

Duration: 30 Mins

Total Marks: 25

ID: ITISKILL6605DI

Student Name: _____	Roll No: _____
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1. How the lamp failures caused by the high inrush currents in lamp dimmer circuits using TRIAC is eliminated?

- A) Using Safety resistor B) By the fuse
C) Using MCB D) By soft start circuit

2. What is the code number of TRIAC?

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

3. Which device is a unipolar transistor?

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

4. What is the package type for BF 245B?

- A) TO-102 B) TO-72
C) TO-92 D) TO-82

5. What is the maximum drain current, ID for BF 245B?

- A) 35mA B) 15mA
C) 45mA D) 25mA

6. 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

7. Which is the package type for the JFET BFW10?

- A) TO-62 B) TO-72
C) TO-82 D) TO-92

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

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

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

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

10. Which device generates high frequency radio frequency indeferences by the extremely rapid turn-ON time?

- A) TRIAC B) Op-Amp
C) Transistor D) UJT

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

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

12. What is the maximum drain- source voltage, VDS for the JFET BF 245B?

- A) 30 V B) 20 V
C) 40 V D) 10 V

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

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

14. What is the load current handled by the solid state relay that must be mounted to some heatsink to protect the device?

- A) 3 Amp B) Greater than 4 Amp
C) 2 Amp D) 1 Amp

15. What is the maximum power dissipation Pmax for BF 245B?

- A) 200 mw B) 300 mw
C) 400 mw D) 100 mw

16. What is the maximum specified voltage for the TRIAC TIC 201D?

- A) 2.1 V B) 1.5 V
C) 1.7 V D) 2.5 V

17. Which characteristics exhibits the current conduction increases while the voltage across the devices decreases in a DIAC?

- A) Nonlinearity characteristics
- C) Positive resistance characteristics

- B) Negative resistance characteristics
- D) Linearity characteristics

C) 5 mA

D) 30 mA

18. Which is the N - channel FET?

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

19. What is the term stands for TRIAC?

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

20. What is the maximum forward gate current (I_g) for BFW10 JFET?

- A) 20 mA
- C) 5 mA
- B) 10 mA
- D) 8 mA

21. What is the maximum drain current I_D for BFW10?

- A) 10 mA
- B) 20 mA

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

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

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

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

24. What type of control is used for FET?

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

25. Which type of defects are occurring in solid state relays?

- A) Intermittent working
- C) Tendency to fail shorted
- B) Tendency to fail open
- D) More sparking