

ITI Quiz - 25-Mar-2026

10:37 PM

Q. ID: ITISKILL8440WN

February 2026

Answer Key

Duration: 30 Mins

Total Marks: 32

Q.ID: ITISKILL8440WN

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

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

Answer: D) Power Amplifier

2. How does the values of bias resistors selected for collector current in class -B amplifiers?

- A) Quiescent current over the cut-off value
- B) Q point set slightly below cut-off
- C) Quiescent current beyond the cut-off point
- D) Quiescent current at mid point

Answer: A) Quiescent current over the cut-off value

3. What is the purpose of using positive feed back in amplifiers?

- A) To produce oscillation
- B) To produce multiplexion
- C) To produce demodulation
- D) To produce modulation

Answer: A) To produce oscillation

4. Which coding system for transistor type numbering system is followed by American standard?

- A) PRO-ELECTRON standard
- B) Home codes
- C) JEDEC standard
- D) JIS standard

Answer: C) JEDEC standard

5. What is the name of multi-stage amplifiers?

- A) Cascaded amplifier
- B) Cascoded amplifier
- C) Complementry symmetry amplifier
- D) Darlington pair amplifier

Answer: A) Cascaded amplifier

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

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

Answer: B) Very high

7. How the maximum permissible voltage that can be applied across the collector ? Emitter junction of a transistor is indicated?

- A) VBE (max) in volts
- B) VCE (max) in volts
- C) VCB (max) in volts
- D) VCC in volts

Answer: B) VCE (max) in volts

8. 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

Answer: B) By ohm meter testing

9. What is the input impedance of darlington pair transistors?

- A) Very high input impedance
- B) Uniter
- C) Medium input impedance
- D) Very low input impedance

Answer: A) Very high input impedance

10. What is the advantage of silicon over germanium for transistor fabrication?

- A) Higher amplification factor
- B) Higher thermal stability
- C) Lower operating voltage
- D) Lower thermal stability

Answer: B) Higher thermal stability

11. What will happen when the forward bias voltage across the PN junction is increased excessively?

- A) Junction ruptured and short circuited
- B) No current flows through the junction
- C) Increases the cut - in - voltage
- D) Barrier width of junction increases

Answer: A) Junction ruptured and short circuited

12. How the negative feedback is called?

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

Answer: C) Degenerative feedback

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

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

Answer: B) Common emitter configuration

14. What is the maximum emitter to base voltage VEB (max) for the transistor BC 147?

- A) 5V
- B) 6V
- C) 4V
- D) 8V

Answer: B) 6V

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

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

Answer: C) Plastic packaging

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

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

Answer: C) Low power transistors

17. Why the complementary - symmetry amplifier is preferred over the other types of amplifier configurations?

- A) To get more voltage gain
- B) To minimize the gain
- C) To get less distortion
- D) To eliminate the transformer

Answer: D) To eliminate the transformer

18. 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

Answer: B) NPN has higher switching speed

19. Which parameter of passive component can be calculated using the formula ?

- A) Capacitance
- B) Inductance
- C) Inductive reactance
- D) Capacitive reactance

Answer: D) Capacitive reactance

20. What is the efficiency transformer coupled class A amplifier?

- A) Less than 20%
- B) About 50%
- C) More than 60%
- D) Unity

Answer: B) About 50%

21. What is the formula used to calculate the current gain (alpha) of common base amplifier?

- A) I_E / I_C
- B) I_E / I_C
- C) I_C / I_E
- D) I_B / I_E

Answer: C) I_C / I_E

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

- A) 45
- B) 90

C) 270

D) 180

Answer: B) 90

23. 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

24. Which type of packaging is used to transistors utilized for medium power amplification?

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

Answer: A) Plastic packaging with metal heatsinks

25. In which quantity affects the Q point of a transistor amplifier?

- A) Proper biasing methods
- B) Decreased temperature
- C) Mismatching signals
- D) Increased temperature

Answer: D) Increased temperature

26. Which class of amplifier uses fixed bias because of its inherent advantage of transistor will never go to saturation?

- A) Class - C
- B) Class - AB
- C) Class - B
- D) Class - A

Answer: D) Class - A

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

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

Answer: C) Higher thermal stability

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

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

Answer: B) Less than 1

29. What is the overall base emitter voltage required to turn the darlington pair?

- A) 0.3 V
- B) 0.2 V
- C) 1.4 V
- D) 0.7 V

Answer: C) 1.4 V

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

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

Answer: D) Power amplifier

31. Where does the depletion region exist in a bipolar transistor?

- A) Between E-B and B-C electrodes B) Between collector and emitter electrodes
C) Between collector - base electrodes D) Between emitter - base electrodes

Answer: A) Between E-B and B-C electrodes

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

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

Answer: D) Silicon material used
