NCFE

NCFE Level 1 Technical Award in Music Technology (601/6777/4)
NCFE Level 2 Technical Award in Music Technology (601/6774/9)

Past Paper

Assessment window: 21 February 2022 – 11 March 2022

Time allowed: 2 hours
Total marks: 36

Please complete the details below clearly and in BLOCK CAPITALS.

Centre name		Centre number	
Learner name		Learner number	
Learner declaration: I confirm that the work contained in this external assessment is all my own work. I have not copied work directly from handouts / internet / textbooks or any other publication. If I have used a quote, then I have referenced this appropriately. My full name above is my registered name with NCFE.			
Learner signature:		Date:	

Learner instructions

- Complete all tasks.
- Read the scenario and each task carefully.
- The marks available for each question are shown in brackets.
- Use black or blue ink.

Resources

- Word processor or pen.
- Headphones / speakers.
- Individual workstation / device with:
  - access to a digital audio workstation (DAW)
  - audio output and controller input capabilities
  - the capacity to save / store digital files.
- Audio / MIDI files:
  - Chords MIDI.mid
  - Snare and Percussion.wav
  - Kick and Bass.wav
  - Lead Vocals.wav
  - Backing Vocals.wav

To be completed by the examiner	Mark
Task 1	/9
Task 2	/9
Task 3	/9
Task 4	/9
TOTAL	/36

Instructions continue over the page. Please turn over.

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Evidence Requirements

Each task tells you what evidence you need to provide. This will include:
- audio files
- explanations and reviews of the processes you have applied. These could include:
    - written responses (either in the space after each task or as a separate word-processed document)
    - annotated screenshots
    - screencasts with commentary. Screencasts must be no longer than 3 minutes per task.

Electronic Evidence

If you have produced screenshots as evidence, put them in a single electronic document.
If you have produced any electronic written responses, put them in the same document.
Clearly label each piece of evidence with the evidence reference shown in **bold** in each task.

Save the document with the following file name:
- Surname_Initial_learner number
  eg Smith_J_123456789

The preferred format for documents is PDF. Your invigilator will be able to advise you of other acceptable file formats, if required.

Audio files should be saved as .wav, .mp3 or .aiff files. Save them with the following file name:

- Surname_Initial_learner number_evidence reference
  eg Smith_J_123456789_Task 3 Rough Mix

Do not submit DAW files or MIDI files as evidence.

The invigilator will tell you your learner number and you can see the evidence reference in bold on each task.

At the end of the assessment there is a checklist. Use this to help you make sure that you have included all of the evidence needed.

You should remember to save your work regularly during the assessment.

Do not turn over until the invigilator tells you to do so.

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Scenario

You are completing an apprenticeship with a record label as an engineer and producer.

You have been asked to edit and mix a new song by a singer / songwriter for release online.

The tasks begin on the next page. Please turn over.

Task 1 – Configuration [9 marks]

You should spend approximately **30 minutes** on this task.

1 (a) There are technical features of your Digital Audio Workstation (DAW) software and associated hardware which make them suitable to edit, develop and mix the recording session files.

Describe these technical features.

1 (b) Complete the following steps:

- Create a new project in your DAW software.
- Set the tempo to 80 bpm.
- Create four audio tracks.
- Create two software instrument tracks.
- Set the audio output for your monitoring equipment.

Explain how you completed each of these steps.

1 (c) Complete the following steps:

- Import the audio files labelled **Kick and Bass**, **Snare and Percussion**, **Lead Vocals** and **Backing Vocals** onto the audio tracks that you created in Task **1 (b)** so that all files start at bar 1.
- Check that the **Kick and Bass**, **Snare and Percussion**, **Lead Vocals** and **Backing Vocals** parts all start during bar 1.
- Import the MIDI file labelled **Chords MIDI** onto the first software instrument track so that it starts at bar 1.
- Select a piano software instrument for the **Chords MIDI** part.

Explain how you completed each of these steps.

Evidence required:

- A screenshot showing your whole project at this point, labelled '**Screenshot 1**'.
- A written response, either using the answer space below or in a separate document labelled '**Task 1**'.
- In this written response you should:
  - describe the DAW software and any other equipment you are using
  - explain how you completed the tasks in **1 (b)** and **1 (c)**.

Task 2 – Editing [9 marks]

You should spend approximately **30 minutes** on this task.

2 (a) There are two incorrect notes in the **Chords MIDI** part between bars 5 and 8. Using MIDI editing tools, adjust the pitches of the two incorrect notes so that the chords are the same as in bars 1–4.

Explain how you completed this step.

2 (b) In bar 10 there is a timing error in the **Kick and Bass** audio part. Use audio editing tools to correct the timing error.

Explain how you completed this step.

2 (c) Use audio editing tools to remove the unwanted 'click' sound in the **Lead Vocals** audio track during bar 57.

Explain how you completed this step.

2 (d) Complete the following steps:

- Export the full song to a suitable stereo format. Make sure that the start and finish markers leave no more than 1 second of silence at the beginning and end of the track.
- Save the stereo audio file as '**Surname_Initial_learner number_Mix 1**'.

Explain how you completed each of these steps.

Evidence required:

- A screenshot showing your whole project at this point, labelled '**Screenshot 2**'.
- A written response, either using the answer space below or in a separate document labelled '**Task 2**'. In this response you should explain how you completed tasks **2 (a), 2 (b), 2 (c)** and **2 (d).**
- Your '**Mix 1**' stereo audio file.

DO NOT WRITE IN THIS SPACE

Task 3 – Musical Development [9 marks]

You should spend approximately **30 minutes** on this task.

3 (a) Create a new sound for your **Chords MIDI** part by selecting and editing a software instrument. The sound that you create should be suitable for the style of the song.

Explain the following:

- Why you chose your software instrument type.
- How you used timbre editing in the software instrument.
- How you used envelope editing in the software instrument.

3 (b). There are two chords missing between bars 58 and 60 in the **Chords MIDI** part. The first is an Fm7 chord and the second is an Fm chord. These chords need to match the notes in the **Chords MIDI** part between bars 62 and 64. Complete the **Chords MIDI** part by adding these two chords in the following places:

- Bar 58 beat 1.
- Bar 60 beat 1.

Explain how you completed this step.

3 (c) Using the empty software instrument track that you created in **1 (b)**, create your own original **melodic piano** part.

- The part should begin at the start of bar 61 and continue to the end of bar 64.
- The part should be suitable for the style of the song.

Explain your musical ideas for the **melodic piano** part.

3 (d) Complete the following steps:

- Mute the **Lead Vocals** audio track so that only the following can be heard:
  - **Kick and Bass** audio track
  - **Snare and Percussion** audio track
  - **Backing Vocals** audio track
  - **Chords MIDI** track
  - your original **melodic piano** track.
- Export the full song to a suitable stereo format. Make sure that the start and finish markers leave no more than 1 second of silence at the beginning and the end of the track.
- Save the stereo audio file as '**Surname_Initial_learner number_Mix 2**'.

Explain how you completed each of these steps.

Evidence required:
- A screenshot showing your whole project at this point, labelled '**Screenshot 3**'.
- A written response, either using the answer space below or in a separate document labelled '**Task 3**'. In this response you should explain how you completed tasks **3 (a), 3 (b), 3 (c)** and **3 (d)**.
- Your '**Mix 2**' stereo audio file.

DO NOT WRITE IN THIS SPACE

Task 4 - Mixing [9 marks]

You should spend approximately **30 minutes** on this task.

4 (a) Complete the following steps:

- Unmute all of the audio and MIDI tracks.
- Use volume automation to adjust the level of the **Lead Vocals** audio track between bars 17 and 19 so that it is consistent with the rest of the part.
- Use automation to pan the **Lead Vocals** audio part:
  - from the start of bar 29, gradually pan from centre to hard right by the end of bar 30
  - from the start of bar 31, gradually pan from hard right to centre by the end of bar 32.
- Use EQ to apply a low cut below 2000 Hz on the **Lead Vocals** part from the start of bar 25 to the end of bar 32.

Explain how you completed each of these steps.

4 (b) Add reverb to the **Lead Vocals** and **Backing Vocals** audio tracks, making sure they have a reverberation effect which suits the song.

Explain how you completed this step.

4 (c) Create a final mix using volume balance, panning, dynamics processing, automation and any additional effects processing that you wish to apply creatively.

Explain how you completed this step.

4 (d) Complete the following steps:

- Make sure that all audio and MIDI tracks can be heard.
- Make sure that start and finish markers leave no more than one second of silence at the beginning and end of the track.
- Export the song to a suitable stereo format.
- Save the stereo audio file as '**Surname_Initial_learner number_Mix 3**'.

Explain how you completed each of these steps.

Evidence required:

- A screenshot showing your whole project at this point, labelled '**Screenshot 4**'.
- A written response, either using the answer space below or in a separate document labelled '**Task 4**'. In this response you should explain how you completed tasks **4 (a), 4 (b), 4 (c)** and **4 (d).**
- Your '**Mix 3**' stereo audio file.

DO NOT WRITE IN THIS SPACE

Evidence Checklist

Task Number	Evidence Type	Please tick (✓) one	
		Handwritten	**Electronic**
Task 1	Screenshot		
Task 1	Written response		
Task 2	Screenshot		
Task 2	Written response		
Task 2	Audio file		
Task 3	Screenshot		
Task 3	Written response		
Task 3	Audio file		
Task 4	Screenshot		
Task 4	Written response		
Task 4	Audio file		

This is the end of the external assessment.

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