

MUSTC 123 / Quiz 1 Study Guide

1. What is the difference between a multitrack recorder and a two-track recorder?
2. On a two-track recorder can you record onto the two tracks separately?
3. Are mixes ever delivered on a multitrack format? If so, when?
4. What is the advantage of analog tape?
5. What are some disadvantages of using analog tape?
6. What is the general scientific concept behind analog tape recording?
7. What are the two main layers of analog tape made of?
8. What are the three heads called on an ATR? What order are they in (from left to right)?
9. What does the erase head do? (your answer should be more than “erase”)
10. What are the head gaps for?
11. A record head transduces ____ into ____.
12. What is the capstan for?
13. What is tape speed measured in?
14. What are the common tape speeds for professional tape machines?
15. Which tape speed is less noisy, faster or slower?
16. What is “Sel-rep”? What does it allow us to do?
17. What is the difference between Auto-input and Input-only monitoring?
18. What are some advantages of recording digitally? Disadvantages?
19. What two numbers does the binary numbering system use?
20. What is a bit?
21. What is a word?

22. EXTRA CREDIT: How can you translate a binary number into decimal? Try this one: 1011 0001
23. How many possible values can 16-bit represent? 24-bit?
24. What is sampling rate?
25. What is quantization and bit-depth?
26. What is the sampling rate of a CD?
27. What determines the highest frequency that can be recorded in a digital system?
28. What is the Nyquist Theorem?
29. What is aliasing?
30. What is an anti-aliasing filter?
31. What is the bit-depth of a CD?
32. What determines the dynamic range of a digital recorder?
33. Which of the following are balanced? Which are unbalanced?
 - a. AES/EBU
 - b. S/PDIF
 - c. ADAT Lightpipe.
34. What two types of head arrangements are available on digital tape machines?
35. What types of machines have rotating heads?