

ITI Quiz - 30-APR-2026 02:13

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Q. ID: ITISKILL4201GX

POWER ELECTRONICS
MONTHLY TEST

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Question Paper

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Score: 6/20 (30.00%)

Code: 6943

1. What is the common and popular application of UJT?

- A) Multivibrator
B) Voltage regulator (Incorrect)
C) **Relaxation oscillator**
D) Motor speed controller

2. How gate is biased in JFET?

- A) AC supply function
B) Forward biased (Incorrect)
C) **Reverse biased**
D) Dual supply function

3. What is the gate current (I_g) of the JFET, when reverse biased?

- A) Practically very low (Incorrect)
B) **Practically zero**
C) Practically unity
D) Practically infinity

4. Which is the N - channel FET?

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

5. Which device is a unipolar transistor?

- A) UJT (Incorrect)
B) **FET**
C) BJT
D) IGBT

6. What is the term stands for TRIAC?

- A) Triode Alternate control (Incorrect)
B) Triode DC semiconductor
C) **Triode AC semiconductor**
D) Triode Access console

7. What is the code number of TRIAC?

- A) 2N2646 (Incorrect)
B) BFW10
C) **BT136**
D) 2N1597

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

- A) Conventional current (Incorrect)
B) **Principal current**
C) Reverse current
D) Leakage current

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

- A) 1 to 25 nano seconds
B) 10 to 60 nano seconds

C) **1 to 100 nano seconds** (Correct)

D) 1 to 100 milli seconds

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

- A) **Few micro Amperes** (Correct)
B) 10 milli Ampere
C) 50 milli Ampere
D) 100 milli Ampere

11. What is the maximum current ratings of solid state relays available in high power packages?

- A) 1 Amp
B) 10 Amp
C) 40 Amp
D) **100 Amp** (Correct)

12. Which is the drain current (I_d) in JFET?

- A) Electron from drain to gate
B) **Electron from source to drain**
C) Electron from drain to source (Incorrect)
D) Electron from gate to source

13. Which is the device made and interconnected by two transistors?

- A) UJT
B) **SCR**
C) FET
D) LED (Incorrect)

14. What will happen in SCR with forward biased condition and gate current is applied?

- A) Reverse current conduction commences (Incorrect)
B) Forward current conduction stops
C) Reverse current turned off
D) **Forward current conduction commences**

15. How many layers of PN - junctions are used in SCR fabrication?

- A) Two layer two junctions
B) **Four layer three junctions**
C) Three layer three junctions (Incorrect)
D) Three layer four junctions

16. Which semiconductor devices are composed inside the solid state relays?

- A) Diodes and transistors (Incorrect)
B) **Thyristor and transistors**

C) MOSFETs and IGBTs

D) UJYs and FETs

17. What is the function of solid state relay(SSR)?

A) Low pass filter

B) High frequency oscillator
(Incorrect)

C) High gain amplifier

D) High speed switching

18. What type of control is used for FET?

A) Resistance controlled device

B) Voltage controlled device (Correct)

C) Current controlled device

D) Frequency controlled device

19. Which parameter controls the current flow in a BI-polar transistor?

A) Voltage

B) Current (Correct)

C) Frequency

D) Resistance

20. How the solid state relays are working for increased lifetime?

A) Bulky profile

B) Slower in operations

C) Spark generated during switching (Incorrect)

D) No moving parts to wear and tear