

FOR OFFICIAL USE



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National
Qualifications
2024

Mark

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X851/76/01

Music Technology

MONDAY, 29 APRIL

1:00 PM – 2:00 PM



* X 8 5 1 7 6 0 1 *

Fill in these boxes and read what is printed below.

Full name of centre

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Town

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Forename(s)

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Surname

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Number of seat

--

Date of birth

Day

--	--

Month

--	--

Year

--	--

Scottish candidate number

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Total marks — 40

Attempt ALL questions.

In this examination you will listen to excerpts of music and answer questions on what you hear.

The text of each question is printed so that you can follow what the speaker says.

Listen carefully to the questions and to the music excerpts.

Some excerpts are played more than once. The number of times each excerpt is played is stated in each question.

Write your answers clearly in the spaces provided. Additional space for answers is provided at the end of this booklet. If you use this space, you must clearly identify the question number you are attempting.

Use **blue** or **black** ink.

Before leaving the examination room you must give this booklet to the Invigilator; if you do not, you may lose all the marks for this paper.



* X 8 5 1 7 6 0 1 0 1 *

Total marks — 40
Attempt ALL questions

MARKS DO NOT
WRITE IN
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MARGIN

Question 1

- (a) Listen to this excerpt and identify **two** terms from the list below which describe what you hear. The excerpt will be played **twice**.

2

Reggae	Wah-wah
Harmonics	Soul
Jazz funk	

Here is the excerpt for the first time.
Here is the excerpt for the second time.

- (b) Listen to the excerpt again. Identify **two** music features present which are typical of the genre/style.

2



Question 2

- (a) Listen to this excerpt and identify the genre. Give **two** reasons for your answer, one referring to a **music** feature and the other to a **technology** feature. The excerpt will be played **twice**.

3

Here is the excerpt for the first time.
Here is the excerpt for the second time.

Genre _____

Music feature _____

Technology feature _____

- (b) Listen to this excerpt and identify **one** term from the list below which describes what you hear. The excerpt will be played **twice**.

1

Strophic	Vocoder
Tremolo	Portamento

Here is the excerpt for the first time.
Here is the excerpt for the second time.

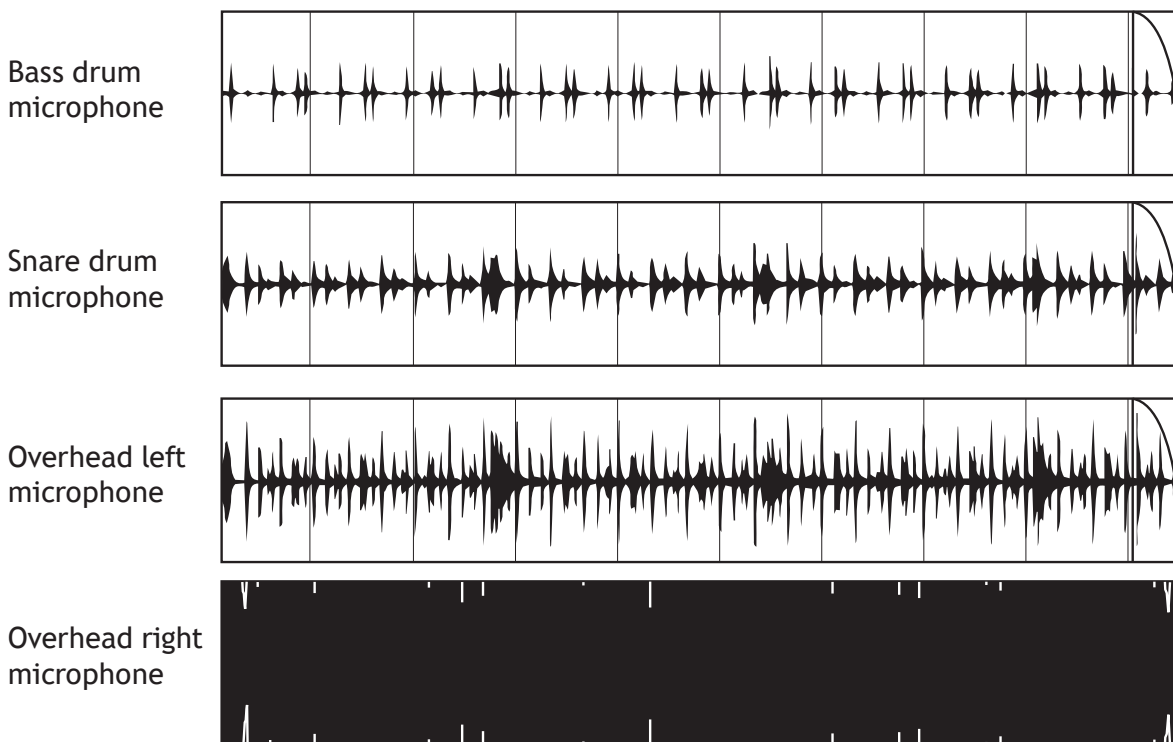
[Turn over



Question 3

In this question, you will hear **two** excerpts. For each one, you must identify the fault and describe in detail how to correct it.

- (a) Listen to this excerpt of a drum kit recorded using four microphones and look at the recorded waveform.



Identify the **recording** fault and describe in detail how to correct it. You will hear this excerpt **twice**.

Here is the excerpt for the first time.
Here is the excerpt for the second time.

- (i) Fault _____ 1

- (ii) Correction _____ 1

You now have **one minute** to complete your answer.



Question 3 (continued)

- (b) Listen to this excerpt. Identify the **processing** fault in the bass guitar and describe in detail how to correct it. You will hear this excerpt **twice**.

Here is the excerpt for the first time.

Here is the excerpt for the second time.

(i) Fault _____ 1

(ii) Correction _____ 1

You now have **one minute** to complete your answer.

[Turn over



* X 8 5 1 7 6 0 1 0 5 *

Question 4

(a) You will hear **two** versions of an electric guitar.

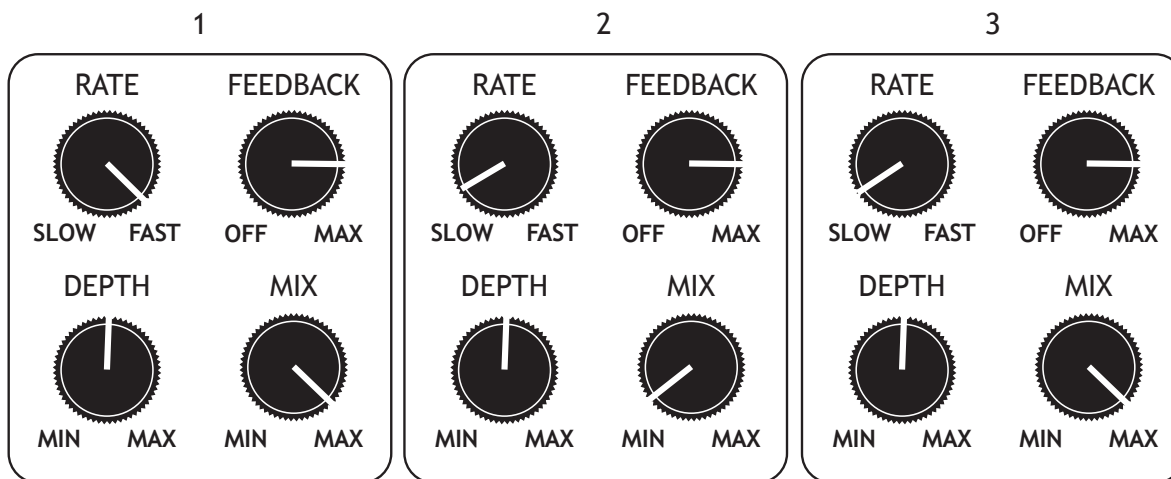
The **first** version has no effects or processes.

The **second** version has a phaser applied.

Listen to **version 1** with no effects or processes.

Listen to **version 2**. Identify the phaser settings used (1, 2 or 3) and justify your answer.

1



You now have **30 seconds** to complete your answer.

Phaser settings applied (1, 2 or 3)

Justification _____

(b) Listen to this excerpt. There is a tremolo effect on the electric guitar. Identify **two** controls of a tremolo effect.

2

The excerpt will be played **twice**.

Here is the excerpt for the first time.

Here is the excerpt for the second time.

Control 1 _____

Control 2 _____



[Turn over for next question

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* X 8 5 1 7 6 0 1 0 7 *

Question 5

This question is about intellectual property issues.

You will hear **two** excerpts of music.

The first excerpt ‘Metal on Metal’ by Kraftwerk in 1977.

The second excerpt ‘Nur Mir’ by Sabrina Setlur in 1997.

For nearly 20 years the German electronic music pioneers Kraftwerk fought a copyright dispute with German pop artist Sabrina Setlur. They claimed the use of a two second audio snippet from their track ‘Metal on Metal’ in the background of the song ‘Nur Mir’ violated their property right.

The original verdict by the German Federal Constitutional Court claimed there was no copyright breach as the audio used was too short and therefore covered under their ‘free use’ law. However, this judgment was appealed to the European Court of Justice who overturned the ruling in favour of Kraftwerk. The judge claimed for audio to be used in this way, the composer must modify the audio so that it is ‘unrecognisable’ to the ear, which in this case, it was not.

You now have **one minute** to read through the question.

You will hear the excerpts **twice** with a pause of **15 seconds** between playings.

Here is excerpt 1 for the first time.

Here is excerpt 2 for the first time.

Here is excerpt 1 for the second time.

Here is excerpt 2 for the second time.

You now have **two minutes** to complete your answers for parts (a), (b) and (c).

- (a) What technology was used to capture the two second audio snippet in excerpt 2? 1

- (b) Tick (✓) **one** box from the list below to identify two concepts that feature in **both** excerpts. 1

Drum sequencer and reverb

Distortion and bass guitar

Chorus effect and lead vocal

Wah-wah and vocoder



Question 5 (continued)

- (c) Describe how Sabrina Setlur could have made sure there was no breach of copyright.

1

[Turn over



* X 8 5 1 7 6 0 1 0 9 *

Question 6

This question features music from different styles.

- (a) Listen to this excerpt and identify **two** terms from the list below which describe what you hear. The excerpt will be played **twice**.

2

World music	Ritardando
Ostinato	Soul
Jazz funk	

Here is the excerpt for the first time.
Here is the excerpt for the second time.

- (b) Listen to this excerpt of a string quartet. Describe in detail a suitable **stereo** mic'ing technique you would use to achieve a similar recording. Justify your choice.

3

You now have **two minutes** to complete your answer.

- (c) Listen to this excerpt and identify the ascending scale.

1

The excerpt will be played **twice**.

Here is the excerpt for the first time.
Here is the excerpt for the second time.



Question 7

This question relates to 20th and 21st century genres and styles and innovators in technological developments.

(a) Choose a genre from the list and answer the question below.

Tick (✓) **one** box to indicate your choice.

Indie

Electroacoustic

Punk

You now have **three minutes** to answer the question.

A warning tone will sound **30 seconds** before the start of part (b).

Give a detailed description of your chosen genre.

Your description must make reference to a **key attribute** and a **key technology**. **2**

[Turn over



Question 7 (continued)

(b) Choose a technology from the list and answer the question below.

Tick (✓) **one** box to indicate your choice.

Gramophone

Radio

Bass Guitar

You now have **three minutes** to answer the question.

A warning tone will sound **30 seconds** before the start of the next question.

Name a key innovator of your chosen technology and describe one example of their influence on the development of this technology.

2



Question 8

Listen to this excerpt.

A guide to the audio is laid out below. You will see that further information is required and must be inserted in the spaces.

There will now be a pause of **40 seconds** to allow you to read through the question.

The excerpt will be played **three** times with a pause of **15 seconds** between playings.

In each playing, a voice will help guide you through the numbered sections.

Here is the excerpt for the first time.

Here is the excerpt for the second time.

Here is the excerpt for the third time.

Section	Description	
1.	Name the control and the effect on the synthesiser _____ and _____.	2
2.	The sample of a _____ is reversed.	1
3.	The tonality is _____.	1
4.	The music modulates to the relative _____.	1
5.	The effect on the male vocal is _____.	1
6.	The _____ time on the synthesiser is increased.	1

[Turn over



Question 9

Listen to this excerpt of music.

You must identify **five** music/production features present in the music from the ten listed below.

You will hear the music **three** times, with a pause of **15 seconds** between each playing.

You now have **one minute** to read through the question.

Time changes	Inverted pedal on string synth
Vocals sung through a vocoder	Guitar with wah-wah effect
Bass synth with delay effect	Synth with portamento
Glockenspiel panned right	Piano plays arpeggios
Glockenspiel panned left	Modulation to relative minor

Give the **five** features on the lines below.

5

Here is the music for the first time.

Here is the music for the second time.

Here is the music for the third time.

You now have **two minutes** to complete your answer.

[END OF QUESTION PAPER]



MARKS DO NOT
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ADDITIONAL SPACE FOR ANSWERS



* X 8 5 1 7 6 0 1 1 5 *

MARKS DO NOT
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ADDITIONAL SPACE FOR ANSWERS



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