

# ITI Quiz - 30-APR-2026 02:13

Q. ID: ITISKILL4201GX

POWER ELECTRONICS  
MONTHLY TEST

P

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Sri Mahalingeswara ITI

Question Paper

Student: Prasad h r  
Score: 17/20 (85.00%)

Code: 2358

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

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

**C) 1 to 100 nano seconds** D) 1 to 100 milli seconds  
(Incorrect)

2. How gate is biased in JFET?

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

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

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

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

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 (Incorrect)  
**D) 100 Amp**

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

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

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

5. Which device is a unipolar transistor?

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

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

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

6. What is the term stands for TRIAC?

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

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

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

7. What is the code number of TRIAC?

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

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

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

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

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

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

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

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

- A) Diodes and transistors  
B) **Thyristor and transistors (Correct)**  
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
- C) High gain amplifier
- D) High speed switching (Correct)**

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
- D) No moving parts to wear and tear (Correct)**