

Duration: 30 Mins

Total Marks: 40

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Student Name: _____ Roll No: _____

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

13. How electrons flow in a battery circuit?

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

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

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

14. Which type of conductor is used for bus bars?

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

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

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

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

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

8. What is the name of electronic circuit?

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

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

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

9. Which electronic component is the voltage regulator?

17. Which semiconductor material is used to make diodes?

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

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

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

19. What is the unit of electric current?

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

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

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

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

- A) 0.1 to 0.5 volt
C) 0.5 to 1 volt
- B) 3 to 18 volt
D) 1 to 3 volt

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

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

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

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

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

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

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

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

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

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

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

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

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

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

29. Which device maintains a constant DC output?

- A) Current limiters
C) Load regulators
- B) Voltage regulators
D) Rectifier circuits

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

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

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

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

32. Which material is used for making ICs?

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

33. Which material is used for making zener diode?

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

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

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

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

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

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

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

37. What is the unit of inductance?

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

38. Which application uses the digital ICs?

- A) Tuned circuits
- C) Logic gates

- B) Amplifier
- D) Voltage regulator

39. What is the unit of electrical energy?

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

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

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