



**Pearson  
Edexcel**

# **Mark Scheme (Results)**

**Summer 2018**

**Pearson Edexcel GCE  
In Music Technology (8MT0) Paper 03**

## **Edexcel and BTEC Qualifications**

Edexcel and BTEC qualifications are awarded by Pearson, the UK's largest awarding body. We provide a wide range of qualifications including academic, vocational, occupational and specific programmes for employers. For further information visit our qualifications websites at [www.edexcel.com](http://www.edexcel.com) or [www.btec.co.uk](http://www.btec.co.uk). Alternatively, you can get in touch with us using the details on our contact us page at [www.edexcel.com/contactus](http://www.edexcel.com/contactus).

## **Pearson: helping people progress, everywhere**

Pearson aspires to be the world's leading learning company. Our aim is to help everyone progress in their lives through education. We believe in every kind of learning, for all kinds of people, wherever they are in the world. We've been involved in education for over 150 years, and by working across 70 countries, in 100 languages, we have built an international reputation for our commitment to high standards and raising achievement through innovation in education. Find out more about how we can help you and your students at: [www.pearson.com/uk](http://www.pearson.com/uk)

Summer 2018

Publications Code 8MT0\_03\_1806\_MS

All the material in this publication is copyright


© Pearson Education Ltd 2018

## 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	<p>C. Plate <i>is the only correct answer</i></p> <p>A. <i>is incorrect, because there was no digital technology at this time</i></p> <p>B. <i>is incorrect, because gating has not been used</i></p> <p>D. <i>is incorrect, because there has been no reversal of the signal</i></p>	<b>1</b>

Question Number	Answer	Mark
Q01aii	<p>B. Metal sheet <i>is the only correct answer</i></p> <p>A. <i>is incorrect, because this refers to digital technology</i></p> <p>C. <i>is incorrect, because a pedal has not been used</i></p> <p>D. <i>is incorrect, because this in itself is not a valid method</i></p>	<b>1</b>

Question Number	Answer	Mark
Q01aiii	<p>Right (1)</p> <p>R (1)</p> <p>Any positive number (must have a + sign) (1)</p> <p>Accept diagrams where the line is <b>anywhere</b> to the right of the vertical centre. (1)</p> <p>e.g. </p> <p>Accept responses where the word 'right' is present</p>	<b>1</b>

Question Number	Answer	Mark
Q01b	<p>Any two of the following:</p> <ul style="list-style-type: none"> <li>• Constricted frequency range / Lack of HF/LF (1)</li> <li>• Lack of definition on kick (1)</li> <li>• Polarised panning / left or right (1)</li> <li>• Stereo spread achieved with reverb (1)</li> <li>• Reverb level quite high/wet / distant mics / not close mics (1)</li> <li>• Mono (dry signal) (1)</li> <li>• Emphasis on drums rather than cymbals (1)</li> </ul>	<b>2</b>

Question Number	Answer	Mark
Q01ci	<ul style="list-style-type: none"> <li>• Double tracking (ADT) (1)</li> <li>• Overdubbing (1)</li> <li>• Close mic (1)</li> <li>•</li> </ul>	<b>1</b>

Question Number	Answer	Mark
Q01cii	<ul style="list-style-type: none"> <li>Record another performance of the same part (1)</li> <li>Duplicate the audio (1)</li> <li>Move the audio slightly apart (in time) (1)</li> <li><u>Short</u> delay (1)</li> <li><u>Small</u> amount of pitch shift (1)</li> <li>ADT (1)</li> </ul>	<b>1</b>

Question Number	Answer	Mark
Q01d	<p>Any three of the following:</p> <ul style="list-style-type: none"> <li>Destructive editing / not undoable / can't change levels/pan/FX (1)</li> <li>Potential reduction in frequency response (1)</li> <li>Possible build-up of hiss/noise / poor signal to noise ratio (1)</li> <li>Adding distortion/saturation (1)</li> <li>Wearing of tape <u>if multiple bounces are used</u> (1)</li> <li>Introducing wow and flutter (1)</li> <li>Must keep one track free whilst recording (1)</li> <li>Submix mix has to be rehearsed (1)</li> </ul>	<b>3</b>

**(Total for Question 1 = 10 marks)**

Question Number	Answer	Mark
Q02a	<p>A. 1952 is the only correct answer  B, C and D are incorrect, because the eras are later than the recording</p>	<b>1</b>

Question Number	Answer	Mark
Q02b	<ul style="list-style-type: none"> <li>Stereo delay (1)</li> <li>Stereo reverb (1)</li> <li>Stereo spreader/stereo enhancer/accept proprietary equivalent (1)</li> <li>EQ each side differently (1)</li> </ul>	<b>1</b>

Question Number	Answer	Mark
Q02c	<ul style="list-style-type: none"> <li>Proximity of performers to mic (1)</li> <li>How loudly the musicians are playing relative to each other (1)</li> </ul>	<b>2</b>

<b>Question Number</b>	<b>Answer</b>	<b>Mark</b>
Q02d	<p>Any 4 of the following</p> <ul style="list-style-type: none"> <li>• Better mics for <u>wider frequency range</u> / HPF (1)</li> <li>• Multiple mics (1)</li> <li>• Acoustic screens to prevent spill(1)</li> <li>• Multitrack recording/overdubbing (1)</li> <li>• Close mic techniques (1)</li> <li>• Better signal to noise ratio / gain structure / reduce distortion (1)</li> <li>• Digital/DAW (1)</li> <li>• Use a 'dead' space (and add reverb later) (1)</li> <li>• Stereo pair mics / X-Y pair etc (1)</li> <li>• Pop shield (1)</li> </ul>	<b>4</b>

<b>Question Number</b>	<b>Answer</b>	<b>Mark</b>
Q02e	<ul style="list-style-type: none"> <li>• Facing the bell (1)</li> <li>• Off axis (1)</li> <li>• 8 inches-3 feet (20cm – 90cm) away (1)</li> <li>• Use a condenser mic / dynamic mic / ribbon mic / cardioid (1)</li> <li>• Pad (1)</li> <li>• Avoiding valve noise (1)</li> <li>• Dead room / acoustic screens (1)</li> </ul>	<b>2</b>

**(Total for Question 2 = 10 marks)**

<b>Question Number</b>	<b>Answer</b>	<b>Mark</b>
Q03a	<ul style="list-style-type: none"> <li>• Kick / snare centre (1)</li> <li>• (Rack) toms panned right (1)</li> <li>• Floor tom panned left (1)</li> <li>• Hi-hat on the right (1)</li> <li>• Crash cymbals on right (1)</li> </ul>	<b>2</b>

Question Number	Answer		Mark									
03b	<table border="1"> <thead> <tr> <th></th> <th>First Guitar (left)</th> <th>Second Guitar (centre/right)</th> </tr> </thead> <tbody> <tr> <td><b>Effects</b></td> <td> <ul style="list-style-type: none"> <li>• <u>More</u> reverb</li> <li>• <u>Panned</u> reverb</li> <li>• <u>Plate</u> reverb</li> <li>• <u>Long</u> reverb</li> <li>• Pronounced early reflections on reverb</li> <li>• Long pre-delay on reverb</li> <li>• Allow hall reverb</li> </ul> </td> <td> <ul style="list-style-type: none"> <li>• Flanger/phaser/chorus</li> <li>• <u>Less</u> reverb</li> </ul> </td> </tr> <tr> <td><b>EQ</b></td> <td> <ul style="list-style-type: none"> <li>• Bright/lacks low frequencies</li> </ul> </td> <td> <ul style="list-style-type: none"> <li>• Mellow/warm/lacks high frequencies</li> </ul> </td> </tr> </tbody> </table>			First Guitar (left)	Second Guitar (centre/right)	<b>Effects</b>	<ul style="list-style-type: none"> <li>• <u>More</u> reverb</li> <li>• <u>Panned</u> reverb</li> <li>• <u>Plate</u> reverb</li> <li>• <u>Long</u> reverb</li> <li>• Pronounced early reflections on reverb</li> <li>• Long pre-delay on reverb</li> <li>• Allow hall reverb</li> </ul>	<ul style="list-style-type: none"> <li>• Flanger/phaser/chorus</li> <li>• <u>Less</u> reverb</li> </ul>	<b>EQ</b>	<ul style="list-style-type: none"> <li>• Bright/lacks low frequencies</li> </ul>	<ul style="list-style-type: none"> <li>• Mellow/warm/lacks high frequencies</li> </ul>	<b>4</b>
	First Guitar (left)	Second Guitar (centre/right)										
<b>Effects</b>	<ul style="list-style-type: none"> <li>• <u>More</u> reverb</li> <li>• <u>Panned</u> reverb</li> <li>• <u>Plate</u> reverb</li> <li>• <u>Long</u> reverb</li> <li>• Pronounced early reflections on reverb</li> <li>• Long pre-delay on reverb</li> <li>• Allow hall reverb</li> </ul>	<ul style="list-style-type: none"> <li>• Flanger/phaser/chorus</li> <li>• <u>Less</u> reverb</li> </ul>										
<b>EQ</b>	<ul style="list-style-type: none"> <li>• Bright/lacks low frequencies</li> </ul>	<ul style="list-style-type: none"> <li>• Mellow/warm/lacks high frequencies</li> </ul>										
<p>Do not credit converse responses about reverb. Each row is worth two marks. Do not mark boxes independently.</p>												

Question Number	Answer	Mark
Q03c	<ul style="list-style-type: none"> <li>• Same reverb/effects can be applied to all vocals (1)</li> <li>• Same <u>EQ</u> can be applied to all vocals (1)</li> <li>• Allows all vocals to be compressed using one compressor (1) since limited number of hardware compressors available (1)</li> <li>• Push or fade on several vocal channels with just one fader (1) so the relative levels are easily maintained (1)</li> <li>• The panning will all be the same (1)</li> </ul>	<b>4</b>

**(Total for Question 3 = 10 marks)**

<b>Question Number</b>	<b>Answer</b>	<b>Mark</b>
Q04a	<ul style="list-style-type: none"> <li>• LPF / high cut</li> </ul>	<b>1</b>

<b>Question Number</b>	<b>Answer</b>	<b>Mark</b>
Q04b	<p>Any five from the following:</p> <ul style="list-style-type: none"> <li>• Crackle/hiss/noise (1)</li> <li>• Sample clearance (1)</li> <li>• EQ (1)</li> <li>• Distortion (1)</li> <li>• Deterioration of analogue tape (1)</li> <li>• Finding samples with no unwanted effects (1)</li> <li>• Isolating the instruments/no bleed (1)</li> <li>• Cutting / loop samples (1)</li> <li>• Tempo (1)</li> <li>• Keys / chords (1)</li> <li>• Coherence of style (1)</li> <li>• Addition of other instruments that fit with the samples (1)</li> <li>• Mono/stereo (1)</li> <li>• Selection of samples takes time (1)</li> </ul>	<b>5</b>

<b>Question Number</b>	<b>Answer</b>	<b>Mark</b>
Q04c	<p>Any two from the following:</p> <ul style="list-style-type: none"> <li>• Identical 2-bar loops (itches) (1)</li> <li>• Identical phrasing/articulation/timing (1)</li> <li>• Quantised (1)</li> <li>• Imperfections in the music are repeated (1)</li> <li>• Consistent level throughout (1)</li> </ul>	<b>2</b>



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). AO3 is the first mark on each bullet point. Subsequent marks on each bullet point are AO4 explanations.</p> <p>Answers may include any of the following:</p> <ul style="list-style-type: none"> <li>• List of 3 or more instruments (1)</li> <li>• LPF on bass (1) helps it sit under the other instruments (1)</li> <li>• Reverse cymbal (1)</li> <li>• Short/staccato synth panning L&amp;R (1) adds to the rhythmic groove (1) to widen the stereo field (1)</li> <li>• Drums quantised (1)</li> <li>• Guitar mixed quietly/lots of reverb (1) sits at the back of the mix / gives a dreamy feel (1)</li> <li>• Looped bass/drums (1) constant groove underpinning the song (1)</li> <li>• EQing of samples/enhancing/boosting treble and bass (1) listeners expect a wider frequency response today (1)</li> <li>• Use of stereo/opposition at times (1) to separate parts in the mix (1) to add the remixer’s signature (1)</li> <li>• Delay (on vocals) (1) adds another layer of rhythm (1) adds ambience (1)</li> <li>• Automated delay only on some words (1) to avoid masking vocals (1) to fill gaps (1) turns vocal into a rhythmic part (1)</li> <li>• (Long) reverb on the vocal (1) adds ambience (1) disguises samples/edit points (1)</li> <li>• Lead vocal loudest (1) to make it the main focus (1)</li> <li>• Looping of samples (1) consistent groove throughout (1)</li> <li>• Filter sweeps at the start (1) serves in place of dynamics (1)</li> <li>• Time stretch (1) to make it the correct tempo (1)</li> <li>• Pitch shift (1) to make it the correct key (1)</li> <li>• Ensuring the volume of older/quieter recordings matches new material (1) to balance the parts (1)</li> <li>• Ensuring that the EQ matches contemporary standards of recording (1) so that fits the current fashions (1)</li> <li>• Highly compressed/limited (1)</li> <li>• Synth pad has long attack/release (1) cuts out of mix to make way for vocals (1)</li> <li>• Layering of claps at end of intro (1)</li> </ul> <p>AOVP</p>	<b>6</b>

**(Total for Question 4 = 14 marks)**

Question	Indicative content	Mark												
Q05	<p style="text-align: center;"><b>AO3 (8 marks)/AO4 (8 marks)</b></p> <p><b>Marking instructions</b> 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 <b>only</b> AO3 without any AO4 should be awarded marks as follows:</p> <ul style="list-style-type: none"> <li>• Level 1 AO3 performance: 1–2 marks</li> <li>• Level 2 AO3 performance: 3–4 marks</li> <li>• Level 3 AO3 performance: 5–6 marks</li> <li>• Level 4 AO3 performance: 7–8 marks</li> </ul> <p><b>Indicative content guidance</b> 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><b>AO3</b></p> <p>Capture: Prince</p> <ul style="list-style-type: none"> <li>• Largely mic'ing and DI</li> <li>• Limited used of sampling</li> <li>• Recorded on analogue tape</li> </ul> <p>Capture: CJ Bomb</p> <ul style="list-style-type: none"> <li>• Sampling</li> <li>• Use of sequencer</li> <li>• Mostly digital</li> </ul> <p>Instrumentation: Prince</p> <ul style="list-style-type: none"> <li>• Guitar</li> <li>• Vocals</li> <li>• Drum machine</li> <li>• Synth</li> </ul> <p>Instrumentation: CJ Bomb</p> <ul style="list-style-type: none"> <li>• Samples</li> </ul> <p>Effects: Prince</p> <ul style="list-style-type: none"> <li>• Use of gated reverb</li> <li>• Vocals have slight delay</li> <li>• Vocals are quite dry in places</li> <li>• Distortion on guitar</li> </ul> <p>Effects: CJ Bomb</p> <ul style="list-style-type: none"> <li>• Use of gated and other reverbs</li> <li>• Use of delays</li> <li>• Use of long reverbs</li> </ul> <p><b>AO4</b></p> <p><b>AO4 content will draw comparisons between the two recordings and/or evaluate the differences</b></p> <table border="1"> <thead> <tr> <th>Comparison</th> <th>Evaluation</th> </tr> </thead> <tbody> <tr> <td>In the Prince there is no bass, in the CJ Bomb the bass has been sequenced</td> <td>This fills in the low frequencies of the CJ Bomb mix and leaving the Prince sounding sparse</td> </tr> <tr> <td>In the Prince there is a wider dynamic range than in the CJ Bomb track</td> <td>References to: Loudness wars / sounds good in clubs / differences in eras</td> </tr> <tr> <td>The Prince has relatively sparse production while the CJ Bomb has more parts</td> <td>Having more parts allows bigger dynamic contrast and removal of parts prepares drops</td> </tr> <tr> <td>The CJ Bomb has a longer delay with more feedback that has been added to the vocals in the chorus</td> <td>This gives the chorus more dynamic lift and emphasises the rhythmic pulse</td> </tr> <tr> <td>CJ Bomb track uses filter sweeps across multiple parts while Prince has much less filtering</td> <td>To create dynamic builds leading into new sections</td> </tr> </tbody> </table>	Comparison	Evaluation	In the Prince there is no bass, in the CJ Bomb the bass has been sequenced	This fills in the low frequencies of the CJ Bomb mix and leaving the Prince sounding sparse	In the Prince there is a wider dynamic range than in the CJ Bomb track	References to: Loudness wars / sounds good in clubs / differences in eras	The Prince has relatively sparse production while the CJ Bomb has more parts	Having more parts allows bigger dynamic contrast and removal of parts prepares drops	The CJ Bomb has a longer delay with more feedback that has been added to the vocals in the chorus	This gives the chorus more dynamic lift and emphasises the rhythmic pulse	CJ Bomb track uses filter sweeps across multiple parts while Prince has much less filtering	To create dynamic builds leading into new sections	
Comparison	Evaluation													
In the Prince there is no bass, in the CJ Bomb the bass has been sequenced	This fills in the low frequencies of the CJ Bomb mix and leaving the Prince sounding sparse													
In the Prince there is a wider dynamic range than in the CJ Bomb track	References to: Loudness wars / sounds good in clubs / differences in eras													
The Prince has relatively sparse production while the CJ Bomb has more parts	Having more parts allows bigger dynamic contrast and removal of parts prepares drops													
The CJ Bomb has a longer delay with more feedback that has been added to the vocals in the chorus	This gives the chorus more dynamic lift and emphasises the rhythmic pulse													
CJ Bomb track uses filter sweeps across multiple parts while Prince has much less filtering	To create dynamic builds leading into new sections													

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

**(Total for Question 5 = 16 marks)**