

# 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: Santhosha

Score: 7/20 (35.00%)

Code: 1401

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

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

2. How gate is biased in JFET?

- A) AC supply function    B) Forward biased  
C) **Reverse biased (Correct)**    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**  
C) Main current flows through P-doped material (Incorrect)    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    B) Triode DC semiconductor  
C) **Triode AC semiconductor (Correct)**    D) Triode Access console

7. What is the code number of TRIAC?

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

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

- A) Conventional current    B) **Principal current (Correct)**  
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**    D) 1 to 100 milli seconds (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

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

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

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

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

- A) Reverse current    B) Forward current conduction commences  
C) Reverse current turned off (Incorrect)    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 (Correct)**  
C) Three layer three junctions    D) Three layer four junctions

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

- A) Diodes and transistors    B) **Thyristor and transistors**  
C) MOSFETs and IGBTs    D) UJYs and FETs (Incorrect)

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

- A) Low pass filter  
C) High gain amplifier
- B) High frequency oscillator  
**D) High speed switching (Correct)**

18. What type of control is used for FET?

- A) Resistance controlled device (Incorrect)  
C) Current controlled device
- B) Voltage controlled device**  
D) Frequency controlled device

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

- A) Voltage  
C) Frequency (Incorrect)
- B) Current**  
D) Resistance

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

- A) Bulky profile  
C) Spark generated during switching (Incorrect)
- B) Slower in operations  
**D) No moving parts to wear and tear**