

Duration: 30 Mins

Total Marks: 39

ID: ITISKILL33922F

Student Name: _____	Roll No: _____
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1. What is the meaning of maximum safe reverse voltage across a diode?

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

2. Which parameter is maintained constant in zener diode?

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

3. Which one is called universal bias?

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

12. How can you confirm a transistor as defective?

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

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

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

14. Which is having three terminal device?

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

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

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

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

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

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

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

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

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

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

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

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

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

21. How the negative feedback is called?

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

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

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

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

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

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

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

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

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

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

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

27. Which rectifier circuit used for four diodes?

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

28. Which device used for transistor testing?

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

29. Which is also known as small signal amplifiers?

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

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

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

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

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

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

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

33. What is the use of transistor?

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

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

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

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

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

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

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

37. When does the zener diode begins to conduct in the

reverse biased condition?

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

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

- A) TRIAC
- B) Diode

C) DIAC

D) Capacitor

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

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