



# **NCFE Level 1/2 Technical Award in Music Technology (603/7008/7)**

## **Examined Assessment**

Paper Number: **Sample Assessment**

Date: **Sample 2021**

## **Mark Scheme**

v1.0 Pre-Standardisation

**DRAFT**

This mark scheme has been written by the assessment writer and refined, alongside the relevant questions, by a panel of subject experts through the external assessment writing process and at standardisation meetings.

The purpose of this mark scheme is to give you:

- examples and criteria of the types of response expected from a learner
- information on how individual marks are to be awarded
- the allocated assessment objective(s) and total mark for each question.

## Marking guidelines

### General guidelines

You must apply the following marking guidelines to all marking undertaken. This is to ensure fairness to all learners, who must receive the same treatment. You must mark the first learner in exactly the same way as you mark the last.

- The mark scheme must be referred to throughout the marking period and applied consistently, do not change your approach to marking once you have been standardised.
- Reward learners positively giving credit for what they have shown, rather than what they might have omitted.
- Utilise the whole mark range and always award full marks when the response merits them.
- Be prepared to award zero marks if the learner's response has no creditworthy material.
- Do not credit irrelevant material that does not answer the question, no matter how impressive the response might be.
- The marks awarded for each response should be clearly and legibly recorded in the grid on the front of the question paper.
- If you are in any doubt about the application of the mark scheme, you must consult with your team leader or the chief examiner.

### Guidelines for using extended response marking grids

Extended response marking grids have been designed to award a learner's response holistically and should follow a best-fit approach. The grids are broken down into levels, with each level having an associated descriptor indicating the performance at that level. You should determine the level before determining the mark.

When determining a level, you should use a bottom up approach. If the response meets all the descriptors in the lowest level, you should move to the next one, and so on, until the response matches the level descriptor. Remember to look at the overall quality of the response and reward learners positively, rather than focussing on small omissions. If the response covers aspects at different levels, you should use a best-fit approach at this stage and use the available marks within the level to credit the response appropriately.

When determining a mark, your decision should be based on the quality of the response in relation to the descriptors. You must also consider the relative weightings of the assessment objectives, so as not to over/under credit a response. Standardisation materials, marked by the chief examiner, will help you with determining a mark. You will be

able to use exemplar learner responses to compare to live responses, to decide if it is the same, better or worse.

You are reminded that the indicative content provided under the marking grid is there as a guide, and therefore you must credit any other suitable responses a learner may produce. It is not a requirement either, that learners must cover all of the indicative content to be awarded full marks.

## Assessment objectives

This unit requires learners to:

<b>AO1</b>	Recall knowledge and show understanding.
<b>AO2</b>	Apply knowledge and understanding.
<b>AO3</b>	Analyse and evaluate knowledge and understanding.

The weightings of each assessment objective can be found in the qualification specification.

Qu	Mark scheme	Total marks
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**Section A**

**Total for this section: [20 marks]**

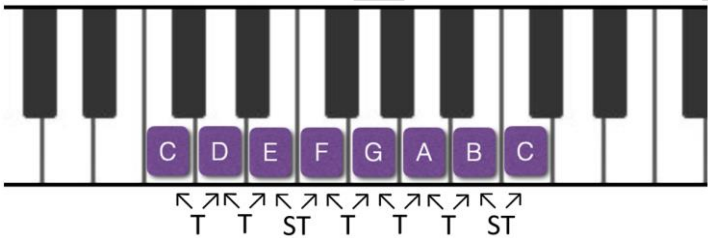
1	<p><b>Which one of the following types of connection would be used to connect a MIDI controller keyboard to a computer?</b></p> <p>A: Quarter inch jack                      B: RCA Phono                      C: USB                      D: XLR</p> <p><b>Answer: C: USB</b></p>	<p><b>1</b></p> <p><b>AO1=1</b></p>
2	<p><b>Which one of the following is the correct track type to use for note input?</b></p> <p>A: Automation track                      B: Mono audio track                      C: Software instrument track                      D: Stereo audio track</p> <p><b>Answer: C: Software instrument track</b></p>	<p><b>1</b></p> <p><b>AO1=1</b></p>
3	<p><b>Which one of the following risks is associated with exposure to noise as a hazard?</b></p> <p>A: Back pain                      B: Electrocutation                      C: Eye strain                      D: Hearing loss</p> <p><b>Answer: D: Hearing loss</b></p>	<p><b>1</b></p> <p><b>AO1=1</b></p>
4	<p><b>Name a dynamic processor which silences audio below a set threshold.</b></p> <p>Award <b>one</b> mark for the following:</p> <ul style="list-style-type: none"> <li>• Gate (1).</li> </ul>	<p><b>1</b></p> <p><b>AO1=1</b></p>


<p><b>5</b></p>	<p><b>Explain one advantage of using an MP3 file format.</b></p> <p>Award <b>one</b> mark maximum for a valid advantage, award <b>one</b> further mark for expansion:</p> <ul style="list-style-type: none"> <li>• saves space/data (1) as it is a compressed file format (1)</li> <li>• easier to share online (1) because file size is reduced (1).</li> </ul> <p><b>Accept any other suitable response.</b></p>	<p><b>2</b></p> <p><b>AO1=2</b></p>
<p><b>6</b></p>	<p><b>Listen to audio file section A.</b></p> <p><b>The drums in audio file section A are a combination of a recorded acoustic drum kit and sampled drum sounds.</b></p> <p><b>Assess one way the technique of sampling drum sounds has affected the musical outcome.</b></p> <p>Award <b>one</b> mark for identified application, award <b>one</b> further mark for impact of function on musical outcome:</p> <ul style="list-style-type: none"> <li>• sampled drum sounds layered on top of acoustic sounds (1) for a thicker texture (1)</li> <li>• reinforcement of drum sounds (1) to create a more powerful sound (1)</li> <li>• use of genre-specific drum sounds (1) to match the intended style (1)</li> <li>• no microphone spill when using samples (1) leading to a clearer drum sound (1)</li> <li>• sampled sounds are uniform (1) leading to consistent drum sound (1).</li> </ul> <p><b>Accept any other suitable response.</b></p>	<p><b>2</b></p> <p><b>AO3=2</b></p>
<p><b>7</b></p>	<p><b>Explain how three technological developments in the 1960s contributed to the development of rock music.</b></p> <p><b>AO1:</b></p> <ul style="list-style-type: none"> <li>• 4 and 8-track recording (1)</li> <li>• increased use of hardware effects (1)</li> <li>• analogue synthesisers (1).</li> </ul> <p><b>AO2:</b></p> <ul style="list-style-type: none"> <li>• (4 and 8-track recording) allowed for layering of instruments (1)</li> <li>• (increased use of hardware effects) allowed for experimentation in texture (1)</li> <li>• (analogue synthesisers) increased palette of sounds available to musicians (1).</li> </ul>	<p><b>6</b></p> <p><b>AO1=3</b></p> <p><b>AO2=3</b></p>

	<b>Accept any other suitable response.</b>	
<b>8</b>	<p><b>Listen to audio file section A.</b></p> <p><b>Overdubbing has been used in the production of the recording.</b></p> <p><b>Explain three different ways that this technique can be used to improve the recording of a piece of music.</b></p> <p>Award <b>one</b> mark for each overdub technique described up to a <b>maximum</b> of <b>three</b> marks.</p> <p>Award <b>one</b> mark for a valid expansion for each technique (up to a <b>maximum</b> of <b>three</b> marks):</p> <ul style="list-style-type: none"> <li>• layering sounds on top of each other (1) to create a thicker sound (1)</li> <li>• recording multiple takes of the same track (1) to allow for greater flexibility when editing (1)</li> <li>• recording at different times (1) to allow development of parts (1)</li> <li>• parts can be recorded in isolation more easily (1) to allow for greater clarity (1).</li> </ul> <p>Do not credit repetition of method, for example layering vocals, layering guitars.</p> <p><b>Accept any other suitable response.</b></p>	<p><b>6</b></p> <p><b>AO2=6</b></p>

**Section B**

**Total for this section: [20 marks]**

<p><b>9</b></p>	<p><b>Which one of the following scalic interval relationships is used when playing a natural minor scale?</b></p> <p><b>A:</b> T, T, T+S, T, T+S  <b>B:</b> T, S, T, T, S, T, T  <b>C:</b> T, S, T, T, S, T+S, S  <b>D:</b> T+S, T, T, T+S, T</p> <p><b>Answer:</b> B: T, S, T, T, S, T, T</p>	<p><b>1</b></p> <p><b>AO1=1</b></p>
<p><b>10</b></p>	<p>Figure 1 shows a piano keyboard.</p> <p>Identify the scale indicated by the notes on the keyboard when played from left to right.</p> <p style="text-align: center;"><b>Figure 1</b></p>  <p><b>A:</b> C harmonic minor  <b>B:</b> C major  <b>C:</b> C minor pentatonic  <b>D:</b> C major pentatonic</p> <p><b>Answer:</b> B: C major</p>	<p><b>1</b></p> <p><b>AO1=1</b></p>
<p><b>11</b></p>	<p><b>Which statement best describes a diatonic melody?</b></p> <p><b>A:</b> Melody that uses notes chromatically  <b>B:</b> Melody that uses different scales throughout  <b>C:</b> Melody that uses every note in a scale  <b>D:</b> Melody that uses only notes from one scale</p> <p><b>Answer:</b> D: Melody that uses only notes from one scale</p>	<p><b>1</b></p> <p><b>AO1=1</b></p>

<p>12</p>	<p><b>State the name of the following structural music form:</b></p> <p><b>ABCBA</b></p> <p>Award <b>one</b> mark for:</p> <ul style="list-style-type: none"> <li>• arch (1).</li> </ul>	<p><b>1</b></p> <p><b>AO1=1</b></p>
<p>13</p>	<p><b>Figure 2 shows a chord.</b></p> <p style="text-align: center;"><b>Figure 2</b></p>  <p><b>Identify the chord.</b></p> <p>Award <b>one</b> mark for F major, award <b>one</b> further mark for identification of major seventh.</p> <ul style="list-style-type: none"> <li>• F major (1) 7 (1).</li> </ul> <p><b>Accept other notation descriptions of major7.</b></p> <p><b>Accept Am (1) b6 (1).</b></p>	<p><b>2</b></p> <p><b>AO2=2</b></p>
<p>14</p>	<p><b>You are planning to record an acoustic guitar in a studio. You will use an audio interface, computer, computer peripherals, DAW software and speakers.</b></p> <p><b>Identify one additional item of music technology equipment that you will need to make the recording and describe why it is required.</b></p> <p>Award <b>one</b> mark for identifying one item of music technology equipment:</p> <p><b>AO1:</b></p> <ul style="list-style-type: none"> <li>• headphones (1)</li> <li>• microphone (1)</li> <li>• microphone stand (1)</li> <li>• shock mount (1).</li> </ul>	<p><b>2</b></p> <p><b>AO1=1</b></p> <p><b>AO2=1</b></p>



	<p>Award <b>one</b> mark for a description of why it is needed:</p> <p><b>AO2:</b></p> <ul style="list-style-type: none"> <li>• (headphones) to allow you to monitor your mix (1)</li> <li>• (microphone) to allow you to record/capture the guitar (1)</li> <li>• (microphone stand) (1) to allow you to accurately position the microphone for recording (1)</li> <li>• (shock mount) to minimise vibrations affecting the microphone (1).</li> </ul> <p><b>Accept any other suitable response.</b></p>	
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<p><b>15</b></p>	<p><b>Explain how underscore can be used in the three different forms of media shown below.</b></p> <p>Award <b>one</b> mark for <b>each</b> identification of use to a <b>maximum</b> of <b>three</b> marks:</p> <p><b>AO1</b></p> <p><b>TV adverts:</b></p> <ul style="list-style-type: none"> <li>• memorable music (1).</li> </ul> <p><b>Video games:</b></p> <ul style="list-style-type: none"> <li>• establishes mood (1).</li> </ul> <p><b>Installations:</b></p> <ul style="list-style-type: none"> <li>• sets atmosphere (1).</li> </ul> <p>Award <b>one</b> mark for each valid expansion to a <b>maximum</b> of <b>three</b> marks:</p> <p><b>AO2</b></p> <p><b>TV adverts:</b></p> <ul style="list-style-type: none"> <li>• (memorable music) to make associations with the product (1).</li> </ul> <p><b>Video games:</b></p> <ul style="list-style-type: none"> <li>• (establishes mood) to engage with game play (1).</li> </ul> <p><b>Installations:</b></p> <ul style="list-style-type: none"> <li>• (sets atmosphere) to capture audience attention (1).</li> </ul>	<p><b>6</b></p> <p><b>AO1=3</b></p> <p><b>AO2=3</b></p>
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	<b>Accept any other suitable response.</b>	
16	<p><b>Listen to audio file section B.</b></p> <p><b>Audio file section B is a piece of music which has been composed for a scene in a movie.</b></p> <p><b>Assess how one change in each of the following are used in the piece:</b></p> <ul style="list-style-type: none"> <li>• <b>melody</b></li> <li>• <b>rhythm</b></li> <li>• <b>instrumentation.</b></li> </ul> <p>Award <b>one</b> mark for each identified change up to a <b>maximum</b> of <b>three</b> marks, award <b>one</b> further mark for each valid expansion up to a <b>maximum</b> of <b>three</b> marks.</p> <p>Limit of <b>two</b> marks <b>maximum</b> per section.</p> <p><b>Melody:</b></p> <ul style="list-style-type: none"> <li>• flute part changes from a simple melody (1) to a repeating arpeggio (1)</li> <li>• use of chromatic notes (1) builds piece to climax (1)</li> <li>• change to arpeggiated melody (1) gives sense of urgency (1).</li> </ul> <p><b>Rhythm:</b></p> <ul style="list-style-type: none"> <li>• the tempo changes (1) over time (1)</li> <li>• increasing tempo (1) builds excitement (1)</li> <li>• repeating rhythmic pattern (1) defines pulse (1).</li> </ul> <p><b>Instrumentation:</b></p> <ul style="list-style-type: none"> <li>• percussion is added (1) establishing low frequencies (1)</li> <li>• brass instruments are added (1) creating complex texture (1)</li> <li>• texture changes (1) from thin to thick (1).</li> </ul> <p><b>Accept any other suitable response.</b></p>	<p><b>6</b></p> <p><b>AO3=6</b></p>

**Section C**

**Total for this section: [19 marks]**

<p><b>17</b></p>	<p><b>A band called The Blistering Beats are about to sign a recording contract as musical artists.</b></p> <p><b>Which one of the following activities is a musical artist responsible for?</b></p> <p><b>A:</b> Creation and development of material  <b>B:</b> Finding opportunities for their client  <b>C:</b> Setting up recording hardware and software  <b>D:</b> Sourcing talent for record labels</p> <p><b>Answer:</b> A: Creation and development of material.</p>	<p><b>1</b></p> <p><b>AO1=1</b></p>
<p><b>18</b></p>	<p><b>The Blistering Beats are considering selling merchandise.</b></p> <p><b>Which of the following is not a form of merchandise?</b></p> <p><b>A:</b> Hooded top  <b>B:</b> Poster  <b>C:</b> T-shirt  <b>D:</b> Website</p> <p><b>Answer:</b> D: Website</p>	<p><b>1</b></p> <p><b>AO1=1</b></p>
<p><b>19</b></p>	<p><b>Which one of the following consumer audio formats features two playing sides, requiring the listener to turn the media over to access music from the other side?</b></p> <p><b>A:</b> Cassette  <b>B:</b> CD  <b>C:</b> Minidisc  <b>D:</b> MP3</p> <p><b>Answer:</b> A: Cassette</p>	<p><b>1</b></p> <p><b>AO1=1</b></p>
<p><b>20</b></p>	<p><b>The Blistering Beats are creating a backup of their recording session. They have copied their files to an SSD.</b></p> <p><b>What does SSD stand for?</b></p> <p>Award <b>one</b> mark for the following:</p> <ul style="list-style-type: none"> <li>• Solid State Drive (1).</li> </ul>	<p><b>1</b></p> <p><b>AO1=1</b></p>

<p><b>21</b></p>	<p><b>Listen to the drums present in audio file section C.</b></p> <p><b>The drums have been played into a DAW using a MIDI keyboard.</b></p> <p><b>Identify one editing tool which could be used to improve the timing of the drum part.</b></p> <p>Award <b>one</b> mark for the following:</p> <ul style="list-style-type: none"> <li>• quantise (1).</li> </ul>	<p><b>1</b></p> <p><b>AO2=1</b></p>
<p><b>22</b></p>	<p><b>A sampler patch in a part that you have created is distorting.</b></p> <p><b>Explain two ways the sample patch could have been improved.</b></p> <p>Award <b>one</b> mark for each of the following:</p> <ul style="list-style-type: none"> <li>• reduce the gain when recording (1)</li> <li>• alter the bit depth settings (1).</li> </ul> <p><b>Accept any other suitable response.</b></p>	<p><b>2</b></p> <p><b>AO1=2</b></p>
<p><b>23</b></p>	<p><b>The electric bass guitar was a popular instrument during the 1950s.</b></p> <p><b>Explain how one feature of the electric bass affected performers during the 1950's.</b></p> <p>Award <b>one</b> mark for a feature, award <b>one</b> further mark for a relevant effect up to a <b>maximum of two</b> marks:</p> <ul style="list-style-type: none"> <li>• easier to play than upright bass (1) leading to development of additional playing techniques (1)</li> <li>• easily amplified (1) leading to more prominent bass parts (1)</li> <li>• easier to transport than upright bass (1) so allowing for greater portability (1)</li> <li>• offered a new sound (1) helping to create new styles of music (1).</li> </ul> <p><b>Accept any other suitable response.</b></p>	<p><b>2</b></p> <p><b>AO3=2</b></p>

<p><b>24</b></p>	<p><b>The bass guitar player in The Blistering Beats has used different effects during the performance in audio file section C.</b></p> <p><b>Identify four different effects used by the bass guitar player.</b></p> <p>Award <b>one</b> mark for each of the following effects up to a <b>maximum</b> of <b>four</b> marks:</p> <ul style="list-style-type: none"> <li>• chorus (1)</li> <li>• delay (1)</li> <li>• flanging (1)</li> <li>• reverb (1).</li> </ul>	<p><b>4</b></p> <p><b>AO2=4</b></p>
<p><b>25</b></p>	<p>Explain the function of each of the following <b>three</b> terms when releasing an album.</p> <p>Award <b>one</b> mark for function:</p> <p><b>AO1</b></p> <p><b>Shipping:</b></p> <ul style="list-style-type: none"> <li>• moves physical products to stores (1).</li> </ul> <p><b>Aggregators:</b></p> <ul style="list-style-type: none"> <li>• accepts uploads from artists (1).</li> </ul> <p><b>Streaming platforms:</b></p> <ul style="list-style-type: none"> <li>• an online consumer music service (1).</li> </ul> <p>Award <b>one</b> mark for expansion:</p> <p><b>AO2</b></p> <p><b>Shipping:</b></p> <ul style="list-style-type: none"> <li>• (moves physical products to stores) for sale to the public and/or for retail (1).</li> </ul> <p><b>Aggregators:</b></p> <ul style="list-style-type: none"> <li>• (accepts uploads from artists) to deploy the album to different streaming/online services (1).</li> </ul> <p><b>Streaming platforms:</b></p> <ul style="list-style-type: none"> <li>• (an online consumer music service) allowing listeners to access music (1).</li> </ul>	<p><b>6</b></p> <p><b>AO1=3</b></p> <p><b>AO2=3</b></p>

	<b>Accept any other suitable response.</b>	
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**Section D**

**Total for this section: [21 marks]**

<b>26</b>	<p><b>You have been asked to create a bass part for a piece of dance music.</b></p> <p><b>You have the option of sampling a bass guitar or using a synthesiser to create your bass sound.</b></p> <p><b>Evaluate both approaches for adding a bass part to a piece of dance music.</b></p>	<p><b>9</b></p> <p><b>AO1=3</b></p> <p><b>AO2=3</b></p> <p><b>AO3=3</b></p>						
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 15%;"><b>Marks</b></th> <th><b>Description</b></th> </tr> </thead> <tbody> <tr> <td style="text-align: center; vertical-align: top;"><b>7–9</b></td> <td> <p><b>AO3 – Excellent</b> analysis and evaluation of processes, concepts and specific functions relating to sampling and synthesis techniques and outcomes that is <b>comprehensive</b> and <b>highly relevant</b>. Broad range of concepts used to support ideas. Supported with <b>excellent</b> conclusions that are <b>comprehensive, highly detailed</b> and <b>valid</b> throughout. The response is coherent and clear throughout and uses <b>fully</b> appropriate specialist terms and language in context.</p> <p><b>AO2 – Excellent</b> application of knowledge and understanding of processes concepts and specific functions relating to sampling and synthesis techniques in reference to the outcome that is <b>highly detailed</b> and <b>fully relevant</b>. The response is coherent and clear throughout and uses <b>fully</b> appropriate specialist terms and language in context.</p> <p><b>AO1 – Excellent</b> recall of valid processes, concepts, and specific functions. The response is coherent and clear throughout and uses <b>fully</b> appropriate specialist terms and language in context.</p> </td> </tr> <tr> <td style="text-align: center; vertical-align: top;"><b>4–6</b></td> <td> <p><b>AO3 – Good</b> analysis and evaluation of processes, concepts and specific functions relating to sampling and synthesis techniques and outcomes. <b>Good</b> range of concepts used to support ideas. Supported with <b>good</b> conclusions that are <b>detailed</b> and <b>mostly valid</b> throughout. <b>Good</b> reference to <b>mostly</b> appropriate terms and language.</p> <p><b>AO2 – Good</b> application of knowledge and understanding of processes, concepts, and specific functions relating to sampling and synthesis</p> </td> </tr> </tbody> </table>			<b>Marks</b>	<b>Description</b>	<b>7–9</b>	<p><b>AO3 – Excellent</b> analysis and evaluation of processes, concepts and specific functions relating to sampling and synthesis techniques and outcomes that is <b>comprehensive</b> and <b>highly relevant</b>. Broad range of concepts used to support ideas. Supported with <b>excellent</b> conclusions that are <b>comprehensive, highly detailed</b> and <b>valid</b> throughout. The response is coherent and clear throughout and uses <b>fully</b> appropriate specialist terms and language in context.</p> <p><b>AO2 – Excellent</b> application of knowledge and understanding of processes concepts and specific functions relating to sampling and synthesis techniques in reference to the outcome that is <b>highly detailed</b> and <b>fully relevant</b>. The response is coherent and clear throughout and uses <b>fully</b> appropriate specialist terms and language in context.</p> <p><b>AO1 – Excellent</b> recall of valid processes, concepts, and specific functions. The response is coherent and clear throughout and uses <b>fully</b> appropriate specialist terms and language in context.</p>	<b>4–6</b>	<p><b>AO3 – Good</b> analysis and evaluation of processes, concepts and specific functions relating to sampling and synthesis techniques and outcomes. <b>Good</b> range of concepts used to support ideas. Supported with <b>good</b> conclusions that are <b>detailed</b> and <b>mostly valid</b> throughout. <b>Good</b> reference to <b>mostly</b> appropriate terms and language.</p> <p><b>AO2 – Good</b> application of knowledge and understanding of processes, concepts, and specific functions relating to sampling and synthesis</p>
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1–3		<p><b>AO3 – Limited</b> analysis and evaluation of processes, concepts and specific functions relating to sampling and synthesis techniques and outcomes. <b>Limited</b> range of concepts used to support ideas. Conclusions are <b>limited</b> with <b>minimal detail</b> and <b>are mostly superficial</b>. <b>Limited</b> use of appropriate terms and language that may <b>not always be relevant</b>.</p> <p><b>AO2 – Limited</b> application of knowledge and understanding of processes, concepts, and specific functions relating to sampling and synthesis techniques in reference to outcomes that have <b>minimal detail</b> and are <b>mostly superficial</b> with <b>minimal relevance</b>. <b>Limited</b> use of appropriate terms and language that may <b>not always be relevant</b>.</p> <p><b>AO1 – Limited</b> recall of valid processes, concepts and specific functions. <b>Limited</b> use of appropriate terms and language that may <b>not always be relevant</b>.</p>	
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<p><b>Indicative content</b></p> <p><b>It is not a requirement that the learner formulate a response specifically against each assessment objective as laid out in the indicative content (IC).</b></p> <p><b>A learner’s demonstration of recall (AO1) and application (AO2) of knowledge and understanding can be implied through the learner’s ability to evaluate the question topic required of AO3.</b></p> <p><b>AO1 – Learners will recall knowledge and understanding of valid processes, that may include the following:</b></p> <p>Sampling:</p> <ul style="list-style-type: none"> <li>• recording</li> <li>• audio editing (for example, cutting, trimming)</li> <li>• equipment (including microphones and others)</li> </ul>			

	<p>Synthesis:</p> <ul style="list-style-type: none"> <li>• oscillators</li> <li>• tuning</li> <li>• equipment (hardware or software synth)</li> <li>• filters</li> <li>• envelope.</li> </ul> <p><b>AO2 – Learners will apply knowledge and understanding of processes in reference to adding a bass part to a piece of music, that may include the following:</b></p> <p>Sampling:</p> <ul style="list-style-type: none"> <li>• (recording) capturing the instrument correctly for sampling</li> <li>• (tuning) of instrument or voice, prior to capture to ensure quality</li> <li>• (audio editing) trimming and applying fades to clean up the audio</li> </ul> <p>Synthesis:</p> <ul style="list-style-type: none"> <li>• (oscillator) choice as a starting point for subtractive or additive synthesis</li> <li>• (tuning) of instrument, prior to capture to ensure quality</li> <li>• (equipment), microphone to capture an amp sound, DI box for a clean direct sound</li> <li>• (filters) use to remove frequencies, create a deeper sound</li> <li>• (envelope) use to change the dynamic profile of the sound.</li> </ul> <p><b>AO3 – Learners will analyse and evaluate the processes, that may include comparative commentary on the following:</b></p> <ul style="list-style-type: none"> <li>• (sampling) time consuming as more equipment is required</li> <li>• (sampling) is more logistically difficult to set up</li> <li>• (sampling) good for a realistic/acoustic/natural sound</li> <li>• (sampling) realistic/acoustic/natural sound may not fit stylistically</li> <li>• (sampling) sampling is more rigid as you are limited by the source audio</li> <li>• (synthesiser) may sound more appropriate for dance music compared to sampled bass</li> <li>• (synthesiser) may historically be linked with choice of sounds in dance music</li> <li>• (synthesiser) greater flexibility in editing as all aspects can be changed at any time.</li> </ul> <p><b>Accept any other suitable response.</b></p>	
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<b>27</b>	<p>Listen to <b>audio file section D</b>.</p> <p>There are a number of audible problems present in the mix. You have been asked to review the problems and suggest ways that the mix could be improved.</p> <p>Justify changes that would need to be made to improve the outcome of the mix.</p>	<p><b>12</b></p> <p><b>AO1=4</b></p> <p><b>AO2=4</b></p> <p><b>AO3=4</b></p>								
	<table border="1"> <thead> <tr> <th style="text-align: center;">Marks</th> <th style="text-align: center;">Description</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">10–12</td> <td> <p><b>AO3 – Excellent</b> analysis and evaluation of the concepts and specific functions relating to mixing techniques and outcomes and the solutions available to improve the mix is <b>comprehensive</b> and <b>highly relevant</b>. Supported with <b>excellent</b> justifications that are <b>comprehensive, highly detailed</b> and <b>valid</b> throughout.</p> <p><b>AO2 – Excellent</b> application of knowledge and understanding of concepts used to support ideas that is <b>highly detailed</b> and <b>fully relevant</b>.</p> <p><b>AO1 – Excellent</b> recall of knowledge and understanding of concepts and specific functions relating mixing techniques and outcomes. The response is coherent and clear throughout and uses <b>fully</b> appropriate terms and language in context.</p> </td> </tr> <tr> <td style="text-align: center;">7–9</td> <td> <p><b>AO3 – Good</b> analysis and evaluation of concepts and specific functions relating to mixing techniques and outcomes and the solutions available to improve the mix is <b>detailed</b> and <b>mostly relevant</b>. Supported with <b>good</b> justifications that are <b>mostly comprehensive, detailed</b> and <b>mostly valid</b> throughout.</p> <p><b>AO2 – Good</b> application of knowledge and understanding of concepts used to support ideas that is <b>detailed</b> and <b>mostly relevant</b>.</p> <p><b>AO1 – Good</b> recall of knowledge and understanding of concepts and specific functions relating mixing techniques and outcomes. <b>Good</b> reference to <b>mostly</b> appropriate terms and language. The response is <b>mostly</b> clear throughout.</p> </td> </tr> <tr> <td style="text-align: center;">4–6</td> <td> <p><b>AO3 – Reasonable</b> analysis and evaluation of concepts and specific functions relating to mixing techniques and outcomes and the solutions available to improve the mix has <b>some detail</b> and <b>some relevance</b>. Supported with <b>some</b> justifications that are minimal in detail and <b>have some validity</b> throughout.</p> </td> </tr> </tbody> </table>	Marks	Description	10–12	<p><b>AO3 – Excellent</b> analysis and evaluation of the concepts and specific functions relating to mixing techniques and outcomes and the solutions available to improve the mix is <b>comprehensive</b> and <b>highly relevant</b>. Supported with <b>excellent</b> justifications that are <b>comprehensive, highly detailed</b> and <b>valid</b> throughout.</p> <p><b>AO2 – Excellent</b> application of knowledge and understanding of concepts used to support ideas that is <b>highly detailed</b> and <b>fully relevant</b>.</p> <p><b>AO1 – Excellent</b> recall of knowledge and understanding of concepts and specific functions relating mixing techniques and outcomes. The response is coherent and clear throughout and uses <b>fully</b> appropriate terms and language in context.</p>	7–9	<p><b>AO3 – Good</b> analysis and evaluation of concepts and specific functions relating to mixing techniques and outcomes and the solutions available to improve the mix is <b>detailed</b> and <b>mostly relevant</b>. Supported with <b>good</b> justifications that are <b>mostly comprehensive, detailed</b> and <b>mostly valid</b> throughout.</p> <p><b>AO2 – Good</b> application of knowledge and understanding of concepts used to support ideas that is <b>detailed</b> and <b>mostly relevant</b>.</p> <p><b>AO1 – Good</b> recall of knowledge and understanding of concepts and specific functions relating mixing techniques and outcomes. <b>Good</b> reference to <b>mostly</b> appropriate terms and language. The response is <b>mostly</b> clear throughout.</p>	4–6	<p><b>AO3 – Reasonable</b> analysis and evaluation of concepts and specific functions relating to mixing techniques and outcomes and the solutions available to improve the mix has <b>some detail</b> and <b>some relevance</b>. Supported with <b>some</b> justifications that are minimal in detail and <b>have some validity</b> throughout.</p>	
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**AO1 – Learners will recall of knowledge and understanding of concepts and specific functions relating mixing techniques and outcomes that may include the following:**

- guitar balance
- bass drum level fluctuates
- vocal volume inconsistent
- toms too loud
- backing vocals too loud
- backing vocals hard-panned left
- vocals out of tune
- hi-hats not central
- snare drum too quiet
- lack of ambience/depth
- thin sounding vocals.

**AO2 – Learners will apply knowledge and understanding of concepts used to support ideas specific to the problem identified, that may include the following:**

- turn down/up for static volume problems
- apply automation for variable volume problems
- apply compression across inconsistent performance
- use of panning with expected stereo conventions
- application of pitch correction tools to fix out of tune vocals
- use of reverb/effects to whole mix or individual parts
- use of EQ to whole mix or individual parts.

**AO3 – Learners will analyse and evaluate the concepts and specific functions relating mixing techniques and outcomes and provide justifications for ways to improve the mix that may include the following:**

- the change required
- why the change is necessary
- how the change improves the mix
- how a change matches conventional or expected approaches.

**Identified problems**

- The guitar at 33 seconds is too loud; it needs to be turned down or compressed because it is overpowering the rest of the mix.
- The bass drum is too quiet from the start of the track to 35 seconds, but then becomes too loud post 35 seconds. Apply automation to fix this so the sound is consistent and balanced across the different sections.
- The backing vocals are panned hard-left; use the pan control to centralise these as it feels unbalanced when the loud backing vocals are hard-left.

	<ul style="list-style-type: none"> <li>• Lack of depth in the mix; apply effects like reverb to add ambience this will improve the mix and make it sound more produced and less 'dead'.</li> </ul> <p><b>Problems and solutions</b></p> <ul style="list-style-type: none"> <li>• Click 'pop' at the beginning of the file, due to the file not having a short fade in at the start. Requires quick fade applied or cutting of file at zero-crossing point.</li> <li>• Guitar balance too loud at 33 seconds and overpowers the rest of the musicians. Apply compression or turn down.</li> <li>• Bass drum too quiet from start 35 seconds <b>and/or</b> bass drum too loud when it comes in post 35 seconds with too many low frequency sounds affecting its depth/height in the mix. Apply compression or automate volume to smooth over changes in the different sections. Apply EQ to reduce low frequencies below 100Hz.</li> <li>• Vocal volume inconsistent "to me" and "scream" (46 seconds and 51 seconds). Automate volume, turn down or compress vocals.</li> <li>• Toms are too loud at 56 seconds. Turn down the volume or compress.</li> <li>• Backing vocals too loud at 58 seconds and panned hard-left. Turn down the volume or compress. Move backing vocals to be central in the mix.</li> <li>• Backing vocals are too loud and pitching off. Turn down volume or compress and apply pitch correction.</li> <li>• Hi-hats not central in the mix, possible phase problems audible. Width/stereo placement might improve if hi-hats made central.</li> <li>• Snare drum too quiet between 45 seconds and 1 minute 6 seconds. Turn the snare up.</li> <li>• General lack of depth-ambience in the mix. Mix too dry, apply reverb to increase depth.</li> <li>• Vocal sounds thin and lacks height in the mix, apply EQ (lower/mid frequencies) to improve vocal projection. Creative use of plugins too add interest (for example chorus).</li> <li>• Cluttered soundstage with competing timbres (guitars, vocals), apply EQ to remove some guitar frequency content and give more space for the vocal.</li> </ul> <p><b>Accept any other suitable response.</b></p>	
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**Assessment Objective Grid**

<b>Question Number</b>	<b>AO1</b>	<b>AO2</b>	<b>AO3</b>	<b>Question Type</b>
1	1			MCQ
2	1			MCQ
3	1			MCQ
4	1			SAQ
5	2			SAQ
6			2	SAQ
7	3	3		SAQ
8		6		SAQ
9	1			MCQ
10	1			MCQ
11	1			MCQ
12	1			SAQ
13		2		SAQ
14	1	1		SAQ
15	3	3		SAQ
16			6	SAQ
17	1			MCQ
18	1			MCQ
19	1			MCQ
20	1			SAQ
21		1		SAQ
22	2			SAQ
23			2	SAQ
24		4		SAQ
25	3	3		SAQ
26	3	3	3	ERQ
27	4	4	4	ERQ
Target	32–36	28–32	16–20	
Total	33	30	17	80
Kil	16			