

ITI Quiz - 10-Feb-2026

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Q. ID: ITISKILL28200K

February 2026

Question Paper

Duration: 30 Mins

Total Marks: 32

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Student Name: _____ Roll No: _____

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

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

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

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

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

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

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

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

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

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

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

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

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

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

8. 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

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

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

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

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

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

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

12. 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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

24. Why the complementary - symmetry amplifier is

preferred over the other types of amplifier configurations?

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

25. How the negative feedback is called?

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

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

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

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

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

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

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

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

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

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

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

31. 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

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

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