MULTITRACK QUESTIONS FOR WEEKS 6

OWUSU-BRAFI

Part One:

1. What does binary mean? Binary Form is a way of structuring a piece of music in two related sections, both of which are usually repeated. Binary code is the simplest form of computer code or programming data. It is represented entirely by a binary system of digits consisting of a string of consecutive zeroes and ones.

2. What is the advantage of using binary coding instead of the decimal system? It’s more efficient and accurate, it the best system for counting.

3. What does Signal-to-Noise Ratio mean? Is a measure used in science and engineering to quantify how much a signal has been corrupted by noise. It is defined as the ratio of signal power to the noise power corrupting the signal. A ratio higher than 1:1 indicates more signal than noise.

4. What is Dynamic Range? The highest and lowest volume a signal, instrument, and circuit can produce.

5. What are the 4 basic controls on a compressor (not all are always present)?

What are some other controls that MIGHT be on a compressor? A) Attack and release B) Threshold C) Ratio and D) Gain. Also Make-up Gain and Output Gain

6. What is unity gain? In the idea of unity gain, the input and the output between two devices are the same level.

7. What does Gain Reduction mean? Gain Reduction can best be described as the difference between input levels and the resulting change to output level

8. Why do meters on Compressors start at “0” and move backwards? The closer to 0 db, the louder it is (for example -5 db is louder than -10 db). If you cross that 0 db line you begin to hear clipping and distortion.

9. A gain of “minus 4” is equal to what “ratio” on a compressor? The aim of a compressor in recording is to reduce the range of dynamics of an audio signal. Any parts of the signal louder than a certain threshold are reduced. The amount of reduction is relative to the level of the signal and expressed as a ratio. If the ratio is set at 2:1 the signal above the threshold is reduced to half its original, if the ratio is set to 5:1 the signal above the threshold is reduced to one fifth of its original.

10. What is a good Compression **Ratio** to use for vocals or bass guitar?

Vocals at 2:1 and electric guitars anywhere from 2:1 to 6:1.

11. What is a good **amount** of Gain Reduction to set on a vocal or bass guitar? Restrict the gain reduction to no more than about 4dB. For more in‑your‑face, crushed dynamics, the gain reduction could be up to 20dB (or even more)

12. What is Multiband Compression? A multi-band compressor is essentially three, four, or possibly five compressors in one, with each compressor focusing on a specific band of frequencies.