



Pearson
Edexcel

Mark Scheme (Results)

Summer 2022

Pearson Edexcel GCE
In Music Technology (8MT0)
Paper 3 Listening and analysing

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Summer 2022

Question Paper Log Number

Publications Code 8MT0_03_****_MS

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General Marking Guidance

- All candidates must receive the same treatment. Examiners must mark the first candidate in exactly the same way as they mark the last.
- Mark schemes should be applied positively. Candidates must be rewarded for what they have shown they can do rather than penalised for omissions.
- Examiners should mark according to the mark scheme not according to their perception of where the grade boundaries may lie.
- There is no ceiling on achievement. All marks on the mark scheme should be used appropriately.
- All the marks on the mark scheme are designed to be awarded. Examiners should always award full marks if deserved, i.e. if the answer matches the mark scheme. Examiners should also be prepared to award zero marks if the candidate's response is not worthy of credit according to the mark scheme.
- Where some judgement is required, mark schemes will provide the principles by which marks will be awarded and exemplification may be limited.
- When examiners are in doubt regarding the application of the mark scheme to a candidate's response, the team leader must be consulted.
- Crossed out work should be marked UNLESS the candidate has replaced it with an alternative response.

Question Number	Answer	Mark
1a (i) TYPE 4	A. Gated. This is the only correct answer. B, C and D are incorrect as there is no use of gating.	(1)

Question Number	Answer	Mark
1a (ii) TYPE 4	A. 1/16. This is the only correct answer. A is incorrect as they would not allow for semiquaver rhythms C and D are incorrect because they are swung rhythms so are inappropriate to quantise a straight rhythm.	(1)

Question Number	Answer	Mark
1a (iii) TYPE 1	<ul style="list-style-type: none"> Fewer sounds/reduced to basic kit/layers removed/less complex 	(1)

Question Number	Answer	Mark
1a (iv) TYPE 1	<ul style="list-style-type: none"> Pronounced LF/bass response HF/upper mid 'Click' Scooped mids 	(1)

Question Number	Answer	Mark
1b TYPE 2	<ul style="list-style-type: none"> Panned left and right Different EQ NB Accept appropriate diagrams or numeric responses.	(1)

Question Number	Answer	Mark
1c (i) TYPE 2	<ul style="list-style-type: none"> • It is quieter/lower in the mix at 1.51 • It is wetter 	(1)

Question Number	Answer	Mark
1c (ii) TYPE 1	<ul style="list-style-type: none"> • To give room for the lead vocal • It is loud enough to provide rhythmic interest 	(1)

Question Number	Answer	Mark
1d TYPE 1	<ul style="list-style-type: none"> • Reverb/delay is more pronounced/wetter/longer • Large(r) pre-delay 	(1)

Question Number	Answer	Mark
1e TYPE 2	<ul style="list-style-type: none"> • Compression/limiting 	(1)

Question Number	Answer	Mark
1f TYPE 2	<ul style="list-style-type: none"> • Automation • Steady hand on the fader 	(1)

(Total for Question 1 = 10 marks)

Question Number	Answer	Mark
2a (i) TYPE 1	<ul style="list-style-type: none"> • Lacks LF • Lacks HF • Mid-Heavy 	(2)

Question Number	Answer	Mark
2a (ii) TYPE 2	<ul style="list-style-type: none"> • EQ • Mics with a wider frequency response • Digital recording • Higher tape speed • Thicker tape 	(1)

Question Number	Answer	Mark
2b TYPE 1	<p>Any four of the following:</p> <ul style="list-style-type: none"> • Cannot EQ parts individually • Cannot balance parts individually (other than by proximity to mic) • Cannot apply effects to individual parts • Cannot use stereo • There can be a lack of clarity in the mix • Can only apply compression to the entire mix • If there is a mistake, you have to start again 	(4)

Question Number	Answer	Mark										
2c TYPE 1	<table border="1"> <thead> <tr> <th>Problem</th> <th>Solution</th> </tr> </thead> <tbody> <tr> <td>Distortion</td> <td>Reduce gain/compress</td> </tr> <tr> <td>Overly loud in the mix</td> <td>Reduce level when mixing</td> </tr> <tr> <td>Uncontrolled dynamics</td> <td>Compression/Volume Automation</td> </tr> <tr> <td>Too dry</td> <td>Add reverb</td> </tr> </tbody> </table>	Problem	Solution	Distortion	Reduce gain/compress	Overly loud in the mix	Reduce level when mixing	Uncontrolled dynamics	Compression/Volume Automation	Too dry	Add reverb	(4)
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Question Number	Answer	Mark
2d TYPE 2	<ul style="list-style-type: none">• Hiss• Poor signal to noise ratio• Crackle	(1)

(Total for Question 2 = 10 marks)

Question Number	Answer	Mark
3a TYPE 1	<p>Any two of the following</p> <ul style="list-style-type: none"> • Stereo • Dry signal R / Wet signal L / panned opposite • Single repeat / 0% feedback • Delayed signal is quieter • Tape/Analogue delay 	(2)

Question Number	Answer	Mark
3b TYPE 1	<ul style="list-style-type: none"> • Regular piano left/L • Tack piano right/R / Tack piano spread across the stereo field with FX <p>NB Accept diagrams and numeric responses.</p>	(2)

Question Number	Answer	Mark
3c (i) TYPE 2	<ul style="list-style-type: none"> • Sine / Triangle 	(1)

Question Number	Answer	Mark
3c (ii) TYPE 1	<ul style="list-style-type: none"> • Analogue • Monophonic • Voltage controlled • Modular <p>Accept valid model e.g. VCS3 / Moog</p>	(1)

Question Number	Answer	Mark
3d TYPE 1	<ul style="list-style-type: none"> • Any four of the following: • Individual voices recorded to separate tracks • Tape spliced to form a loop • Cut into lengths and spliced together to form a continuous playback • Tape speed increased on playback • Looped on a separate machine • Delay • WEM Copicat / tape (delay) • Transferred back to master tape • Reverb applied 	(4)

(Total for Question 3 = 10 marks)

Question Number	Answer	Mark
4 (a) TYPE 2	<ul style="list-style-type: none"> LFO / Modulation wheel 	(1)

Question Number	Answer	Mark
4b (i) TYPE 2	<ul style="list-style-type: none"> Multitracked/ADT 	(1)

Question Number	Answer	Mark
4b (ii) TYPE 2	<ul style="list-style-type: none"> Thickens the texture/Makes the vocal more 	(1)

Question Number	Answer	Mark	
4c (i) TYPE 1	Placement	<ul style="list-style-type: none"> Facing the bell Slightly towards the sound Holes 	
	Distance	<ul style="list-style-type: none"> 10-20 inches/25-50 cm 	
	Reducing spill	<ul style="list-style-type: none"> Directional mic Record in separate space/ booth Baffles Non-reflective surfaces 	
	Mic Choice	<ul style="list-style-type: none"> Condenser / Dynamic / ribbon 	(1)

Question Number	Answer	Mark
4c (ii) TYPE 2	<ul style="list-style-type: none"> • Key clicks • Unwanted breath sounds • Restricted movement of player • Unwanted resonance from bell • Proximity effect if too close • Not enough ambience/too dry 	(1)

Question Number	Answer	Mark																		
4d TYPE 1	<p>One mark is awarded for each point (AO3 – maximum 3) with further marks for explanation of the point (A04).</p> <p>Answers may include any of the following:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%; text-align: center;">A03</th> <th style="width: 50%; text-align: center;">A03</th> </tr> </thead> <tbody> <tr> <td>The rhythm guitars are panned left and right</td> <td>this differentiates them in the mix</td> </tr> <tr> <td>The lead guitar has a short delay, with signals panned separately</td> <td>this gives the impression of doubletracking, makes a fuller sound</td> </tr> <tr> <td>The lead guitar is high in the mix</td> <td>this gives it prominence and power</td> </tr> <tr> <td>The lead guitar has a fairly bright EQ</td> <td>this lifts it out of the mix</td> </tr> <tr> <td>The lead guitar is distorted</td> <td>Adds sustain / singing quality</td> </tr> <tr> <td>The strings are relatively low in the mix</td> <td>this gives them a supportive pad-like role, and space for the feature instruments</td> </tr> <tr> <td>The strings are panned across the stereo field</td> <td>this adds more width to the mix</td> </tr> <tr> <td>The EQ of the rhythm section is quite bass, low-mid focused</td> <td>this gives weight to the drums, bass and guitars</td> </tr> </tbody> </table>	A03	A03	The rhythm guitars are panned left and right	this differentiates them in the mix	The lead guitar has a short delay, with signals panned separately	this gives the impression of doubletracking, makes a fuller sound	The lead guitar is high in the mix	this gives it prominence and power	The lead guitar has a fairly bright EQ	this lifts it out of the mix	The lead guitar is distorted	Adds sustain / singing quality	The strings are relatively low in the mix	this gives them a supportive pad-like role, and space for the feature instruments	The strings are panned across the stereo field	this adds more width to the mix	The EQ of the rhythm section is quite bass, low-mid focused	this gives weight to the drums, bass and guitars	
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	Panning of the band is quite wide	this allows the guitar solo to take centre stage	
	Piano chords panned R	to oppose electric rhythm guitar on L	
	Synth 'drops'/stabs -	punctuate rhythm/provide fills at the ends of phrases	
	Layered/overdubbed electric guitar -	thicker chord texture	
			(6)

(Total for Question 4 = 14 marks)

Question Number	Answer	Mark
<p>5 TYPE 1</p>	<p style="text-align: center;">AO3 (8 marks)/AO4 (8 marks)</p> <p>Marking instructions</p> <ul style="list-style-type: none"> • Markers must apply the descriptors in line with the general marking guidance and the qualities outlined in the levels-based mark scheme below. Responses that demonstrate only AO3 without any AO4 should be awarded marks as follows: • Level 1 AO3 performance: 1-2 marks • Level 2 AO3 performance: 3-4 marks • Level 3 AO3 performance: 5-6 marks • Level 4 AO3 performance: 7-8 marks • Responses that refer to only one song should be awarded marks as follows: • Level 1 performance: 1-2 marks • Level 2 performance: 3-4 marks • Level 3 performance: 5-6 marks • Level 4 performance: 7-8 marks <p>Indicative content guidance The indicative content below is not prescriptive and candidates are not required to include all of it. Other relevant material not suggested below must also be credited. Relevant points may include:</p>	<p>(16)</p>

A03	A04
<p>Capture: OC</p> <ul style="list-style-type: none"> • Digital/DAW • Vocal recorded • Distortion (bit depth) on some drum parts 	<ul style="list-style-type: none"> • This allows for a clean sound • Allows detailed manipulation of audio • Crunchy/textural effect
<p>Capture: S&P</p> <ul style="list-style-type: none"> • Digital/DAW • Sampling from OC • Additional samples 	<ul style="list-style-type: none"> • Allows detailed manipulation of audio • Additional samples add a new more EDM vibe
<p>Instrumentation: OC</p> <ul style="list-style-type: none"> • Samples, synths, vocals, 'real' instruments imitated (eg Glockenspiel 0:10) • Careful, creative editing/sequencing • Arpeggiator synth 	<ul style="list-style-type: none"> • Some sense of a live quality via the vocal • Intricate textures • Variety of sounds • Allows for tight rhythm • Synth creates rhythmic element
<p>Instrumentation: S&P</p> <ul style="list-style-type: none"> • Samples from OC • Additional samples • More repetitive use of sampling • Drum patterns are less syncopated 	<ul style="list-style-type: none"> • This has inherited the live quality of the vocal, but it is sampled only • The restricted EQ on the vocal remains the same as OC • Additional samples/synths add new harmonic structure • Repetitive nature of loops very well-suited to a club environment
<p>Effects: OC</p> <ul style="list-style-type: none"> • Many and varied effects including a range of • reverbs – contrasts between wet reverbs and dry sounds - very dry vocal in verses, a much wetter feel to entire mix in chorus (1:25) • tight ambience reverb on lead vocal • delays – eg stereo delay from 0:00 on synth • filters – sweeps (eg 0:19), restricted frequency range on vocals and drums (eg 0:43) 	<ul style="list-style-type: none"> • these lead to a variety of textures/colours • used creatively to enhance the song • intimate quality • Sweeps create builds and drops, and frame sections • Effects used to create space/width in the mix • Delays create rhythmic patterns

<ul style="list-style-type: none"> • Use of autotune for corrective and artistic purposes 	
<p>Effects: S&P</p> <ul style="list-style-type: none"> • (More) Delays (eg vocal 0:39) • Reversed samples (0:56) • Heavy reverbs 	<ul style="list-style-type: none"> • Delays and reverbs used to create width and depth • They also create rhythmic impetus • Reversed samples to announce/build into new section • Very long delay at end serves as a fadeout
<p>Stereo: OC</p> <ul style="list-style-type: none"> • A wide use of the field with stereo delays, split signals panned in opposition (eg strings at 1:04) 	<ul style="list-style-type: none"> • Stereo used to give space and movement • Also gives a thickness to the texture
<p>Stereo: S&P</p> <ul style="list-style-type: none"> • Some fairly central panning of rhythm section • Some use of extreme panning (eg synth at 1:50) 	<ul style="list-style-type: none"> • Panning would not be readily perceived (or desired) in a club situation • Panning widens the mix and creates interest
<p>General: OC</p> <ul style="list-style-type: none"> • Distorted pad added in the chorus • Tempo slows at the end • Syncopated/gappy drum and bass patterns • Octave/unison vocals 	<ul style="list-style-type: none"> • The chorus has a sense of greater dynamic contrast • Gives a satisfying sense of conclusion • Leaves space for vocal • Subtle layering effect
<p>General: S&P</p> <ul style="list-style-type: none"> • Faster tempo • A higher/more consistent perceived volume • Brickwall limiting • More synth layers 	<ul style="list-style-type: none"> • The bpm has been raised to make it more danceable • A more restricted dynamic range is suitable to a club setting • Pumping

Level	Mark	Descriptor
•	• 0	• No rewardable material.
• Level 1	• 1–4	<ul style="list-style-type: none"> • Demonstrates and applies limited knowledge and understanding of production techniques used, some of which may be inaccurate or irrelevant. (AO3) • Gives limited analysis and deconstruction of production techniques used, making limited comparisons between the two recordings and/or little attempt at chains of reasoning. (AO4)
• Level 2	• 5–8	<ul style="list-style-type: none"> • Demonstrates and applies some knowledge and understanding of production techniques used, which is occasionally relevant but may include some inaccuracies. (AO3) • Gives some analysis and deconstruction of production techniques used, making some comparisons between the two recordings and/or simplistic chains of reasoning. (AO4)
• Level 3	• 9–12	<ul style="list-style-type: none"> • Demonstrates and applies clear knowledge and understanding of production techniques used, which is mostly relevant and accurate. (AO3) • Gives clear analysis and deconstruction of production techniques used, making clear comparisons between the two recordings and competent chains of reasoning. (AO4)
• Level 4	• 13–16	<ul style="list-style-type: none"> • Demonstrates and applies detailed knowledge and understanding of production techniques used, which is relevant and accurate throughout. (AO3) • Gives detailed and accurate analysis and deconstruction of production techniques used, making detailed comparisons between the two recordings and logical chains of reasoning. (AO4)

Level	Mark	Descriptor
	0	No rewardable material.
Level 1	1–4	<ul style="list-style-type: none"> • Demonstrates limited knowledge and understanding of production techniques/technology used, some of which may be inaccurate or irrelevant (AO3). • Applies limited analysis and deconstruction of production techniques/technology used in the recording with little attempt at chains of reasoning (AO4). • Makes limited connections between the production techniques/technology used in the recording and their wider impact (AO4). • Makes limited evaluative and/or critical judgements about the wider impact of the production techniques/technology used in the recording (AO4).
Level 2	5–8	<ul style="list-style-type: none"> • Demonstrates knowledge and understanding of production techniques/technology used, which are occasionally relevant but may include some inaccuracies (AO3). • Applies some analysis and deconstruction of production techniques/technology used in the recording, with simplistic chains of reasoning (AO4). • Makes some connections between the production techniques/technology used in the recording and their wider impact (AO4). • Makes some evaluative and/or critical judgements about the wider impact of the production techniques/technology used in the recording (AO4).
Level 3	9–12	<ul style="list-style-type: none"> • Demonstrates clear knowledge and understanding of production techniques/technology used, which are mostly relevant and accurate (AO3). • Applies clear analysis and deconstruction of production techniques/technology used in the recording which is mostly detailed, with competent chains of reasoning (AO4). • Makes valid connections between the production techniques/technology used in the recording and their wider impact (AO4). • Makes clear evaluative and critical judgements about the wider impact of the production techniques/technology used in the recording (AO4).
Level 4	13–16	<ul style="list-style-type: none"> • Demonstrates detailed knowledge and understanding of production techniques/technology used, which are relevant and accurate (AO3) • Applies detailed and accurate analysis and deconstruction of production techniques/technology used in the recording, with logical chains of reasoning on occasion (AO4). • Makes detailed and valid connections between the production techniques/technology used in the recording and their wider impact (AO4). • Makes detailed and valid evaluative and critical judgements about the wider impact of the production techniques/technology used in the recording (AO4).

Level	Mark	Descriptor
	0	No rewardable material.
Level 1	1–3	<ul style="list-style-type: none"> • Demonstrates limited knowledge and understanding of production techniques used, some of which may be inaccurate or irrelevant (AO3). • Gives limited analysis and deconstruction of production techniques used with little attempt at chains of reasoning (AO4). • Makes limited comparisons between the two recordings, with little or no conclusion (AO4).
Level 2	4–6	<ul style="list-style-type: none"> • Demonstrates some knowledge and understanding of production techniques used, which is occasionally relevant but may include some inaccuracies (AO3). • Gives some analysis and deconstruction of production techniques used with simplistic chains of reasoning (AO4). • Makes some comparisons between the two recordings, reaching unsupported conclusions (AO4).
Level 3	7–9	<ul style="list-style-type: none"> • Demonstrates clear knowledge and understanding of production techniques used, which is mostly relevant and accurate (AO3). • Gives clear analysis and deconstruction of production techniques used, with competent chains of reasoning (AO4). • Makes clear comparisons between the two recordings, reaching partially supported conclusions (AO4).
Level 4	10–12	<ul style="list-style-type: none"> • Demonstrates detailed knowledge and understanding of production techniques used, which is relevant and accurate (AO3). • Gives detailed and accurate analysis and deconstruction of production techniques used, with logical chains of reasoning on occasion (AO4). • Makes detailed comparisons between the two recordings, reaching well supported conclusions (AO4).
Level 5	13–15	<ul style="list-style-type: none"> • Demonstrates sophisticated and accurate knowledge of production techniques used throughout (AO3). • Gives sophisticated and accurate analysis and deconstruction of production techniques used, with logical chains of reasoning throughout (AO4). • Makes detailed comparisons between the two recordings, reaching sophisticated conclusions (AO4).

Level	Mark	Descriptor
	0	No rewardable material.
Level 1	1–4	<ul style="list-style-type: none"> • Demonstrates limited knowledge and understanding of production techniques/technology used, some of which may be inaccurate or irrelevant (AO3). • Applies limited analysis and deconstruction of production techniques/technology used in the recording with little attempt at chains of reasoning (AO4). • Makes limited connections between the production techniques/technology used in the recording and their wider impact (AO4). • Makes limited evaluative and/or critical judgements about the wider impact of the production techniques/technology used in the recording (AO4).
Level 2	5–8	<ul style="list-style-type: none"> • Demonstrates knowledge and understanding of production techniques/technology used, which are occasionally relevant but may include some inaccuracies (AO3). • Applies some analysis and deconstruction of production techniques/technology used in the recording, with simplistic chains of reasoning (AO4). • Makes some connections between the production techniques/technology used in the recording and their wider impact (AO4). • Makes some evaluative and/or critical judgements about the wider impact of the production techniques/technology used in the recording (AO4).
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Level 4	13–16	<ul style="list-style-type: none"> • Demonstrates detailed knowledge and understanding of production techniques/technology used, which are relevant and accurate (AO3) • Applies detailed and accurate analysis and deconstruction of production techniques/technology used in the recording, with logical chains of reasoning on occasion (AO4). • Makes detailed and valid connections between the production techniques/technology used in the recording and their wider impact (AO4). • Makes detailed and valid evaluative and critical judgements about the wider impact of the production techniques/technology used in the recording (AO4).
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Level 5	17–20	<ul style="list-style-type: none"> • Demonstrates sophisticated and accurate knowledge and understanding of production techniques/technology used throughout (AO3). • Applies sophisticated and accurate analysis and deconstruction of production techniques/technology used in the recording and logical chains of reasoning throughout (AO4). • Makes sophisticated and valid connections between the production techniques/technology used in the recording and their wider impact (AO4). • Makes sophisticated and valid evaluative and critical judgements about the wider impact of the production techniques/technology used in the recording (AO4).

