

Department of Electronics
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1. Most of the amplification in a superhetrodyne receiver occurs at _____ stage?

- A. IF**
- B. RF amplifier
- C. Audio amplifier
- D. Detector

2. If a radio receiver amplifies all the signal frequencies equally well, it is said to have high _____?

- A. Sensitivity
- B. Selectivity
- C. Distortion
- D. Fidelity**

3. The letters AVC stand for _____?

- A. Audio voltage control
- B. Abrupt voltage control
- C. Automatic volume control**
- D. Automatic voltage control

4. In superhetrodyne receiver, the input at mixer stage is _____?

- A. IF and RF
- B. RF and AF
- C. IF and AF
- D. RF and local oscillator signal**

5. When the modulating signal controls the frequency of the carrier, we get _____?

- A. Phase modulation
- B. Amplitude modulation
- C. Frequency modulation**
- D. May be any one of the above

6. The IF is 455 kHz. If the radio receiver is tuned to 855 kHz, the local oscillator frequency is _____?

- A. 455 kHz
- B. 1310 kHz**
- C. 1500 kHz
- D. 1520 kHz

7. The function of ferrite antenna is to _____?

- A. Reduce stray capacitance
- B. Stabilise d.c. bias
- C. Increase the Q of tuned circuit**
- D. Reduce noise

8. A 100 V carrier is made to vary between 160 V and 40 V by the signal. What is the modulation factor ?

- A. 3
- B. 6**
- C. 5
- D. None of the above

9. If $A_{min} = 40$ and $A_{max} = 60$, what is the percentage of modulation?

- A. 20 %**
- B. 40 %
- C. 50 %
- D. 10 %

10. In a radio receiver, we generally use oscillator as a local oscillator

- A. Crystal
- B. Wien-bridge
- C. Phase-shift
- D. Hartley**

11. A 50 kW carrier is to be amplitude modulated to a level of 85%. What is the carrier power after modulation ?

- A. 50 kW**
- B. 5 kW
- C. 8 kW
- D. 25 kW

12. As the modulation level is increased, the carrier power_____?

- A. Is increased
- B. Remains the same**
- C. Is decreased
- D. None of the above

13. A high Q tuned circuit will permit an amplifier to have high _____?

- A. Fidelity
- B. Frequency range
- C. Sensitivity
- D. Selectivity**

14. Man made noise are_____ variations?

- A. Amplitude**
- B. Frequency
- C. Phase
- D. Both phase and frequency

15. If level of modulation is increased _____ power is increased?

A. Carrier

B. Sideband

C. Carrier as well as sideband

D. None of the above

16. Demodulation is done in _____?

A. Receiving antenna

B. Transmitter

C. Radio receiver

D. Transmitting antenna

17. In radio transmission, the medium of transmission is _____?

A. Space

B. An antenna

C. Cable

D. None of the above

18. In TV transmission, picture signal is _____ modulated?

A. Frequency

B. Phase

C. Amplitude

D. None of the above

19. In a radio receiver, noise is generally developed at _____?

A. IF stage

B. Receiving antenna

C. Audio stage

D. RF stage

20. The signal voltage induced in the aerial of a radio receiver is of the order of _____?

- A. mV
- B. μ V**
- C. V
- D. None of the above

21. In a transmitter _____ oscillator is used?

- A. Hartley
- B. RC phase-shift
- C. Wien-bridge
- D. Crystal**

22. In an AM wave useful power is carrier by _____?

- A. Carrier
- B. Sidebands**
- C. Both sidebands and carrier
- D. None of the above

23. In an AM wave, the majority of the power is in _____?

- A. Lower sideband
- B. Upper sideband
- C. Carrier**
- D. None of the above

24. If modulation is 100% then signal amplitude is _____ carrier amplitude?

- A. Equal to**
- B. Greater than
- C. Less than
- D. None of the above

25. In amplitude modulation, the _____ of carrier is varied according to the strength of the signal?

- A. Amplitude**
- B. Frequency
- C. Phase
- D. None of the above

26. In amplitude modulation, bandwidth is _____ the audio signal frequency?

0

- A. Thrice
- B. Four times
- C. Twice**
- D. None of the above

27. At 100% modulation, the power in each sideband is _____ of that of carrier?

0

- A. 50%
- B. 40%
- C. 60%
- D. 25%**

28. Over-modulation (amplitude) occurs when signal amplitude is _____ carrier amplitude?

- A. Equal to
- B. Greater than**
- C. Less than
- D. None of the above

29. Over modulation results in _____?

- A. Weakening of the signal
- B. Excessive carrier power
- C. Distortion**
- D. None of the above