



Pearson
Edexcel

Mark Scheme (Results)

Summer 2023

Pearson Edexcel GCE
Music Technology (8MT0)
Paper 03: Listening and Analysing

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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.

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Question Number	Answer	Mark
Q01a(i) TYPE 4	<ul style="list-style-type: none"> D is the only possible answer <p>It can't be (A) digital as it was not available It can't be (B) ping pong as it remains central It can't be (C) slapback as it has multiple repeats</p>	1

Question Number	Answer	Mark
Q01a(ii) TYPE 1	<ul style="list-style-type: none"> has more repeats The feedback is higher More pronounced (upper) mid EQ / repeats degrade/distort 	1

Question Number	Answer	Mark
Q01b (i) TYPE 1	<ul style="list-style-type: none"> Dry / very little reverb 	1

Question Number	Answer	Mark
Q01b (ii) TYPE 1	<ul style="list-style-type: none"> It has been close mic'd Cardioid mic/directional Dead acoustic/ sound absorbent panels <p>Award 0 if part ii contradicts part i</p>	1

Question Number	Answer	Mark
Q01c TYPE 2	<ul style="list-style-type: none"> Piano Left/L Bass Centre/C/Middle allow <u>slightly</u> right Tambourine Right/R <p>Accept appropriate abbreviations, percentages, or diagrams</p>	3

Question Number	Answer	Mark
Q01d TYPE 1	<p>Any three of the following:</p> <ul style="list-style-type: none"> • Necessary due to very limited tracks available • The maximum -1 tracks are recorded • They are balanced • Appropriate EQ and effects are applied • Ensure a high signal to noise ratio, but avoid clipping • These tracks are then recorded to the remaining free track / multiple tracks are mixed down to one track / bounce to one track • The process frees tracks for additional parts • High frequencies are lost with each bounce • Additional noise is added with each bounce • This process cannot be undone/reversed / destructive editing 	3

(Total for Question 1 = 10 marks)

Question Number	Answer	Mark
Q02a TYPE 1	<p>Assume response refers to LV unless otherwise specified</p> <ul style="list-style-type: none"> • BV is lower in the mix • <u>Heavily</u> compressed • Autotuned / pitch correction • BV panned slightly right (off-centre) for some separation • Delay (on certain phrases) • BV's possibly sampled and played on keyboard/pitchshifted • LV EQ brighter/BV EQ dull 	3

Question Number	Answer	Mark
Q02b TYPE 1	<ul style="list-style-type: none"> • Descending (cut-off frequency) • LPF/BPF • high resonance (Q) • panned (slightly) right • (white) noise 	2

Question Number	Answer	Mark
Q02c TYPE 2	<ul style="list-style-type: none"> • The clap sample is removed • Shaker sample removed • High frequency kit elements removed <p>NOT snare removed</p>	1

Question Number	Answer	Mark
Q02d TYPE 1	<ul style="list-style-type: none"> • Single repeat/low feedback • Timed / Semibreve / 1. Allow minim / ½ • Low in the mix • Automated to apply to single phrases only • Adds a rhythmic accent • Panned centrally/mono • Frequency restricted/thinned filtering/EQ • Digital 	3

Question Number	Answer	Mark
Q02e TYPE 2	<ul style="list-style-type: none"> • Compression • Limiting • multi-band compression/dynamic EQ <p>Allow relevant plug-in name</p>	1

(Total for Question 1 = 10 marks)

Question Number	Answer	Mark
Q03a 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)/ lack of clarity in the mix • Cannot apply effects to individual parts • Cannot use stereo • Can only apply compression to the entire mix • If there is a mistake, you have to start again • Proximity effect on LF with instruments that are closer (inverse for instruments farther away) • Lacks LF/Lacks HF/Mid-Heavy 	4

Question Number	Answer		Mark
Q03b TYPE 1	Method	Explanation	
	Overheads	To capture entire band and room ambience/to capture stereo	
	Cardioid mics	To prevent spill/help with a clear mix	
	Booth for soloists	To isolate sound/can be mixed separately	
	Baffles/Screens	To prevent spill	
	Condenser mics that can cope with high SPL of brass	Avoids distortion/gives clarity	
	Mics with wider frequency response	Avoids muddiness	
	Overdubbing of vox/soloists/sections	Clearer separation/ won't have to start again if mistakes are made	
	Multiple mics	Clearer separation/stereo / process each part separately/ more control over balance	
Close mic	Avoids too much ambience/ for a tighter sound		
			6

(Total for Question 3 = 10 marks)

Question Number	Answer	Mark
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Q04a TYPE 1	<ul style="list-style-type: none"> • Hammers hit small metal tines NOT strings • The vibrations are captured by electromagnetic pickups • Signal is sent to amplifier/speaker/DI 	2
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Question Number	Answer	Mark
Q04bi TYPE 1	<ul style="list-style-type: none"> • Click track / metronome • (Click track in) headphones • Use of drum part / guide track 	2

Question Number	Answer	Mark
Q04bii TYPE 1	<ul style="list-style-type: none"> • Studio size • Fewer microphones required • Spill issues • Easier to separate instruments / more control over effects and processing on individual parts • Different mic techniques required for the separate forces • The orchestral arrangement was probably written after the rhythm tracks were recorded • Allows for multiple takes of the orchestra to remedy mistakes 	3

Question Number	Answer	Mark
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Q04c TYPE 2	<ul style="list-style-type: none">• Double tracking• Allow ADT NOT multi-tracked / overdubbed	1
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Question Number	Answer	Mark																										
Q04d TYPE 1	<p>One mark is awarded for each point (AO3 – maximum 3) with further marks for explanation of the point (AO4).</p> <p>Answers may include any of the following:</p> <table border="1" data-bbox="359 492 1316 1624"> <thead> <tr> <th data-bbox="359 492 853 526">AO3</th> <th data-bbox="853 492 1316 526">AO4</th> </tr> </thead> <tbody> <tr> <td data-bbox="359 526 853 761"> The rhythm guitars are panned left and right The strings are panned across the stereo field <i>1 mark max for mentioning panning on X</i> </td> <td data-bbox="853 526 1316 761"> <ul style="list-style-type: none"> • Makes space for vocals in centre of mix. • Stereo width for rhythm guitar. • This adds more width to the mix, and mimics a live feel </td> </tr> <tr> <td data-bbox="359 761 853 817">Rhythm guitar is distorted.</td> <td data-bbox="853 761 1316 817">Bigger sound / fills mix / 'grittier' sound contrasts with strings</td> </tr> <tr> <td data-bbox="359 817 853 873">Guitar has thin EQ/lacks LM</td> <td data-bbox="853 817 1316 873">Allows it to cut through the mix. Prevents congested low mids.</td> </tr> <tr> <td data-bbox="359 873 853 974">HF boosted on X</td> <td data-bbox="853 873 1316 974">To add brightness / brings X forward in the mix / makes production sound 'glossier'</td> </tr> <tr> <td data-bbox="359 974 853 1052">The horns are quite prominent at the end of the prechorus</td> <td data-bbox="853 974 1316 1052">This gives an added life to the transition</td> </tr> <tr> <td data-bbox="359 1052 853 1176">The bass has chorus applied</td> <td data-bbox="853 1052 1316 1176">This gives it more weight/movement / description of effect</td> </tr> <tr> <td data-bbox="359 1176 853 1232">Bass guitar tone has HF rolled off</td> <td data-bbox="853 1176 1316 1232">Leaves space for other parts in the frequency spectrum</td> </tr> <tr> <td data-bbox="359 1232 853 1321">The snare and toms are quite prominent in the mix</td> <td data-bbox="853 1232 1316 1321">This drives the rhythm section.</td> </tr> <tr> <td data-bbox="359 1321 853 1444">Strings are loud enough in the mix to not be overpowering</td> <td data-bbox="853 1321 1316 1444">Allows the countermelody to be heard, but does not distract from the lead vocal</td> </tr> <tr> <td data-bbox="359 1444 853 1500">Reverb used on X</td> <td data-bbox="853 1444 1316 1500">Sets X back in the mix/ natural space</td> </tr> <tr> <td data-bbox="359 1500 853 1534"><u>Light</u> compression used</td> <td data-bbox="853 1500 1316 1534">Retains natural dynamic range</td> </tr> <tr> <td data-bbox="359 1534 853 1624">Tape saturation</td> <td data-bbox="853 1534 1316 1624">Adds warmth/ improves signal to noise ratio/ smooths transients/ soft clipping</td> </tr> </tbody> </table>	AO3	AO4	The rhythm guitars are panned left and right The strings are panned across the stereo field <i>1 mark max for mentioning panning on X</i>	<ul style="list-style-type: none"> • Makes space for vocals in centre of mix. • Stereo width for rhythm guitar. • This adds more width to the mix, and mimics a live feel 	Rhythm guitar is distorted.	Bigger sound / fills mix / 'grittier' sound contrasts with strings	Guitar has thin EQ/lacks LM	Allows it to cut through the mix. Prevents congested low mids.	HF boosted on X	To add brightness / brings X forward in the mix / makes production sound 'glossier'	The horns are quite prominent at the end of the prechorus	This gives an added life to the transition	The bass has chorus applied	This gives it more weight/movement / description of effect	Bass guitar tone has HF rolled off	Leaves space for other parts in the frequency spectrum	The snare and toms are quite prominent in the mix	This drives the rhythm section.	Strings are loud enough in the mix to not be overpowering	Allows the countermelody to be heard, but does not distract from the lead vocal	Reverb used on X	Sets X back in the mix/ natural space	<u>Light</u> compression used	Retains natural dynamic range	Tape saturation	Adds warmth/ improves signal to noise ratio/ smooths transients/ soft clipping	6
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(Total for Question 4 = 14 marks)

Question Number	Answer	Mark
Q05 TYPE 1	<p style="text-align: center;">A03 (8 marks)/A04 (8 marks)</p> <p>Marking instructions 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 A03 without any A04 should be awarded marks as follows:</p> <ul style="list-style-type: none"> • Level 1 A03 performance: 1–2 marks • Level 2 A03 performance: 3–4 marks • Level 3 A03 performance: 5–6 marks • Level 4 A03 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>	16

A03	A04
<p>Capture: TW</p> <ul style="list-style-type: none"> • All captured with mics • Close mic'd • A range of different mic placements <ul style="list-style-type: none"> • Quite possibly recorded live • Analogue/Tape 	<ul style="list-style-type: none"> • Because all instruments are acoustic • Allows for separation when mixing • Gives a range of acoustic depths • The brass has more natural reverb than other instruments • Loose performance • Human feel • Hard to edit
<p>Capture: PSB</p> <ul style="list-style-type: none"> • Digital • Sequenced 	<ul style="list-style-type: none"> • Allows detailed manipulation of audio • Tight rhythms through quantisation • Constant velocity • No dynamic contrast
<p>Instrumentation: TW</p> <ul style="list-style-type: none"> • Banjo, accordion, double bass, vocals, brass, bass drum, xylophone 	<ul style="list-style-type: none"> • Some sense of a live quality [do not credit twice] • Cabaret/folk/classical feel • All acoustic
<p>Instrumentation: PSB</p> <ul style="list-style-type: none"> • Synths 	<ul style="list-style-type: none"> • Combination of sustained pads and tight rhythms give contrast

<ul style="list-style-type: none"> • Samples • Additional samples (the crowd at 1:35 and the thunder at 1:47 and 3:25, the knives at 0:59) • Vocal is the only live sound • Vocoder at 0:58 	<ul style="list-style-type: none"> • An intricate assortment of sounds • Suits the 90's EDM style • These form a commentary on the lyric/add drama • Has some live quality from the vocal • Adds to the processed feel
<p>Effects: TW</p> <ul style="list-style-type: none"> • Very few effects • Room reverb is dry • Opening section has wetter reverb, and is possibly reversed • HF flat/reduced 	<ul style="list-style-type: none"> • Gives a live feel [do not credit twice] • Gives an immediacy to the recording • Makes a mysterious intro • The EQ reflects the natural qualities of the instruments
<p>Effects: PSB</p> <ul style="list-style-type: none"> • A range of reverbs, particularly on the drums • Short room reverbs, gated reverb • Reverb on drums is different to the rest of the track • Digital reverb • Very little delay used 	<ul style="list-style-type: none"> • Reverbs used to create depth and contrast • Tails don't clutter the mix • Adds a sense of sustain to the drums • Bright • Dense • Lack of delays keeps the complex rhythmic texture uncluttered
<p>Stereo: TW</p> <ul style="list-style-type: none"> • Shifting panning on the intro sounds • Some unorthodox panning eg bass drum to the left, xylophone extreme left 	<ul style="list-style-type: none"> • Adds to the sense of expectancy/motion effect • Adds to the quirkiness of the recording • Instruments are clearly separated
<p>Stereo: PSB</p> <ul style="list-style-type: none"> • Some fairly central panning of rhythm section • Panning is more pronounced in the chorus • Synth pad panned left and right • Marching sound effect pans left then right 	<ul style="list-style-type: none"> • Panning would not be readily perceived (or desired) in a club situation • Give a sense of larger space • Leave space for lead vocal in the centre • A sense of opposition
<p>General: TW</p> <ul style="list-style-type: none"> • Slower tempo • Shorter in length • Not focused on percussive rhythm 	<ul style="list-style-type: none"> • Has a dark quality • A section/verse is missing • Focuses more on the voice and the harmony
<p>General: PSB</p> <ul style="list-style-type: none"> • Faster tempo • Double tracked vocals • Synth doubles vocal line 	<ul style="list-style-type: none"> • A higher/more consistent perceived volume/more compression than TW • A more restricted dynamic range is suitable to EDM • The bpm has been raised to make it more danceable • Adds thickness

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)