Homework #7 (chapters 5,6)

Question 1

Define and describe briefly: VCO, VCA, VCF, envelope generator, noise generator, and ring modulator.

Question 2

a) What is the “place theory or hearing”?
b) What is “sharpening”?
c) What is “Ohm’s law of hearing”?
d) What is a “JND”? Give two examples.
e) What is “masking”? Why does it depend on frequency?
f) What is the “critical band”?

Question 3

a) If 1 Watt of sound power is spread out over 1m² of area, what is the SIL in decibels (dB)?
b) If the SIL of one voice is 95 dB, what is the SIL if you have 100 such voices together?
c) By what multiplicative factor is the intensity increased if we add 3dB to the SIL?