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**Score: 23/25 (92.00%)**

**Code: 7080**

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

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

2. What is 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) Complementary 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
- C) 6V (Correct)**
- 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 versawatt transistors

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

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

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

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

14. Which type of amplifier is 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 is 40mv and the output voltage is 3.6V?

- A) 45
- B) 90 (Correct)**
- C) 180
- D) 270

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

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

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

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

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

- A) Class - A (Correct)**  
C) Class - AB
- B) Class - B  
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)  
C) Quiescent current beyond the cut-off point
- B) Quiescent current at mid point  
**D) Quiescent current over the cut-off value**

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

- A) Capacitance  
**C) Capacitive reactance**
- B) Inductance  
D) Inductive reactance (Incorrect)

21. What will happen when the forward bias voltage across

the PN junction is increased excessively?

- A) Increases the cut - in - voltage  
**C) Junction ruptured and short circuited (Correct)**
- B) Barrier width of junction increases  
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  
C) 0.7 V
- B) 0.3 V  
**D) 1.4 V (Correct)**

23. How can you confirm a transistor as defective?

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

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

- A) Between emitter - base electrodes  
C) Between collector and emitter electrodes
- B) Between collector - base 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  
C) Proper biasing methods
- B) Increased temperature (Correct)**  
D) Mismatching signals