

## Chapter 4.0 How Radio Works

### Section 4.2 FM

G7C08 (D) p.110

What type of circuit is used in many FM receivers to convert signals coming from the IF amplifier to audio?

- A. Product detector
- B. Phase inverter
- C. Mixer
- D. Discriminator

G8A02 (B) p.110

What is the name of the process that changes the phase angle of an RF wave to convey information?

- A. Phase convolution
- B. Phase modulation
- C. Angle convolution
- D. Radian inversion

G8A03 (D) p.103

What is the name of the process that changes the instantaneous frequency of an RF wave to convey information?

- A. Frequency convolution
- B. Frequency transformation
- C. Frequency conversion
- D. Frequency modulation

G8A04 (B) p.110

What emission is produced by a reactance modulator connected to a transmitter RF amplifier stage?

- A. Multiplex modulation
- B. Phase modulation
- C. Amplitude modulation
- D. Pulse modulation

G8A08 (D) p.107

Which of the following is an effect of overmodulation?

- A. Insufficient audio
- B. Insufficient bandwidth
- C. Frequency drift
- D. Excessive bandwidth

G8B04 (D) p.107

What is the stage in a VHF FM transmitter that generates a harmonic of a lower frequency signal to reach the desired operating frequency?

- A. Mixer
- B. Reactance modulator
- C. Pre-emphasis network
- D. Multiplier

G8B06 (D) p.106

What is the total bandwidth of an FM phone transmission having 5 kHz deviation and 3 kHz modulating frequency?

- A. 3 kHz
- B. 5 kHz
- C. 8 kHz
- D. 16 kHz

G8B07 (B) p.108

What is the frequency deviation for a 12.21 MHz reactance modulated oscillator in a 5 kHz deviation, 146.52 MHz FM phone transmitter?

- A. 101.75 Hz
- B. 416.7 Hz
- C. 5 kHz
- D. 60 kHz