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** | **Q.ID: ITISKILL7832FR**

1. Which circuit photo SCR opto couplers are used?

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

Answer: B) AC powered circuits

2. What is the advantage of PIN photo diodes?

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

Answer: B) High sensitivity in the infrared range

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

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

Answer: D) Cadmium sulfide

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

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

Answer: A) B3202

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

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

Answer: C) 0.2MA to 1.6MA

6. What is the drawbacks of LDR?

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

Answer: B) Cannot be used to determine precise light levels

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

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

Answer: A) Defects the operation of switching signal

8. Which circuit uses photo-darlington devices?

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

Answer: A) DC circuits

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

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

Answer: D) 2.1 V

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

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

Answer: C) Cadmium sulfide

11. What is the main application of photo resistor?

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

Answer: D) Controls of street lighting systems

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

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

Answer: D) Considerable greater sensitivity

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

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

Answer: C) Lead selenide

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

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

Answer: D) 1.8 V

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

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

Answer: B) 2 V

16. What is the use of photo transistor?

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

Answer: D) Used as light controlled switch

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

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

Answer: B) By IR light produced inside the package

18. 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

Answer: C) Resistance will increase to around 1 Mega Ohm

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

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

Answer: A) Light dependent resistor

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

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

Answer: A) 1.8 V

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

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

Answer: C) Photo resistors

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

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

Answer: A) Ohmmeter

23. 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

Answer: C) Photo diode and transistor

24. What is the type of transistor BPX81?

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

Answer: B) NPN - Photo transistor

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

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

Answer: C) 20 MA

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

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

Answer: C) 8 V