

2. What is the maximum reverse voltage that can be applied across the general purpose LED?

A) 32 V
B) 8 V
C) 15 V
D) 12 V

3. Which purpose the cadmium sulfide cells (CDS cells) are used?

A) Voltage dependent resistor
B) Primary cells
C) Rechargeable cells
D) Light dependent resistor

4. What is the forward voltage drop of single colour Red LED?

A) 2.1 V
B) 2 V
C) 1.8 V
D) 2.2 V

5. Which is the combination of photo transistor?

A) Photo resistor and TRIAC
B) LASER diode and pin diode
C) Photo diode and transistor
D) Photo transistor and DIAC

6. Which circuit photo SCR opto couplers are used?

A) Counter circuits
B) Amplifier circuits
C) AC powered circuits
D) DC circuits

7. What is the drawbacks of LDR?

A) Made of low resistance material with few holes
B) More sensitive
C) Available different sizes and specifications
D) Cannot be used to determine precise light levels

8. Which circuit uses photo-darlington devices?

A) Amplifier circuits
B) AC powered circuits
C) Counter circuits
D) DC circuits

9. What is the use of photo transistor?

A) Used in comparator circuit
B) Used as demodulator
C) Used as oscillator
D) Used as light controlled switch

10. Which electronic device inversely changes its resistance with the amount of light falling on it?

A) Photo voltaic cells
B) Photo diodes
C) Photo resistors
D) Photo transistors

11. What is the minimum forward current If for single colour LEDs?

A) 10 MA
B) 30 MA
C) 20 MA
D) 5 MA

12. What is the main application of photo resistor?

A) Voltage rectification
B) Controls of street lighting systems
C) Demodulation purpose
D) To generate oscillations

13. Which material is used to make LDR for lower end requirements?

A) Copper sulfide
B) Cadmium sulfide
C) Zinc sulfide
D) Aluminium sulfide

14. What is the function of opto-coupler in the switching operation of digital input signal?

A) Produces electrical noise signal
B) Defects the operation of switching signal
C) Converts voltage into current
D) Amplifier the signal

15. How the light sensitive photo transistor enclosed inside a tight package is activated?

A) By the light sensitive receiver inside
B) By IR light produced inside the package
C) By the external signal to the transistor
D) By the bias voltage to the photo transistor

16. Which of the device is opto-coupled TRIACS?

A) BT136
B) 2N2648
C) MOC3020
D) B3202

17. What is the forward voltage for the single colour orange LEDs?

A) 0.5 V
B) 2 V
C) 2.5 V
D) 0.8 V

18. Which material is used to make LDR for higher end requirements?

A) Zinc sulfide
B) Copper sulfide
C) Lead selenide
D) Cadmium sulfide

19. What is the type of transistor BPX81?

A) Audio frequency transistor
B) Uni - Junction transistor
C) NPN - Photo transistor
D) PNP - Photo transistor

20. What is the advantage of PIN photo diodes?

A) Low sensitivity in the infrared range
B) Medium sensitivity in the infrared range
C) High sensitivity in the infrared range
D) Low sensitivity in the Ultraviolet range

21. Which material is used to make photo resistors (LDR)?

A) Silicon
B) Cadmium sulfide
C) Aluminium
D) Germanium

22. What is the advantage of photo transistors over photo diodes?

A) Considerably lower sensitivity
B) Considerable greater sensitivity
C) Limit voltage handling capacity
D) Vulnerable to electrical sources

23. What is the typical forward voltage drop of the RED colour LED?

A) 1.8 V
B) 2.2 V
C) 2 V
D) 2.1 V

24. What is the typical forward voltage drop of the yellow colour LED?

A) 2 V
B) 2.1 V
C) 1.8 V
D) 2.2 V

25. What is the range of photo current for photo transistor BPX 38?

A) 0.3MA to 2.7MA
B) 0.1MA to 1.2MA
C) 0.4MA to 3.8MA
D) 0.2MA to 1.6MA

26. What will happen if the photo resistor (LDR) is exposed to low level light condition?

A) Resistance will increase to 1 Kilo Ohm
B) Resistance will decrease to 100 Ohm
C) Resistance will increase to around 1 Mega Ohm
D) Resistance will decrease to 10 Ohm