

QUIZ – ANSWER KEY

QUIZ NO: 143

TOPIC: ELECTRICAL ENGINEERING

DATE: 04/01/2023

1. The use of amplifier in a circuit is to _____ for input signal ?

- [A] Provide a phase shift
- [B] Provide strength
- [C] Provide frequency enhancement
- [D] Make circuit compatible

Answer: B

Explanation: The only use of amplifier in a circuit is to provide strength to signal. This may refer to an increase in current, voltage or power of the output w.r.t the input being applied.

2. The unwanted characteristics of amplifier output apart from the desired output is collectively termed as _____ ?

- [A] Inefficiency
- [B] Damage
- [C] Fault
- [D] Distortion

Answer: D

Explanation: The unwanted characteristics of amplifier output apart from desired output are collectively termed as distortion. This should be avoided.

Join our social media



QUIZ – ANSWER KEY

3. Unit of power rating of a transistor is expressed in _____ ?

- [A] Watts
- [B] KWh
- [C] W/s
- [D] Wh

Answer: A

Explanation:

Power rating is the maximum power allowable to dissipate by a transistor beyond this point transistor may behave unlikely. This is expressed in watts.

4. Which device was used for the amplification of audio signals before the invention of power amplifiers?

- [A] Diode
- [B] Op-amp
- [C] Vacuum tubes
- [D] SCR

Answer: C

Explanation: Before the invention of power amplifier vacuum tubes are used for audio signal amplification which consumes large space and costly.

5. Power amplifier directly amplifies _____ ?

- [A] Voltage of signal
- [B] Current of the signal
- [C] Power of the signal
- [D] All of the mentioned

Answer: D

Join our social media



QUIZ – ANSWER KEY

Explanation: Power amplifier increases voltage as well as current. Increase in voltage or current is small compared to normal amplifiers. But power amplification has occurred ie. Voltage x current is more.

6. Input stage of power amplifier is also called ____ ?

- [A] First op
- [B] Beginning stage
- [C] Front end
- [D] Normal stage

Answer: C

Explanation: Input stage of the power amplifier is also called the front end.

7. Transistor in power amplifier is _____ ?

- [A] An active device
- [B] A passive device
- [C] A op-amp
- [D] A voltage generating device

Answer: A

Explanation: Transistor is an active device since transistor contains voltage sources which are necessary for amplification.

8. For a perfect power amplifier output power rating will be _____ if the output impedance is halved ?

- [A] Halved
- [B] Squared
- [C] Doubled
- [D] Square rooted

Join our social media



QUIZ – ANSWER KEY

Answer: C

Explanation: In the equation of power output for the power amplifier, the power is proportional to the square of the current and inversely proportional to the resistance. If the impedance is halved then power is doubled.

9. Which of the following audio speaker will be hard to be driven by a power amplifier?
- [A] 4ohm
 - [B] 8ohm
 - [C] 12ohm
 - [D] 2ohm

Answer: D

Explanation: If the resistance of the audio amplifier is less, the output power of the transistor will be high since output current is increasing. Hence to drive a 2ohm speaker amplifier needs double power that for a 4ohm speaker.

10. The power rating of the amplifier is 100watts then the transistor can only operate at _____?
- [A] Power higher than 100w
 - [B] Power lower than 100w
 - [C] Power near to 100w
 - [D] Power lower than 200W

Answer: B

Explanation: The power rating is 100 W, and that is the maximum allowable power usage of a transistor, beyond which it may damage. If the power is less than 100W, the circuit operates. Near to 100W, the power may also be higher than 100W, hence that option is incorrect.

Join our social media

