

# ITI Quiz - 10-Feb-2026

## 08:22 PM

Q. ID: ITISKILL28200K

February 2026

Question Paper

Duration: 30 Mins

Total Marks: 32

ID: ITISKILL28200K

Student Name: _____	Roll No: _____
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1. What is the meaning of first letter indicated in the transistor code number BC 107?

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

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

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

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

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

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

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

5. What is the maximum emitter to base voltage  $V_{EB}(\max)$  for the transistor BC 147?

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

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

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

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

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

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

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

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

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

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

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

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

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

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

- A)  $V_{CC}$  in volts
- B)  $V_{CE}(\max)$  in volts
- C)  $V_{CB}(\max)$  in volts
- D)  $V_{BE}(\max)$  in volts

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

- A) Complementary symmetry amplifier
- B) Cascaded amplifier
- C) Cascode amplifier
- D) Darlington pair amplifier

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

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

15. How can you confirm a transistor as defective?

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

16. What is the efficiency of transformer coupled class A amplifier?

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

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

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

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

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

19. What in the current gain of a common ? base amplifier?

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

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

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

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

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

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

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

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

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

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

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

25. Which parameter of passive component can be calculated

using the formula ?

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

26. How the negative feedback is called?

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

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

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

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

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

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

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

30. Where does the depletion region exists in a bipolar transistor?

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

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

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

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

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