Chapter 1-3 - Answers

Q1   Explain in your own words the relationship between frequency, period and wavelength.

Frequency is the rate at which the electrons move back and forward measured in Hertz (Hz). Period is the time for each cycle. Wavelength is the distance the wave would travel in one cycle.

Q2 Is a nano second (nS) faster or slower than a milli second (mS)?

A nano second is 0.000000001 and a milli second is 0.000001 so a nS is faster than a millisecond.

Q3   Complete the following table.

Frequency	Period	Wavelength
144 MHz	6.9 nS	2 M
3.6 MHz	27 uS	80 M
7.1 MHz	14 uS	40 M
21 MHz	0.04 uS	15 M
28.5 MHz	35 nS	10 M
430 MHz	2.3 nS	70 cM
773 kHz (ABC AM)	1.3 uS	388 M
91.5 MHz. (Smooth FM)	10 nS	3.2 M

Q4 Complete the following table.

MF	Medium Frequency	300 kHz	3 MHz
HF	High frequency	3 MHz	30 MHz
VHF	Very High Frequency	30 MHz	300 MHz
UHF	Ultra-High Frequency	300 MHz	3 GHz

Q5 Complete the table of frequencies for the Foundation licence from memory.

Foundation (6 bands)

Band	Freq in MHz	Mode
80m	3.5 – 3.7	
40m	7 – 7.3	
15m	21 – 21.45	Any mode
10m	28 – 29.7	
2m	144 – 148	
70cm	430 - 450	