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**Score: 29/32 (90.63%)**

**Code: 7750**

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

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

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

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

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

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

4. 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

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

- A)  $I_C / I_E$  (Correct)**                      B)  $I_E / I_C$   
 C)  $I_B / I_E$                                       D)  $I_E / I_C$

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

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

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

- A) 4V                                        B) 5V  
**C) 6V (Correct)**                                D) 8V

8. How the negative feedback is called?

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

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

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

10. 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

11. 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

12. 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

13. 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

14. 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

15. 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

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

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

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

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

18. 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

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

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

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

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

21. 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  
**D) Quiescent current over the cut-off value**  
B) Quiescent current at mid point

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

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

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

- A) IF Amplifier  
**C) Power Amplifier (Correct)**  
B) RF Amplifier  
D) Voltage Amplifier

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

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

25. What is the effeciency transformer coupled class A amplifier?

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

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

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

27. 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

28. 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)**

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

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

30. 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

31. 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)**

32. 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