## Technician Class Course: Homework 3

## Directions:

- 1. Read the book pages specified and fill in the answers to the questions below.
- 2. While reading also highlight the correct answer to each FCC test question and Gordon's keywords (in blue) in the explanation. *Do not read the incorrect answers!*
- 3. No sample tests yet! Re-read past chapter questions & answers once.

	Brief summary:
	http://www.youtube.com/watch?v=1HfvmU_utI8 (up to 5:30)
	Brief summary:
	http://www.youtube.com/watch?v=RDKUixM9zos (up to 1:25)
	Brief summary:
	http://www.youtube.com/watch?v=zYS9kdS5618
	Brief summary:
MER	GENCY! (Pages 86-91)
	CGENCY! (Pages 86-91)  ch traffic has the highest priority?
Whi	
Whi Use	ch traffic has the highest priority?
Whi Use Say	ch traffic has the highest priority? this to signal an emergency using Morse code?
Whi Use Say Say	ch traffic has the highest priority?  this to signal an emergency using Morse code?  this on the international worldwide bands in an emergency?
Whi Use Say Say Do t	ch traffic has the highest priority?  this to signal an emergency using Morse code?  this on the international worldwide bands in an emergency?  this in an emergency on a 2 meter repeater?
Whi Use Say Say Do t	ch traffic has the highest priority?  this to signal an emergency using Morse code?  this on the international worldwide bands in an emergency?  this in an emergency on a 2 meter repeater?  his after you have checked into an emergency net?
White Use Say Say Do to Are Radio	ch traffic has the highest priority?  this to signal an emergency using Morse code?  this on the international worldwide bands in an emergency?  this in an emergency on a 2 meter repeater?  his after you have checked into an emergency net?  tactical call signs allowed in an emergency?

## **WEAK SIGNALS (Pages 92-98)** 1. How far is VHF range? 2. When communicating simplex in a big city, should you choose UHF of VHF? \_\_\_\_\_ 3. 6 meter long range excitement may be from radio wave refracting off the \_\_\_\_\_? 4. What mode do we normally use for weak signal work? \_\_\_\_\_ 5. Do we use lower sideband or upper sideband on VHF and UHF? \_\_\_\_\_ 6. What is that letter-number designator assigned to a geographic location? \_\_\_\_\_ 7. Fun webpage for 6 meter activity? www. \_\_\_\_\_\_.org? **DIGITAL & SPACE (Pages 99-111)** 1. What kind of ham station is tied into the internet? 2. What does VoIP mean? \_\_\_\_\_ 3. What system allows radio to radio internet linking? \_\_\_\_\_ 4. What system allows your computer to link into the internet? \_\_\_\_\_ 5. You won't need this for a digital radio station? 6. What does PSK mean? \_\_\_\_\_ 7. What system allows you to automatically transmit your position over radio? 8. Support this organization that supports satellites? 9. What class of license to operate through satellites? \_\_\_\_\_ 10. How much power should you run working through a satellite? \_\_\_\_\_ 11. What does LEO stand for? \_\_\_\_\_ 12. International Space Station may be heard on what 2 meter frequency? **BANDWIDTH & INTERFERENCE (Pages 112-125)** Emission with narrowest bandwidth?\_\_\_\_\_ 2. Typical bandwidth of an FM signal?\_\_\_\_\_ 3. What is being transmitted using NTSC?\_\_\_\_\_ 4. Bandwidth for a single sideband voice signal?\_\_\_\_\_

5. A break in your cable TV coax could lead to \_\_\_\_\_?

7. What filter goes on a TV for outside antenna reception? \_\_\_\_\_

6. What type of connector is on cable box coax?

8. What kind of filter goes on a telephone to reduce interference?	
9. What type of filter goes on the power cable to minimize alternator whistle?	
10. Use this to help track down noise spurs?	
VOLTS & AMPS (Pages 126-135) – part 1	
1. Electromotive force (EMF), voltage, is represented by what single letter?	
2. How many volts in a car battery?	
3. Current in amps is represented by what letter?	
4. Direct current, out of a battery, flows in just direction.	
5. What is a good conductor?	
6. What is a good insulator?	