

# Subject: GCE Music Technology

## Exam Board: Edexcel

### Component 3

Listening Exam – A Level Past Paper (9MT0 03)

1 hour 30 mins

#### Sequencing and DAW

- Uses of sequencing in tracks.
- Humanising techniques (e.g. iterative quantize)
- Appropriate quantize values / quantize techniques.

#### Recording and Capture

- Sources of unwanted noise. How to avoid.
- Identify characteristics of a recording / link to era
- Identify limitations in older recording technology
- Identify specific recording techniques, linked to era
- Identify specific electronic/keyboard instruments
- Understand the development of recording technology and the production practices of different eras, including how production techniques have changed over time.
  - Direct to tape mono recording (1930-1963)
  - Early multitrack recording (1964-1969)
  - Large-scale analogue multitrack (1969-1995)
  - Digital recording and sequencing (1980-present day)
  - Digital audio workstation and emerging technologies (1996-present day)

#### Effects and Processing

- Identify effects on individual instruments
- Describe parameters of an effect by ear
- Advanced production techniques e.g. side chain compression, filter sweep.
- Analyse production techniques on a section of music.
- Reverb/delay parameters
- Reverb types and how they work.
- Differentiating tracks in the mix using EQ.
- Mastering – preparing a master for different media
- Understand key mastering processes and how they affect the sound

#### Synthesis

- Oscillator settings (e.g. wave shape)
- Filter settings (e.g. filter type)
- Envelope settings
- Modulation settings (LFO)
- Other settings (e.g. arpeggiator, portamento)

#### Audio Editing/Sampling

- Identify/describe sampling techniques.
- Sample rate and bit depth and how they affect sound quality.

### Component 4

Practical Exam – A Level Past Paper (9MT0 04)

2 hours 15 mins

#### Sequencing and DAW

- Quantize values.
- Adjusting rhythm and pitch.
- Describe/manipulate pitch bend data.
- Velocity editing.
- Rhythmic dictation.
- Import MIDI drums and reassign the drum samples correctly.
- Understand how MIDI messages are constructed
- Name and describe different types of MIDI messages.

#### Recording and Capture

- Sources of unwanted noise, how to remove
- Microphone placement
- Instrument-specific recording techniques
- DI boxes, audio interface controls, audio cables and their uses.
- Microphone selection (type, frequency response, polar pattern) – 8 marks

#### Effects and Processing

- Identify and describe audio effects, including individual parameters, what they do and how they are set
  - Dynamic processing (compress, noise gate, side chain compression/gate)
  - Frequency (EQ/filter)
  - Reverb/delay
  - Pitch correction/time stretch
- Listen to a complex effect involving multiple staged processes and recreate it by ear.

#### Audio Editing/Sampling

- Correct out of time sections of an audio track.
- Repair notes/phrases from material elsewhere.
- Compile a part from multiple audio files, by ear.
- Compile a part by clipping notes/hits from elsewhere in the part and editing them together (piano roll given).
- Fade in/out, crossfade.
- What is a sample/sampler?
- Map a sample across the keyboard and enter a MIDI part.
- Use pitch correction to create a backing vocal (piano roll given)
- Remove intrusive resonance
- Describe Nyquists theorem

#### Synthesis

- Recreate a synthesiser sound from scratch, match
  - Oscillator settings (shape, octave, pitch)
  - Filter settings (LPF, HPF)

### Technical Numeracy

- Make frequency calculations.
- Annotate and interpret technical graphs (see C4).

### Question 5 - Comparison Question

- Evaluate the production techniques heard in two songs/two versions of a song.
  - Capture
  - Instruments and Style
  - Dynamics
  - Effects Processing
  - Reflection

### Question 6: Greater Depth

- You will be given one specific piece of technology (e.g. effect, recording medium, instrument) and will evaluate its use in a track **AND** describe its development over time and how it impacted music production.
- E.g. a specific recording medium
  - Tape
  - Digital
  - DAW
- A specific effect or production technique
  - Reverb
  - Distortion
  - Processing of frequencies
  - Dynamic processing
- An electronic instrument
  - Synthesisers
  - Samplers
  - Sequencers
  - Electric guitar

- Envelope settings (ADSR, amplitude, filter, pitch)
- Modulation settings (LFO)
- Pitch bend range
- Velocity sensitive filtering
- Describe a synthesiser sound by ear (above)

### Technical Numeracy

- Analyse MIDI file and record technical details.
- Convert numbers from decimal to binary.
- Annotate and interpret technical graphs.
  - Audio waveforms
  - Oscillator shapes
  - EQ/filter
  - Compression/noise gate
  - Reverb
  - Distortion
- Annotate and interpret plug-in settings.
- Calculate frequencies of notes.
- Understand file types /properties and how they affect the sound quality. Sample rate, bit depth, MP3 bitrate, lossy vs lossless compression.

### Question 5 - Mixing

- Produce a final mix, including:
  - Compress, noise gate, side chain compression/gate
  - EQ whole track, EQ specific phrase, filter sweep
  - Automated pan, automatic double tracking
  - Identify an effect and recreate it
  - Balance the levels of the mix
  - Produce a final stereo mix (bounce the track)

### Question 6

- Evaluate a recording setup, signal chain, mixing settings, synthesiser sound or effects parameters for a particular task.
  - Recording setup for a particular instrument/genre
  - Mix window for a particular instrument/genre
  - Effects chain for a particular instrument/genre (e.g. guitar pedals)
  - Synthesiser settings for a particular timbre (e.g. 80s lead, pad)

### **Useful revision resources:**

A Level Music Technology revision guide [https://www.amazon.co.uk/Edexcel-Level-Music-Technology-Revision/dp/1785586343/ref=sr\\_1\\_1?crid=38QJ01HI0JPV&dchild=1&keywords=a+level+music+technology+revision+guide&qid=1615995196&prefix=a+level+music+technolo%2Caps%2C175&sr=8-1](https://www.amazon.co.uk/Edexcel-Level-Music-Technology-Revision/dp/1785586343/ref=sr_1_1?crid=38QJ01HI0JPV&dchild=1&keywords=a+level+music+technology+revision+guide&qid=1615995196&prefix=a+level+music+technolo%2Caps%2C175&sr=8-1)

Quizlet Sets for Tier 3 Vocabulary (available on Shared Drive)

Shared Drive = OneDrive/Shared/A Level Music Tech – Shared Folder

Green sheets

### Component 3

- Revision videos (Shared Drive)
- Music Technology revision- Component 3

<https://www.youtube.com/watch?v=yAKLguSjD-U>

Past Papers – Available on Teams

### Component 4

#### Revision Videos - Practical Skills

- Mixing (Q5) practice tasks and support videos (Shared Drive)
- Synthesis practice tasks and support videos (Shared Drive)
- Audio Editing practice tasks and support videos (Shared Drive)
- Sequencing practice tasks and support videos (Shared Drive)
- Specimen Paper Walkthrough (Teams)
- Past Papers (Teams)
- Component 4 Revision - <https://www.youtube.com/watch?v=LDtV3Pk0sTA>

### Revision Tips

#### Component 3

- Take the time to check your equipment fully before the exam starts. Make sure you have your headphones on the right way around!
- Remember the 'CIDER' acronym to help you with Question 5.
- Answer 'explain' questions using the DEE format (describe, explain, example). You can only get so many marks for 'describing' only.

#### Component 4

- Take the time to read the instructions during the setup process. Make a note of the tempo and the first track you need to import. Add a stereo master fader at this point too.
- Take a highlighter into the exam and highlight key words, bar numbers etc.