

Duration: 30 Mins

Total Marks: 39

Q.ID: ITISKILL33922F

1. Which is used for to operate in the reverse breakdown region?

- A) Capacitor
- B) Diode
- C) Resistor
- D) Zenerdiode

Answer: D) Zenerdiode

2. What is the current through the zener diode with full load condition?

- A) Minimum
- B) Remains constant
- C) Maximum
- D) Zero

Answer: C) Maximum

3. Which electrical quantity controls the operation of the bipolar transistor device?

- A) Current
- B) Voltage
- C) Frequency
- D) Energy

Answer: A) Current

4. How the negative feedback is called?

- A) Voltage controlled feedback
- B) Current controlled feedback
- C) Degenerative feedback
- D) Regenerative feedback

Answer: C) Degenerative feedback

5. What type of ripple filter circuit is used for large load current requirements?

- A) RC filter
- B) LC filter
- C) Inductor Input filter
- D) Capacitor Input filter

Answer: D) Capacitor Input filter

6. Why NPN type of transistors are preferred over the PNP type transistors?

- A) Low operating voltage
- B) NPN has higher switching speed
- C) NPN has lower switching speed
- D) NPN has good bias stability

Answer: B) NPN has higher switching speed

7. Which configuration of transistor amplifier is most commonly used in electronic circuits?

- A) Common emitter configuration
- B) Common collector configuration
- C) Common drain amplifier configuration
- D) Common base configuration

Answer: A) Common emitter configuration

8. What is the disadvantage of the two diode full wave rectifier compared with a bridge rectifier?

- A) Each diode carries half the load current
- B) The need of centretapped transformer
- C) The ripple frequency is higher
- D) DC output level is higher

Answer: B) The need of centretapped transformer

9. What type of packaging is generally used to transistors utilized for low power amplification?

- A) Metal packaging
- B) Plastic packaging
- C) Plastic packaging with metal heat sinks
- D) Ceramic packaging

Answer: B) Plastic packaging

10. What is the voltage gain in a transistor if the input voltage in 40 mv and the output voltage in 3.6 V?

- A) 90
- B) 270
- C) 45
- D) 180

Answer: A) 90

11. What is the output pulse frequency of the full wave rectifier with input frequency of 50 Hz?

- A) 60 Hz
- B) 100 Hz
- C) 40 Hz
- D) 200 Hz

Answer: B) 100 Hz

12. What is the current gain of a common - base amplifier?

- A) Less than 1
- B) Infinity
- C) Unity
- D) Greater than 1

Answer: A) Less than 1

13. What is the output frequency of the pulse setting DC in a two diode fullwave rectifier?

- A) Same frequency of the A/C input
- B) Half of the input A/C frequency
- C) Three times the input A/C frequency
- D) Double the input A/C frequency

Answer: D) Double the input A/C frequency

14. Which parameter is maintained constant in zener diode?

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

Answer: B) Voltage

15. Which diode is used in low power communication circuits?

- A) Rectifier diodes
- B) Switching diodes
- C) High power diodes
- D) Signal diodes

Answer: D) Signal diodes

16. What is the meaning of first letter indicated in the transistor code number BC 107?

- A) Silicon material used
- B) Antimony material used
- C) Indium material used
- D) Germanium material used

Answer: A) Silicon material used

17. What is the current through the zener diode under no load condition?

- A) Zero
- B) Minimum
- C) Maximum
- D) Remains constant

Answer: C) Maximum

18. Which device used for transistor testing?

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

Answer: C) Ohm meter

19. Which is the first step followed in troubleshooting of electronic circuit?

- A) Physical and Sensory test
- B) Thermal test
- C) Mechanical test
- D) Chemical test

Answer: A) Physical and Sensory test

20. What is the use of transistor?

- A) Reducing voltage
- B) Reducing electrical signal
- C) Amplifying small electric / Electronic signals
- D) AC to DC

Answer: C) Amplifying small electric / Electronic signals

21. What is the process of adding impurities to a pure semiconductor material?

- A) Forming
- B) Doping
- C) Etching
- D) Diffusion

Answer: B) Doping

22. What is the name of the process of converting AC into DC voltage?

- A) Inverting
- B) Rectifying
- C) Amplifying
- D) Demodulating

Answer: B) Rectifying

23. Which type of amplifier is used to operate the loud speaker?

- A) Voltage amplifier
- B) IF amplifier
- C) Power amplifier
- D) RF amplifier

Answer: C) Power amplifier

24. What is the current gain of common collector amplifier?

- A) Medium
- B) High
- C) Low
- D) Very high

Answer: D) Very high

25. Which impurity is added to pure semiconductor to form N-type material?

- A) Indium
- B) Gallium
- C) Boron
- D) Arsenic

Answer: D) Arsenic

26. What is the advantage of using bias in transistor circuits?

- A) Easily sets saturated
- B) Provides positive feedback
- C) Gives maximum distortion
- D) Never reach saturation

Answer: D) Never reach saturation

27. Which component filter the ripples in the rectifier circuit?

- A) TRIAC
- B) Diode
- C) Capacitor
- D) DIAC

Answer: C) Capacitor

28. Which rectifier circuit used for four diodes?

- A) Full wave
- B) two half wave
- C) Half wave
- D) Bridge

Answer: D) Bridge

29. What is the meaning of maximum safe reverse voltage across a diode?

- A) Knee voltage
- B) Break down voltage
- C) PIV voltage
- D) Reverse break down voltage

Answer: C) PIV voltage

30. Which active components is used for AC to DC converter in rectifier circuit?

- A) Transformer
- B) Capacitor
- C) Diode
- D) Resistor

Answer: C) Diode

31. What is the peak inverse voltage of germanium diode?

- A) 0.3 V
- B) 1 V
- C) 0.8 V
- D) 0.7 V

Answer: A) 0.3 V

32. Which impurity is added to form P - type semiconductor material?

- A) Phosphorus
- B) Arsenic
- C) Gallium
- D) Antimony

Answer: C) Gallium

33. When does the zener diode begins to conduct in the reverse biased condition?

- A) When bias voltage reached 0.7 V
- B) Voltage across it reached the zener voltage
- C) Voltage across zener reached 0.3 V
- D) After the barrier voltage cancelled

Answer: B) Voltage across it reached the zener voltage

34. Which is having three terminal device?

- A) Capacitor
- B) Diode
- C) Transistor
- D) Resistor

Answer: C) Transistor

35. Why transistors made of silicon is preferred over the germanium semiconductor material?

- A) Complex design
- B) Higher thermal stability
- C) Requires complicated bias arrangement
- D) Silicon transistor needs low cut-involtage

Answer: B) Higher thermal stability

36. Which is also known as small signal amplifiers?

- A) Medium power transistors
- B) High power transistors
- C) Very high power transistors
- D) Low power transistors

Answer: D) Low power transistors

37. Which type of transistors are required to amplify signals from the microphone / transducer?

- A) Medium power transistors
- B) High power transistors
- C) Low power transistors
- D) Epitaxial versa watt transistors

Answer: C) Low power transistors

38. Which one is called universal bias?

- A) Voltage divider bias
- B) Collector bias
- C) Emitter bias
- D) Base bias

Answer: A) Voltage divider bias

39. How can you confirm a transistor as defective?

- A) By circuit testing
- B) By physical testing
- C) By voltage measurements
- D) By ohm meter testing

Answer: D) By ohm meter testing