

**Duration: 30 Mins****Total Marks: 40****Q.ID: ITISKILL9406VY**

1. What are the active components used in electronic circuits?

- A) Semi conductors and transformers  
B) Transistors, diodes and SCRs  
C) Transformers and inductors  
D) Resistors, capacitors and inductors

**Answer: B) Transistors, diodes and SCRs**

2. Which semiconductor material is used to make diodes?

- A) Aluminium  
B) Copper  
C) Steel  
D) Silicon

**Answer: D) Silicon**

3. Which winding has more inductance in refrigerator compressor motor?

- A) Run  
B) Start and common  
C) Common  
D) Start

**Answer: A) Run**

4. What is the equivalent of one microfarad in farad?

- A) 10-12 farad  
B) 10-9 farad  
C) 10-3 farad  
D) 10-6 farad

**Answer: B) 10-9 farad**

5. What is the name of electronic circuit?

- A) Quarter wave rectifier  
B) Bridge rectifier  
C) Full wave rectifier  
D) Half wave rectifier

**Answer: B) Bridge rectifier**

6. Which tool is used for skinning the insulation of cables and cleaning the wire surface?

- A) Firmer chisel  
B) Electrician's knife  
C) Combination pliers  
D) Hacksaw

**Answer: B) Electrician's knife**

7. Which material is used for making zener diode?

- A) Silicon  
B) Platinum  
C) Titanium  
D) Lead

**Answer: A) Silicon**

8. Which application uses the digital ICs?

- A) Voltage regulator  
B) Amplifier  
C) Logic gates  
D) Tuned circuits

**Answer: C) Logic gates**

9. Which meter indicates the true power directly in an electrical circuit?

- A) Watt meter  
B) Volt meter  
C) Ammeter  
D) Ohm meter

**Answer: A) Watt meter**

10. Which material is used to avoid oxidation between aluminium conductor and the terminal?

- A) Petrol  
B) Kerosene  
C) Shellac  
D) Grease

**Answer: D) Grease**

11. How many diodes are required for making a bridge rectifier circuit?

- A) Two  
B) Four  
C) Three  
D) One

**Answer: B) Four**

12. Which winding has low resistance in resistance start induction run motor?

- A) Common winding  
B) Running winding  
C) Auxiliary winding  
D) Starting winding

**Answer: B) Running winding**

13. What is the supply voltage if a current of 2 ampere flows through 10 Ohm resistor in a circuit?

- A) 65 Volt  
B) 55 Volt  
C) 45 Volt  
D) 20 Volt

**Answer: D) 20 Volt**

14. What is the effect of pouring water on electrodes resistance in earth pit?

- A) Remains same  
B) Increases  
C) Equalises  
D) Decreases

**Answer: D) Decreases**

15. Which joint is made in either single or multi - strand conductors?

- A) Britannia joint  
B) Western union joint  
C) Rat tail joint  
D) Scarfed joint

**Answer: C) Rat tail joint**

16. What is the unit of inductance?

- A) Henry  
C) Ohm
- B) Ampere  
D) Farad

**Answer: A) Henry**

17. How many terminals are there in a Silicon Controlled Rectifier (SCR)?

- A) One  
C) Two
- B) Four  
D) Three

**Answer: D) Three**

18. What is the name of active component used in electronic circuit?

- A) TRIAC  
C) Transistor
- B) SCR  
D) DIAC

**Answer: C) Transistor**

19. Which material is used for making disc in energy meter?

- A) Zinc  
C) Aluminium
- B) Brass  
D) Copper

**Answer: C) Aluminium**

20. How electrons flow in a battery circuit?

- A) Phase to earth  
C) Negative polarity to positive polarity
- B) Positive to negative polarity  
D) Phase to neutral

**Answer: C) Negative polarity to positive polarity**

21. What is the unit of capacitance used with single phase induction motors in domestic RAC system?

- A) Milli henry  
C) Kilo ohm
- B) Milli ampere  
D) Microfarad

**Answer: D) Microfarad**

22. How the ability of a conductor is called if it induces the voltage in the same conductor?

- A) Capacitance  
C) Conductance
- B) Self inductance  
D) Resistance

**Answer: B) Self inductance**

23. How the maximum reverse voltage across the diode is termed in reverse biased condition?

- A) Ripple frequency  
C) Peak rectification voltage
- B) Diode voltage  
D) Peak inverse voltage

**Answer: D) Peak inverse voltage**

24. Which electronic component is the voltage regulator?

- A) Triac  
C) Transistor
- B) Zener diode  
D) Diac

**Answer: B) Zener diode**

25. Which is the common terminal while Ohm meter reads  $AB = 10 \text{ Ohm}$ ,  $AC = 15 \text{ Ohm}$  and  $BC = 25 \text{ Ohm}$  if the motor terminals are A, B and C?

- A) Terminal A  
C) Terminal C
- B) Earth Terminal  
D) Terminal B

**Answer: A) Terminal A**

26. Which type of diode is used for communication circuits?

- A) Signal diode  
C) Switching diode
- B) Rectifier diode  
D) Zener diode

**Answer: A) Signal diode**

27. Which property limits the flow of electrons in an electrical circuit?

- A) Current  
C) Voltage
- B) Resistance  
D) Conductance

**Answer: C) Voltage**

28. What are the passive components used in electronic circuits?

- A) Semi conductors and transistors  
C) Transformers and semiconductors
- B) Resistors, capacitors and inductors  
D) Transistors, diodes and SCRs

**Answer: B) Resistors, capacitors and inductors**

29. Which law relates to voltage, current and resistance in an electrical circuit?

- A) Faraday s law  
C) Ohm s law
- B) Newton s law  
D) Lenz s law

**Answer: C) Ohm s law**

30. What is the maximum capacity of 3 phase squirrel cage induction motor used with direct on line (DOL) starter?

- A) 10 HP  
C) 15 HP
- B) 5 HP  
D) 20 HP

**Answer: B) 5 HP**

31. What is the unit of electric current?

- A) Volt  
C) Ohm
- B) Farad  
D) Ampere

**Answer: D) Ampere**

32. What is the load resistance in an electrical circuit, if current,  $I = 2 \text{ amp}$  and supply,  $V = 10 \text{ volt}$ ?

- A) 4 Ohms  
C) 2 Ohms
- B) 3 Ohms  
D) 5 Ohms

**Answer: D) 5 Ohms**

33. Which device maintains a constant DC output?

- A) Rectifier circuits  
B) Current limiters

C) Load regulators                      D) Voltage regulators

**Answer: D) Voltage regulators**

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**34.** What is the unit of electrical energy?

- A) Volt                                      B) Ampere  
C) Watt                                      D) Kilo watt hour

**Answer: C) Watt**

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**35.** Which material is used for making ICs?

- A) Carbon                                  B) Silicon  
C) Platinum                                D) Mild steel

**Answer: B) Silicon**

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**36.** What is the condition of compressor motor if Ohm meter reads infinity across common and start terminals?

- A) Running winding shorted    B) Starting winding open  
C) Running winding open        D) Starting winding shorted

**Answer: B) Starting winding open**

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**37.** What is the reverse break down voltage range of zener diode?

A) 0.1 to 0.5 volt

B) 1 to 3 volt

C) 3 to 18 volt

D) 0.5 to 1 volt

**Answer: C) 3 to 18 volt**

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**38.** Which type of conductor is used for bus bars?

- A) Standard conductor            B) Solid conductor  
C) Thermal conductor            D) Stranded conductor

**Answer: D) Stranded conductor**

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**39.** Which component is used as a switching device in electronic circuit?

- A) SCR                                      B) Diode  
C) Capacitor                              D) Zener diode

**Answer: A) SCR**

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**40.** What is the total resistance if two resistors R1 and R2 are connected in series?

- A)  $(R1 - R2)$  Ohms                      B)  $(R1 \times R2)$  Ohms  
C)  $(R1 / R2)$  Ohms                      D)  $(R1 + R2)$  Ohms

**Answer: D)  $(R1 + R2)$  Ohms**

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