

Monthly test for the month of April

Q. ID: ITISKILL8776XB

May 2026

VARMA ITI KOLLEGAL

Answer Key

Duration: 30 Mins

Total Marks: 20

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

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

Answer: D) 8 V

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

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

Answer: C) B3202

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

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

Answer: B) 1.8 V

4. What is the drawbacks of LDR?

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

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

5. What is the minimum forward current I_f for single colour LEDs?

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

Answer: D) 20 MA

6. What is the type of transistor BPX81?

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

Answer: A) NPN - Photo transistor

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

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

Answer: D) Cadmium sulfide

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

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

Answer: C) Cadmium sulfide

9. Which circuit photo SCR opto couplers are used?

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

Answer: A) AC powered circuits

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

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

Answer: D) Defects the operation of switching signal

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

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

Answer: D) Considerable greater sensitivity

12. Which is the combination of photo transistor?

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

Answer: A) Photo diode and transistor

13. What is the use of photo transistor?

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

Answer: D) Used as light controlled switch

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

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

Answer: A) 2.1 V

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

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

Answer: C) 0.2MA to 1.6MA

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

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

Answer: D) 1.8 V

17. Which circuit uses photo-darlington devices?

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

Answer: B) DC circuits

18. What is the advantage of PIN photo diodes?

- A) Low sensitivity in the infrared range
- B) High sensitivity in the infrared range

C) Low sensitivity in the Ultraviolet range

D) Medium sensitivity in the infrared range

Answer: B) High sensitivity in the infrared range

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

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

Answer: A) 2 V

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

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

Answer: D) Lead selenide