



Pearson
Edexcel

Mark Scheme (Results)

Summer 2019

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.

Question Number	Answer	Mark
Q01ai	B Delay This is the only correct answer	1

Question Number	Answer	Mark
Q01aii	C Room reverb This is the only correct answer	1

Question Number	Answer	Mark
Q01b	Right/R Accept responses where the word 'right' is present. Accept appropriate diagrams or numeric responses.	1

Question Number	Answer	Mark
Q01c	Double tracking/allow multi-tracking	1

Question Number	Answer	Mark
Q01d	Any two of the following: <ul style="list-style-type: none"> • Playing live/visual signals • (An increasing tempo) click track • A well-rehearsed band/following drummer • Guide track 	2

Question Number	Answer	Mark
Q01e	Compression/limiting	1

Question Number	Answer	Mark
Q01f	D Multitrack digital recorder This is the only correct answer	1

Question Number	Answer	Mark
Q01g	Any two of the following: <ul style="list-style-type: none"> • Different effects • Different EQ • Different panning • Different distortion • Balance 	2

(Total for Question 1 = 10 marks)

Question Number	Answer	Mark
Q02a	C 1/16 This is the only correct answer	1

Question Number	Answer	Mark
Q02b	Any two of the following: <ul style="list-style-type: none"> • Identical phrasing • Identical articulation • Identical volume • Looped/ copied and pasted in a DAW • Max 1 for exactly the same • 	2

Question Number	Answer	Mark
Q02c	Any two of the following: <ul style="list-style-type: none"> • Wider spread in the chorus • <u>backing vocals</u> panned L and R • Strings are panned L and R • No backing vocals in the centre/hole in the middle • "call and response" between central lead and wide backing vocals 	2

Question Number	Answer	Mark
Q02d	Any one of the following: <ul style="list-style-type: none"> • Mixed at an equal level • Backing vocals perceived volume slightly higher than lead 	1

Question Number	Answer	Mark
Q02e	<p>Any four of the following:</p> <ul style="list-style-type: none"> • Different samples/rhythms for verse, chorus and middle eight • Different loop lengths • Pauses/dropping out/missed beats • Additional percussion sample added in chorus • Use of scratch sample • Different snare and kick sounds • Crash • Rhythmic fills/transitions on kick/snare/open hi-hat • Change of quantise/groove to swung 16ths 	4

(Total for Question 2 = 10 marks)

Question Number	Answer	Mark
Q03ai	<ul style="list-style-type: none"> • Slapback • mono/analogue/tape delay/single tap Accept appropriate description.	1

Question Number	Answer	Mark
Q03aii	Any three of the following: <ul style="list-style-type: none"> • Lid open • Single microphone • Inside the casing • Pointing towards the strings that are being played/high strings • Close to the hammers • Small diaphragm condenser/capacitor microphone • Cardioid/directional • Microphone with poor low frequency response 	3

Question Number	Answer	Mark
03bi	Any one of the following: <ul style="list-style-type: none"> • This recording is rather flat • This recording is warm • A modern recording would have more exaggerated high frequencies • A modern recording would have a wider frequency range 	1

Question Number	Answer	Mark
03bii	Reverb is added (not longer reverb)	1

Question Number	Answer	Mark
Q03c	Any one of the following: <ul style="list-style-type: none"> • Vocal fader has been left up slightly • There is bleed from other tracks • Crosstalk • FX return left unmuted • Spill 	1

Question Number	Answer	Mark
Q03d	<p>Any three of the following:</p> <ul style="list-style-type: none">• The maximum -1 (multiple) 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• 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	3

(Total for Question 3 = 10 marks)

Question Number	Answer	Mark
Q04a	<p>Any two of the following:</p> <ul style="list-style-type: none"> • LPF (accept BPF) • Filter <u>sweep</u> • Decreasing/descending cutoff frequency/Higher frequencies gradually cut • Automated/envelope/long decay of cutoff frequency 	2

Question Number	Answer	Mark
Q04b	<p>Any three of the following:</p> <ul style="list-style-type: none"> • Timed/synced delay • Semiquaver rate/16ths • More than one repeat/ high feedback • Stereo delay • Filtered wet signal/ reduced high frequencies • Wet level lower than dry 	3

Question Number	Answer	Mark
Q04c	<p>Introduction of claps on every beat (1) fade in (1) New tom loop (1) syncopated (1) highly reverberant (1) Drum roll/fill at the end (1) volume increases through drum roll (1) Opened and closed hi-hat (1) 1/16 groove (1) Clap and hat sound are analogue/ 808/909 (1) Building up of layers (1)</p>	3

Question Number	Answer	Mark																						
Q04d	<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="395 510 1350 1402"> <thead> <tr> <th data-bbox="395 510 887 546">AO3</th> <th data-bbox="887 510 1350 546">AO4</th> </tr> </thead> <tbody> <tr> <td data-bbox="395 546 887 616">Few high frequencies on the pads and synths</td> <td data-bbox="887 546 1350 616">Makes space for a bright vocal to sit on top of the texture</td> </tr> <tr> <td data-bbox="395 616 887 786"><u>Long/heavy</u> reverb and delay on the vocal</td> <td data-bbox="887 616 1350 786">Fills gaps between the vocal phrases. Airy mix reflects the lyrics/dreamy quality. Adds space/depth</td> </tr> <tr> <td data-bbox="395 786 887 822">Double tracking (ADT) on the vocal</td> <td data-bbox="887 786 1350 822">Thickens the vocal.</td> </tr> <tr> <td data-bbox="395 822 887 891">Bright EQ on vocal</td> <td data-bbox="887 822 1350 891">Breathy quality which cuts through</td> </tr> <tr> <td data-bbox="395 891 887 960">Kick drum is prominent and is mostly low frequencies</td> <td data-bbox="887 891 1350 960">Sits under the mid-range instruments.</td> </tr> <tr> <td data-bbox="395 960 887 1095">Hand claps and Hi hats are bright Extremes of frequency range</td> <td data-bbox="887 960 1350 1095">Analogue/808/909. Stands out of the mix due to EQ Adds a sense of progression and builds the texture.</td> </tr> <tr> <td data-bbox="395 1095 887 1131">The bass pitch bends up at 0:39</td> <td data-bbox="887 1095 1350 1131">To introduce the drum pattern</td> </tr> <tr> <td data-bbox="395 1131 887 1234">Drums build in volume and then drop - e.g. with frenetic hi-hat pattern that enters/exits</td> <td data-bbox="887 1131 1350 1234">Rising and falling tension</td> </tr> <tr> <td data-bbox="395 1234 887 1337">Heavy compression</td> <td data-bbox="887 1234 1350 1337">Typical of EDM To make parts more prominent/balance the mix</td> </tr> <tr> <td data-bbox="395 1337 887 1402">Relatively narrow panning of drums</td> <td data-bbox="887 1337 1350 1402">Allows space for the wide pads Typical of music for clubs</td> </tr> </tbody> </table> <p>NB Do not credit mention of instrument without qualification.</p>	AO3	AO4	Few high frequencies on the pads and synths	Makes space for a bright vocal to sit on top of the texture	<u>Long/heavy</u> reverb and delay on the vocal	Fills gaps between the vocal phrases. Airy mix reflects the lyrics/dreamy quality. Adds space/depth	Double tracking (ADT) on the vocal	Thickens the vocal.	Bright EQ on vocal	Breathy quality which cuts through	Kick drum is prominent and is mostly low frequencies	Sits under the mid-range instruments.	Hand claps and Hi hats are bright Extremes of frequency range	Analogue/808/909. Stands out of the mix due to EQ Adds a sense of progression and builds the texture.	The bass pitch bends up at 0:39	To introduce the drum pattern	Drums build in volume and then drop - e.g. with frenetic hi-hat pattern that enters/exits	Rising and falling tension	Heavy compression	Typical of EDM To make parts more prominent/balance the mix	Relatively narrow panning of drums	Allows space for the wide pads Typical of music for clubs	6
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(Total for Question 4 = 14 marks)

Question Number	Answer	Mark
Q05	<p style="text-align: center;">AO3 (8 marks)/AO4 (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 AO3 without any AO4 should be awarded marks as follows:</p> <ul style="list-style-type: none"> • 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 <p>Responses that refer to only one song should be awarded marks as follows:</p> <ul style="list-style-type: none"> • 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, but are not limited to:</p>	16

AO3	AO4
<p>Capture: James</p> <ul style="list-style-type: none"> • Single mic/ Mono. • live • There is crackle present 	<ul style="list-style-type: none"> • This creates issues of balance and separation. • Capture of drums is muffled and unclear as they are far away from the microphone. • No possibility of mixing after recording. • Crackle added on purpose to a modern recording can make for a lo-fi feel, but in this case it is accidental. • Direct to disc recording. • Unable to edit post-recording
<p>Capture: Manhattan Transfer</p> <ul style="list-style-type: none"> • DI • Multiple mic'ing for acoustic instruments Close micing • • Multitrack tape recording / • All mastered to stereo. 	<ul style="list-style-type: none"> • Much cleaner capture due to multiple mics and overdubbing. • Multi-mic'ed drum kit allows for balance and clarity of individual elements of drum kit and the band. • Close mic recording allows better control of ambience. • Allows for overdubbing/doubletracking • Many takes are possible/editing after recording •
<p>Instrumentation: James</p> <ul style="list-style-type: none"> • Big band jazz ensemble/Single vocal/No electric instruments 	<ul style="list-style-type: none"> • All recorded acoustically. • Balance achieved through proximity to mic and internal balance of the band, making good balance very difficult.
<p>Instrumentation: Manhattan Transfer</p> <ul style="list-style-type: none"> • Synth (analogue) • with a prominent portamento and vibrato (most noticeably at 1.40) • with considerable LFO depth. • Bass guitar/Electric guitar/Drums/Big band jazz ensemble/Multiple vocals <p>NB 1 max for insts.</p>	<ul style="list-style-type: none"> • The synth sound is used only intermittently. It lends a stark contrast to the traditional swing band feel of the rest of the track. Gives it a contemporary feel. • When mixed behind the band, it has a slight string tone to it. • The band arrangement is typical of the 30's/40's featuring reeds and brass. However, the instrumental have been separately miked for clarity in the mix via panning, balance and EQ.
<p>Effects: James</p> <ul style="list-style-type: none"> • Relies on room acoustic/natural reverb • Nothing added/applied to the whole track 	<ul style="list-style-type: none"> • There is little control over the amount of ambience on individual instruments as this is determined by their distance from the mic. • This also makes the choice of recording space of paramount importance. • A smaller room makes for easier capture.
<p>Effects: Manhattan Transfer</p> <ul style="list-style-type: none"> • Use of reverbs • Wah-wah • Applied to different tracks • EQ used in MT (more HF LF/wider range/clarity) • Not in HJ (muffles/indistinct) 	<ul style="list-style-type: none"> • Reverb is added at mixing stage to the electric instruments. to give the impression in the same a room as the band, despite being DI'd. • It also gives more control over the ambience. • The wah wah FX gives a modern, anachronistic feel. • Band pass filter. • Compression gives wider dynamic range in Lames/smaller in MT

Frequency response <ul style="list-style-type: none"> Constricted in James/Wider in MT EQ in MT / no EQ in James 	<ul style="list-style-type: none"> The frequency range in James is limited compared to MT because of the recording medium and equipment available. Lack of LF, and HF is very bright at times. In MT use of EQ and mics with a wider frequency response helps with balance and separation.
Signal to noise ratio <ul style="list-style-type: none"> In James, a general level is set, and some instruments distort In MT Levels can be set for individual instruments, and compression used to avoid this. There is no distortion. Use of compression in MT/not in James 	<ul style="list-style-type: none"> Compression/Modern technology allows for a smoother, distortion-free capture, which was rarely achievable in the 30's Helps to sit instruments in the mix
Use of overdubbing <ul style="list-style-type: none"> MT has probably used overdubbing, particularly in the vocals. 	<ul style="list-style-type: none"> This means that multiple individual takes could be recorded, without having to record the entire thing again. Composite vocal tracks could be compiled.

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)