Technician - Chapter 2

T5B01 (C)

How many milliamperes is 1.5 amperes?

A. 15 milliamperes

B. 150 milliamperes

C. 1500 milliamperes (1.5A = 1,500 mA)

D. 15,000 milliamperes

T5B02 (A)

What is another way to specify a radio signal frequency of 1,500,000 hertz?

A. 1500 kHz (1,500,000 Hz = 1,500 kHz = 1.5 MHz)

B. 1500 MHz

C. 15 GHz

D. 150 kHz

T5B03 (C)

How many volts are equal to one kilovolt?

A. One one-thousandth of a volt

B. One hundred volts

C. One thousand volts (1 kV = 1000 V)

D. One million volts

T5B04 (A)

How many volts are equal to one microvolt?

A. One one-millionth of a volt $(1 \mu V = one one-millionth of a volt)$

B. One million volts

C. One thousand kilovolts

D. One one-thousandth of a volt

T5B05 (B)

Which of the following is equal to 500 milliwatts?

A. 0.02 watts

B. 0.5 watts (500 mW = 0.5 W)

C. 5 watts

D. 50 watts

T5B06 (C)

If an ammeter calibrated in amperes is used to measure a 3000- milliampere current, what reading would it show?

A. 0.003 amperes

B. 0.3 amperes

C. 3 amperes (3,000 mA = 3 A)

D. 3,000,000 amperes

T3B08 (B)

What are the frequency limits of the VHF spectrum?

A. 30 to 300 kHz

B. 30 to 300 MHz

C. 300 to 3000 kHz

D. 300 to 3000 MHz

T5B07 (C)

If a frequency display calibrated in megahertz shows a reading of 3.525 MHz, what would it show if it were calibrated in kilohertz?

A. 0.003525 kHz

B. 35.25 kHz

C. 3525 kHz (3.525 MHz = 3,525 kHz)

D. 3,525,000 kHz

T5B08 (B)

How many microfarads are equal to 1,000,000 picofarads?

A. 0.001 microfarads

B. 1 microfarad (1,000,000 pF = 1 μ F)

C. 1000 microfarads

D. 1,000,000,000 microfarads

T5B12 (A)

Which of the following frequencies is equal to 28,400 kHz?

A. 28.400 MHz (28,400 kHz = 28.4 MHz)

B. 2.800 MHz

C. 284.00 MHz

D. 28.400 kHz

T5B13 (C)

If a frequency display shows a reading of 2425 MHz, what frequency is that in GHz?

A. 0.002425 GHz

B. 24.25 GHz

C. 2.425 GHz (2425 MHz = 2.425 GHz)

D. 2425 GHz

T5A12 (D)

What describes the number of times per second that an alternating current makes a complete cycle?

- A. Pulse rate
- B. Speed
- C. Wavelength

D. Frequency

T5C05 (A)

What is the unit of frequency?

A. Hertz

- B. Henry
- C. Farad
- D. Tesla

T5C14 (D)

What is the proper abbreviation for megahertz?

- A. mHz
- B. mhZ
- C. Mhz

D. MHz

T3B09 (D)

What are the frequency limits of the UHF spectrum?

- A. 30 to 300 kHz
- B. 30 to 300 MHz
- C. 300 to 3000 kHz

D. 300 to 3000 MHz

T3B10 (C)

What frequency range is referred to as HF?

- A. 300 to 3000 MHz
- B. 30 to 300 MHz

C. 3 to 30 MHz

D. 300 to 3000 kHz

T5C06 (A)

What does the abbreviation "RF" refer to?

A. Radio frequency signals of all types

- B. The resonant frequency of a tuned circuit.
- C. The real frequency transmitted as opposed to the apparent frequency
- D. Reflective force in antenna transmission lines

T3B01 (C)

What is the name for the distance a radio wave travels during one complete cycle?

- A. Wave speed
- B. Waveform

C. Wavelength

D. Wave spread

T3B04 (A)

How fast does a radio wave travel through free space?

A. At the speed of light

- B. At the speed of sound
- C. Its speed is inversely proportional to its wavelength
- D. Its speed increases as the frequency increases

T3B05 (B)

How does the wavelength of a radio wave relate to its frequency?

A. The wavelength gets longer as the frequency increases

B. The wavelength gets shorter as the frequency increases

- C. There is no relationship between wavelength and frequency
- D. The wavelength depends on the bandwidth of the signal

T3B06 (D)

What is the formula for converting frequency to approximate wavelength in meters?

- A. Wavelength in meters equals frequency in hertz multiplied by 300
- B. Wavelength in meters equals frequency in hertz divided by 300
- C. Wavelength in meters equals frequency in megahertz divided by 300
- D. Wavelength in meters equals 300 divided by frequency in megahertz

T3B07 (A)

What property of radio waves is often used to identify the different frequency bands?

A. The approximate wavelength

- B. The magnetic intensity of waves
- C. The time it takes for waves to travel one mile
- D. The voltage standing wave ratio of waves

T3B11 (B)

What is the approximate velocity of a radio wave as it travels through free space?

A. 150,000 kilometers per second

B. 300,000,000 meters per second

- C. 300,000,000 miles per hour
- D. 150,000 miles per hour

T7A02 (B)

What is a transceiver?

A type of antenna switch

B. A unit combining the function of a transmitter and receiver

- C. A component in a repeater that filters out unwanted interference
- D. A type of antenna matching network