ITI Quiz - 07-May-2026 10:50 AM

Q. ID: ITISKILL3010K3

May 2026 | **Govt ITI Beguru** | Answer Key

Duration: 30 Mins | **Total Marks: 31** | **Q.ID: ITISKILL3010K3**

1. 6 What is the input impedance of IGBT?

A) High
B) Low
C) Infinity
D) Unity

Answer: A) High

2. What is the advantage of MOSFET?

A) Fast switching speed
B) Low thermal ionisation of electron-holes
C) Higher power gate signal
D) Slow switching speed

Answer: A) Fast switching speed

3. Which is the property of IGBT?

A) Significant power consumption
B) High efficiency and fast switching
C) Low input impedance
D) Low gate signal

Answer: B) High efficiency and fast switching

4. What is the full form of the abbreviation MOSFET?

A) Metal oxide semiconductor FET
B) Medium oscillator signal FET
C) Minimum output signal FET
D) Metal orgamic serial FET

Answer: A) Metal oxide semiconductor FET

5. When does the complementary metal oxide type MOSFET configuration consumes power?

A) While it holds its state
B) Never consumes power
C) During switching
D) Always consumes power

Answer: C) During switching

6. What is the gate current (Ig) of the JFET, when reverse biased?

A) Practically infinity
B) Practically unity
C) Practically zero
D) Practically very low

Answer: C) Practically zero

7. What is the advantage of IGBT?

A) Low driving power
B) Low gate signal power
C) Fast switching speed
D) Used to isolate logic circuits

Answer: A) Low driving power

8. What is the code number of TRIAC?

A) 2N2646
B) BFW10
C) BT136
D) 2N1597

Answer: C) BT136

9. Which electrical quantity controls the operation of the bipolar transistor device?

A) Energy
B) Frequency
C) Voltage
D) Current

Answer: D) Current

10. How gate is biased in JFET?

A) Forward biased
B) Reverse biased
C) Dual supply function
D) AC supply function

Answer: B) Reverse biased

11. Which current flows in TRIAC between MT1 and MT2?

A) Principal current
B) Leakage current
C) Conventional current
D) Reverse current

Answer: A) Principal current

12. What is the switching speed of solid state relays?

A) 1 to 100 nano seconds
B) 10 to 60 nano seconds
C) 1 to 25 nano seconds
D) 1 to 100 milli seconds

Answer: A) 1 to 100 nano seconds

13. What is the input impedance of IGBT?

A) Low input impedance
B) Medium input impedance
C) High input impedance
D) Infinity input impedence

Answer: C) High input impedance

14. Which is the N - channel FET?

A) Main current flows through N-doped material
B) S-terminal connected to positive
C) AC supply connected to drain termin
D) Main current flows through P-doped material

Answer: A) Main current flows through N-doped material

15. Why the electronic device IGBT is preferred over the power MOSFET?

A) Low switching speed
B) Suitability for medium power applications
C) Higher switching repetition rates
D) Higher driving power requirement

Answer: C) Higher switching repetition rates

16. What is the minimum current ratings of solid state relays available in low power packages?

A) 10 milli Ampere
B) 50 milli Ampere
C) 100 milli Ampere
D) Few micro Amperes

Answer: D) Few micro Amperes

17. What is the maximum blocking voltage of very high current handling IGBT modules?

A) 6000 V
B) 440 V
C) 1000 V
D) 5000 V

Answer: A) 6000 V

18. What is the common and popular application of U.J.T?

A) Relaxation oscillator
B) Voltage regulator
C) Motor speed controller
D) Multivibrator

Answer: A) Relaxation oscillator

19. What is the maximum specified voltage for the TRIAC TIC 201D?

A) 1.7 V
B) 2.5 V
C) 2.1 V
D) 1.5 V

Answer: B) 2.5 V

20. Which device is a unipolar transistor?

A) UJT
B) IGBT
C) BJT
D) FET

Answer: D) FET

21. Which insulation layer is used in MOSFET?

A) Germanium material
B) Antimony material
C) Arsenic material
D) Silicon-di-oxide

Answer: D) Silicon-di-oxide

22. How many alternating layers are there in IGBT?

A) 3 layers
B) Single layer
C) 4 layers
D) 2 layers

Answer: C) 4 layers

23. What is the drawback of IGBT compared to the power MOSFET?

A) Higher driving power requirement
B) Poor current conduction capability
C) Poor switching speed
D) Not suitable for power applications

Answer: C) Poor switching speed

24. Which circuit uses the enhancement type MOSFET?

A) High power amplifier circuits
B) High frequency switching circuits
C) Integrated MOS switching circuits
D) Low power oscillator circuits

Answer: C) Integrated MOS switching circuits

25. What is the main advantages of IGBT over BJT?

A) Reverse bias secondary break downs
B) Thermal limits are pushed to the edge
C) Fast switching speed
D) Superior current conduction capability

Answer: D) Superior current conduction capability

26. What is the advantage of IGBT?

A) Low efficiency and slow switching
B) High efficiency and fast switching
C) IGBT is a gate current driven device
D) It has low input impedance

Answer: B) High efficiency and fast switching

27. What is the maximum drain- source voltage, VDS for the JFET BF 245B?

A) 20 V
B) 30 V
C) 40 V
D) 10 V

Answer: B) 30 V

28. What is the advantage of MOSFET?

A) Low gate signal power requirements
B) Low driving power
C) Very low on-state voltage
D) Superior current conduction capability

Answer: A) Low gate signal power requirements

29. Which is the package type for the JFET BFW10?

A) TO-82
B) TO-62
C) TO-92
D) TO-72

Answer: D) TO-72

30. How the drive circuits for the power MOSFETs are coupled?

A) Using logic circuitry
B) Using transistors
C) Direct coupling method
D) Using pulse transformer

Answer: D) Using pulse transformer

31. What is the term stands for TRIAC?

A) Triode Alternate control
B) Triode Access console
C) Triode DC semiconductor
D) Triode AC semiconductor

Answer: D) Triode AC semiconductor