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Q. ID: ITISKILL9897HH

March 2026 **GITIANKOLA** Question Paper

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Score: 21/25 (84.00%)

Code: 1068

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

A) Low
B) High
C) Medium
D) Very high (Correct)

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

A) Unity
B) Infinity
C) Greater than 1
D) Less than 1 (Correct)

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

A) Germanium material used
B) Silicon material used (Correct)
C) Antimony material used
D) Indium material used

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

A) IC/ IE (Correct)
B) IE/ IC
C) IB/ IE
D) IE/ IC

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

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

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

A) 4V
B) 5V (Incorrect)
C) 6V
D) 8V

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

A) IF amplifier
B) RF amplifier
C) Power amplifier (Correct)
D) Voltage amplifier

15. 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 (Correct)
C) 180
D) 270

16. What is the input impedence of darlington pair transistors?

A) Very low input impedance | **B) Very high input impedance (Correct)**
C) Medium input impedance | D) Uniter

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

A) Provides positive feed back | **B) Never reach saturation (Correct)**
C) Easily sets saturated | D) Gives maximum distortion

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

A) Class - A (Correct) | B) Class - B
C) Class - AB | D) Class - C

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

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

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

A) Capacitance | B) Inductance
C) Capacitive reactance (Correct) | D) Inductive reactance

21. 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 (Correct) | D) No current flows through the junction

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

A) 0.2 V | B) 0.3 V
C) 0.7 V | **D) 1.4 V (Correct)**

23. How can you confirm a transistor as defective?

A) By circuit testing | **B) By ohm meter testing (Correct)**
C) By physical testing | D) By voltage measurements

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

A) Between emitter - base electrodes | B) Between collector - base electrodes
C) Between collector and emitter electrodes | **D) Between E-B and B-C electrodes (Correct)**

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

A) Decreased temperature | **B) Increased temperature (Correct)**
C) Proper biasing methods | D) Mismatching signals