OCR
Oxford Cambridge and RSA

# Unit 2.6 Data Representation
# Lesson 4 – Sound

## MCQS

The numbers after the question are an approximate estimation of relative difficulty, broadly based around the new GCSE Numbering System. Please note that these were produced before final guidance was released regarding levels of difficulty and as such should be used as a rough guide only.

| | |
|---|---|
| **Question 1: What unit is sample rate measured in? (1-4)** | ✓ |
| Bits per second (bps) | |
| Hertz (Hz) | |
| Megabits per second (Mbps) | |
| **Question 2: Which of the following is not true if you increase the sample rate? (3-6)** | ✓ |
| Better quality of recording | |
| Needs greater storage space | |
| larger file size | |
| Decrease in quality | |
| **Question 3: What is meant by bit depth? (3-6)** | ✓ |
| The number of samples taken per second | |
| The amplitude of each sample | |
| The number of bits used per second of audio | |
| The number of bits used to store each sound sample | |
| **Question 4: Which of the following is true if you decrease the bit rate? (3-6)** | ✓ |
| File size increases | |
| Sound quality increases | |
| Sound quality decreases | |
| Number of sound samples taken per second increases | |
| **Question 5: What is measured when the wave is sampled? (3-6)** | ✓ |
| Amplitude | |
| Hertz | |
| Bit rate | |
| Frequency | |
| **Question 6: What sample rate is used for CD quality sound? (6-8)** | ✓ |
| 44,100 Hz | |
| 88,200 Hz | |
| 22,100 Hz | |
| **Question 7: The purpose of a Digital to Analogue converter is to… (6-8)** | ✓ |
| convert binary data into analogue form so we can hear it via a speaker | |
| convert sound waves into binary so it can be understood by a computer | |

# MCQS

| **Question 8: What piece of hardware would you use to input sound into a computer? (1-3)** | ✓ |
|---|---|
| Speaker | |
| Analogue to digital converter | |
| Microphone | |
| Digital to analogue converter | |
| **Question 9: If you increase the bit depth of an audio file then you increase the quality? (1-4)** | ✓ |
| True | |
| False | |
| **Question 10: The amplitude of a sound wave is… (6-9)** | ✓ |
| how high the wave is from the crest or trough | |
| the frequency at which it is sampled | |
| the speed at which it travels through air | |

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## MCQS ANSWERS

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