Questions

1) Explain why sound needs to be converted to a digital format. [2]

2) a) Define the term sample. [1]

b) Define sample rate. [1]

c) Define bit depth. [1]

3) State 3 factors that affect the size of a sound file. [3]

4) a) Which unit is bit depth measured in?

A) Hertz (Hz)
B) Milliseconds (ms)
C) Bits per second (bps)
D) Bits [1]

b) Which unit is bit rate measured in?

A) Hertz (Hz)
B) Milliseconds (ms)
C) Bits per second (bps)
D) Bits [1]

c) Which unit is sample rate measured in?

A) Hertz (Hz)
B) Milliseconds (ms)
C) Bits per second (bps)
D) Bits [1]

5) a) Which one of the following is true if you increase the bit depth?

A) File size reduces
B) Sound quality reduces
C) Sound quality increases
D) Sample rate increases [1]

b) Which one of the following is true if you increase the sample rate?

A) File size reduces
B) Sound quality reduces
C) Bit depth increases
D) Bit rate increases [1]

6) a) Explain why a high quality sound file needs a high sample rate. [2]

b) Explain why a high quality sound file needs a high bit depth. [2]

7) John records himself singing a song.

a) Outline what happens when the computer converts his voice into a file. [3]

John reduces the bit depth used to store his recorded song.

b) Explain **two** effects this will have on his recorded song. [4]