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Q1. Modulation is done in ……..

1. Transmitter
2. Radio receiver
3. Between transmitter and radio receiver
4. None of the above

Answer : 1

Q2. In a transmitter ……. oscillator is used

1. Hartley
2. RC phase-shift
3. Wien-bridge
4. Crystal

Answer : 4

Q3. In India, ……. modulation is used for radio transmission

1. Frequency
2. Amplitude
3. Phase
4. None of the above

Answer : 2

Q4. In an AM wave useful power is carrier by …….

1. Carrier
2. Sidebands
3. Both sidebands and carrier
4. None of the above

Answer : 2

Q5. In amplitude modulation, bandwidth is ……. the audio signal frequency

1. Thrice
2. Four times

3. Twice
4. None of the above

Answer : 3

Q6. In amplitude modulation, the …… of carrier is varied according to the strength of the signal.

1. Amplitude
2. Frequency
3. Phase
4. None of the above

Answer : 1

Q7. Overmodulation (amplitude) occurs when signal amplitude is ……. carrier amplitude

1. Equal to
2. Greater than
3. Less than
4. None of the above

Answer : 2

Q8. In an AM wave, the majority of the power is in …….

1. Lower sideband
2. Upper sideband
3. Carrier
4. None of the above

Answer : 3

Q9. At 100% modulation, the power in each sideband is …… of that of carrier

1. 50%
2. 40%
3. 60%
4. 25%

Answer : 4

Q10. Overmodulation results in ……..

1. Weakening of the signal
2. Excessive carrier power

3. Distortion
4. None of the above

Answer : 3

Q11. If modulation is 100% then signal amplitude is …….. carrier amplitude

1. Equal to
2. Greater than
3. Less than
4. None of the above

Answer : 1

Q12. As the modulation level is increased, the carrier power ……..

1. Is increased
2. Remains the same
3. Is decreased
4. None of the above

Answer : 2

Q13. Demodulation is done in ……

1. Receiving antenna
2. Transmitter
3. Radio receiver
4. Transmitting antenna

Answer : 3

Q14. A high Q tuned circuit will permit an amplifier to have high ……

1. Fidelity
2. Frequency range
3. Sensitivity
4. Selectivity

Answer : 4

Q15. In radio transmission, the medium of transmission is ……..

1. Space
2. An antenna
3. Cable

4. None of the above

Answer : 1

Q16. If level of modulation is increased ……. power is increased

1. Carrier
2. Sideband
3. Carrier as well as sideband
4. None of the above

Answer : 2

Q17. In TV transmission, picture signal is …… modulated

1. Frequency
2. Phase
3. Amplitude
4. None of the above

Answer : 3

Q18. In a radio receiver, noise is generally developed at …….

1. IF stage
2. Receiving antenna
3. Audio stage
4. RF stage

Answer : 4

Q19. Man made noise are ……. variations.

1. Amplitude
2. Frequency
3. Phase
4. Both phase and frequency

Answer : 1

Q20. The signal voltage induced in the aerial of a radio receiver is of the order of …….

1. mV
2. µV
3. V
4. None of the above

Answer : 2

Q21. Superhertodyne principle refers to

1. Using a large number of amplifier stages
2. Using a push-pull circuit
3. Obtaining lower fixed intermediate frequency
4. None of the above

Answer : 3

Q22. If a radio receiver amplifies all the signal frequencies equally well, it is said to have high ……

1. Sensitivity
2. Selectivity
3. Distortion
4. Fidelity

Answer : 4

Q23. Most of the amplification in a superhetrodyne receiver occurs at ……. stage

1. IF
2. RF amplifier
3. Audio amplifier
4. Detector

Answer : 1

Q24. The letters AVC stand for ……..

1. Audio voltage control
2. Abrupt voltage control
3. Automatic volume control
4. Automatic voltage control

Answer : 3

Q25. The superhetrodyne principle provides selectivity at ……. stage

1. RF
2. IF
3. audio
4. Before RF

Answer : 2

Q26. In superhetrodyne receiver, the input at mixer stage is …….

1. IF and RF
2. RF and AF
3. IF and AF
4. RF and local oscillator signal

Answer : 4

Q27. The major advantage of FM over AM is ……..

1. Reception is less noisy
2. Higher carrier frequency
3. Smaller bandwidth
4. Small frequency deviation

Answer : 1

Q28. When the modulating signal controls the frequency of the carrier, we get…….

1. Phase modulation
2. Amplitude modulation
3. Frequency modulation
4. May be any one of the above

Answer : 3

Q29. Modulation refers to a low-frequency signal controlling the ……

1. Amplitude of the carrier
2. Frequency of the carrier
3. Phase of the carrier
4. May be any of the above

Answer : 4

Q30. The IF is 455 kHz. If the radio receiver is tuned to 855 kHz, the local oscillator frequency is …….

1. 455 kHz
2. 1310 kHz
3. 1500 kHz
4. 1520 kHz

Answer : 2

Q31. If A_{min} = 40 and A_{max} = 60, what is the percentage of modulation?

1. 20 %

2. 40 %
3. 50 %
4. 10 %

Answer : 1

Q32. The function of ferrite antenna is to …….

1. Reduce stray capacitance
2. Stabilise d.c. bias
3. Increase the Q of tuned circuit
4. Reduce noise

Answer : 3

Q33. In a radio receiver, we generally use …….. oscillator as a local oscillator

1. Crystal
2. Wien-bridge
3. Phase-shift
4. Hartley

Answer : 4

Q34. A 100 V carrier is made to vary between 160 V and 40 V by the signal. What is the modulation factor?

1. 3
2. 6
3. 5
4. None of the above

Answer : 2

Q35. A 50 kW carrier is to be amplitude modulated to a level of 85%. What is the carrier power after modulation?

1. 50 kW
2. 5 kW
3. 8 kW
4. 25 kW

Answer : 1

Q36. In the above question, what is the power in sidebands?

1. 8 kW

2. 6 kW
3. 06 kW
4. 9 kW

Answer : 3

Q37. In a superhetrodyne receiver, the difference frequency is chosen as the IF rather than the sum frequency because …….

1. The difference frequency is closer to oscillator frequency
2. Lower frequencies are easier to amplify
3. Only the difference frequency can be modulated
4. None of the above

Answer : 2

Q38. The diode detector in an AM radio receiver is usually found …….

1. Before the first RF stage
2. After the first RF stage
3. After several stages of amplification
4. None of the above

Answer : 3

Q39. In a TRF radio receiver, the RF and detection stages are tuned to ……

1. Radio frequency
2. IF
3. Audio frequency
4. None of the above

Answer : 1

Q40. In TV transmission, sound signal is …… modulated

1. Amplitude
2. Frequency
3. Phase
4. None of the above

Answer : 2