

Monthly test for the month of April

Q. ID: ITISKILL8776XB

May 2026

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Question Paper

Duration: 30 Mins

Total Marks: 20

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Student Name: _____ Roll No: _____

1. What is the drawbacks of LDR?

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

2. What is the advantage of PIN photo diodes?

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

3. Which circuit photo SCR opto couplers are used?

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

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

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

5. What is the use of photo transistor?

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

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

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

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

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

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

- A) 10 MA
- B) 30 MA

C) 20 MA

D) 5 MA

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

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

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

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

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

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

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

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

13. What is the type of transistor BPX81?

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

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

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

15. Which is the combination of photo transistor?

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

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

- A) 0.2MA to 1.6MA
- B) 0.1MA to 1.2MA

C) 0.4mA to 3.8mA

D) 0.3mA to 2.7mA

17. Which circuit uses photo-darlington devices?

A) DC circuits

B) Counter circuits

C) AC powered circuits

D) Amplifier circuits

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

A) Cadmium sulfide

B) Aluminium

C) Germanium

D) Silicon

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

A) 8 V

B) 15 V

C) 12 V

D) 32 V

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

A) Cadmium sulfide

B) Zinc sulfide

C) Copper sulfide

D) Aluminium sulfide