

Duration: 30 Mins

Total Marks: 39

Q.ID: ITISKILL33922F

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

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

**Answer: A) Rectifying**

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

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

**Answer: D) Current**

3. Which device used for transistor testing?

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

**Answer: A) Ohm meter**

4. How can you confirm a transistor as defective?

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

**Answer: C) By ohm meter testing**

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

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

**Answer: D) Physical and Sensory test**

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

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

**Answer: D) Doping**

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

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

**Answer: C) Maximum**

8. 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**

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

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

**Answer: A) Arsenic**

10. Which is also known as small signal amplifiers?

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

**Answer: D) Low power transistors**

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

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

**Answer: B) 0.3 V**

12. How the negative feedback is called?

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

**Answer: D) Degenerative feedback**

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

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

**Answer: C) 90**

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

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

**Answer: B) NPN has higher switching speed**

15. 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**

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

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

**Answer: D) The need of centretapped transformer**

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

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

**Answer: A) Common emitter configuration**

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

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

**Answer: C) Plastic packaging**

**19.** Which one is called universal bias?

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

**Answer: B) Voltage divider bias**

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

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

**Answer: B) Zenerdiode**

**21.** Which type of amplifier in used to operate the loud speaker?

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

**Answer: C) Power amplifier**

**22.** What is the current gain of common collector amplifier?

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

**Answer: C) Very high**

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

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

**Answer: C) Voltage across it reached the zener voltage**

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

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

**Answer: C) Higher thermal stability**

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

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

**Answer: B) Gallium**

**26.** Which is having three terminal device?

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

**Answer: B) Transistor**

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

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

**Answer: D) Low power transistors**

**28.** 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**

**29.** Which component filter the ripples in the rectifier circuit?

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

**Answer: A) Capacitor**

**30.** Which rectifier circuit used for four diodes?

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

**Answer: C) Bridge**

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

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

**Answer: D) Maximum**

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

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

**Answer: A) 100 Hz**

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**33.** 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) Same frequency of the A/C input  
C) Half of the input A/C frequency        D) Double the input A/C frequency

**Answer: D) Double the input A/C frequency**

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**34.** Which diode is used in low power communication circuits?

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

**Answer: B) Signal diodes**

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**35.** Which parameter is maintained constant in zener diode?

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

**Answer: C) Voltage**

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

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

**Answer: C) Never reach saturation**

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

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

**Answer: B) Less than 1**

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

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

**Answer: C) Diode**

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

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

**Answer: D) Silicon material used**

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