

Q1. The value of β for a transistor is generally

- 1
- less than 1
- between 20 and 500
- above 500

Answer : 3

Q2. The most commonly used transistor arrangement is arrangement

- common emitter
- common base
- common collector
- none of the above

Answer : 1

Q3. The input impedance of a transistor connected in arrangement is the highest

- common emitter
- common collector
- common base
- none of the above

Answer : 2

Q4. The output impedance of a transistor connected in arrangement is the highest

- common emitter
- common collector
- common base
- none of the above

Answer : 3

Q5. The phase difference between the input and output voltages in a common base arrangement is

- 180°
- 90°
- 270°
- 0°

Answer : 4

Q6. The power gain in a transistor connected in arrangement is the highest

- common emitter
- common base
- common collector
- none of the above

Answer : 1

Q7. The phase difference between the input and output voltages of a transistor connected in common emitter arrangement is

- 0°
- 180°
- 90°
- 270°

Answer : 2

Q8. The voltage gain in a transistor connected in arrangement is the highest

1. common base
2. common collector
3. common emitter
4. none of the above

Answer : 3

Q9. As the temperature of a transistor goes up, the base-emitter resistance decreases

1. increases
2. remains the same
3. none of the above

Answer : 1

**Q10. The voltage gain of a transistor connected in common collector arrangement is
.....**

1. equal to 1
2. more than 10
3. more than 100
4. less than 1

Answer : 4

Q11. The phase difference between the input and output voltages of a transistor connected in common collector arrangement is

1. 180°
2. 0°
3. 90°
4. 270°

Answer : 2

Q12. $I_C = \beta I_B + \dots\dots\dots$

1. I_{CBO}
2. I_C
3. I_{CEO}
4. αI_E

Answer : 3

Q13. $I_C = [\alpha / (1 - \alpha)] I_B + \dots\dots\dots$

1. I_{CEO}
2. I_{CBO}
3. I_C
4. $(1 - \alpha) I_B$

Answer : 1

Q14. $I_C = [\alpha / (1 - \alpha)] I_B + [\dots\dots\dots / (1 - \alpha)]$

1. I_{CBO}
2. I_{CEO}
3. I_C
4. I_E

Answer : 1

Q15. BC 147 transistor indicates that it is made of

1. germanium

2. silicon
3. carbon
4. none of the above

Answer : 2

16. $I_{CEO} = (\dots\dots\dots) I_{CBO}$

1. β
2. $1 + \alpha$
3. $1 + \beta$
4. none of the above

Answer : 3

Q17. A transistor is connected in CB mode. If it is not connected in CE mode with same bias voltages, the values of I_E , I_B and I_C will

1. remain the same
2. increase
3. decrease
4. none of the above

Answer : 1

Q18. If the value of α is 0.9, then value of β is

1. 9
2. 0.9
3. 900
4. 90

Answer : 4

Q19. In a transistor, signal is transferred from a circuit

1. high resistance to low resistance
2. low resistance to high resistance
3. high resistance to high resistance
4. low resistance to low resistance

Answer : 2

Q20. The arrow in the symbol of a transistor indicates the direction of

1. electron current in the emitter
2. electron current in the collector
3. hole current in the emitter
4. donor ion current

Answer : 3

Q21. The leakage current in CE arrangement is that in CB arrangement

1. more than
2. less than
3. the same as
4. none of the above

Answer : 1

Q22. A heat sink is generally used with a transistor to

1. increase the forward current
2. decrease the forward current
3. compensate for excessive doping
4. prevent excessive temperature rise

Answer : 4