

ITI Quiz - 30-APR-2026 02:13

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Q. ID: ITISKILL4201GX

POWER ELECTRONICS
MONTHLY TEST

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Sri Mahalingeswara ITI

Question Paper

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Score: 18/20 (90.00%)

Code: 8487

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

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 **B) Practically zero (Correct)**
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 **B) FET (Correct)**
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
C) BT136 (Correct) 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 **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 (Correct)**
C) FET D) LED

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
D) Forward current conduction commences (Correct)
C) Reverse current turned off

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 (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)**