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Sri Mahalingeswara ITI

Answer Key

Duration: 30 Mins

Total Marks: 20

Q.ID: ITISKILL4201GX

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

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

Answer: C) Practically zero

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

- A) LED B) SCR
C) UJT D) FET

Answer: B) SCR

3. What is the term stands for TRIAC?

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

Answer: C) Triode AC semiconductor

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

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

Answer: C) No moving parts to wear and tear

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

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

Answer: D) Principal current

6. What is the code number of TRIAC?

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

Answer: A) BT136

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

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

Answer: B) Four layer three junctions

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

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

- C) 1 to 100 milli seconds D) 1 to 100 nano seconds

Answer: D) 1 to 100 nano seconds

9. How gate is biased in JFET?

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

Answer: D) Reverse biased

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

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

Answer: B) High speed switching

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

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

Answer: B) Electron from source to drain

12. Which is the N - channel FET?

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

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

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

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

Answer: A) Thyristor and transistors

14. What type of control is used for FET?

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

Answer: A) Voltage controlled device

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

- A) 100 Amp B) 1 Amp
C) 40 Amp D) 10 Amp

Answer: A) 100 Amp

16. Which device is a unipolar transistor?

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

Answer: A) FET

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

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

Answer: B) Few micro Amperes

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

- A) Voltage
- B) Resistance

C) Frequency

D) Current

Answer: D) Current

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

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

Answer: C) Relaxation oscillator

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

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

Answer: D) Forward current conduction commences