



Pearson
Edexcel

Mark Scheme (Results)

Summer 2019

Pearson Edexcel GCE
Music Technology (9MT0)
Paper 03: Listening and Analysing

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Summer 2019

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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.

Music Technology GCE - Component 3: Listening & analysing
9MT0/03 2019 - Mark scheme – Standardisation

1. Lead Belly: *Where Did You Sleep Last Night?*

Question Number	Answer	Mark
1(a)	<p>Any one of:</p> <ul style="list-style-type: none"> • Improvised/spoken interjections in the vocal part • Mistakes/imperfections • String buzzes/strings mute in guitar line • Loose timing • Vocal and guitar sound like they are recorded in the same acoustic • No (audible) cuts/no edit points/no looping <i>NOT 'players don't stop' or similar</i> • Abrupt fade at end 	1

Question Number	Answer	Mark
1(b)	<p>Any three of:</p> <ul style="list-style-type: none"> • Mono recording • Poor balance • Lack of multi-tracking/overdubbing/single mic/fewer microphones/fewer channels/ambient miking/no close mics • Poor/low signal-to-noise ratio • Surface noise/crackle/hiss/rumble NOT just 'noise' • Distortion/saturation • Limited frequency response • No effects/little EQ • Accept: no compression/wide dynamic range of the performance 	3

Question Number	Answer	Mark
1(c)	<p>One mark is awarded for each method to a maximum of two marks, with a further mark for an explanation of each method.</p> <ul style="list-style-type: none"> • Natural reverb (1), captured at the time of recording / by recording in a reflective room or hall / using ambient /omnidirectional/distant microphones (1) <i>NOT 'in a big room'</i> • Chamber reverb (1), added after recording / where a recording is played back into a concrete room/chamber/stairwell/reverberant space / and re-recorded / using ambient/omnidirectional/distant microphones / using a speaker and microphone (1) • Spring reverb (1) where the spring vibrates to create the reverb / using a pick-up at the opposite end of the spring/with transducers (1) • Accept: plate reverb (1) where the metal plate vibrates / vibrations are captured by a pick-up/transducer / a dampener/tension controls reverb length and tone (1) 	4


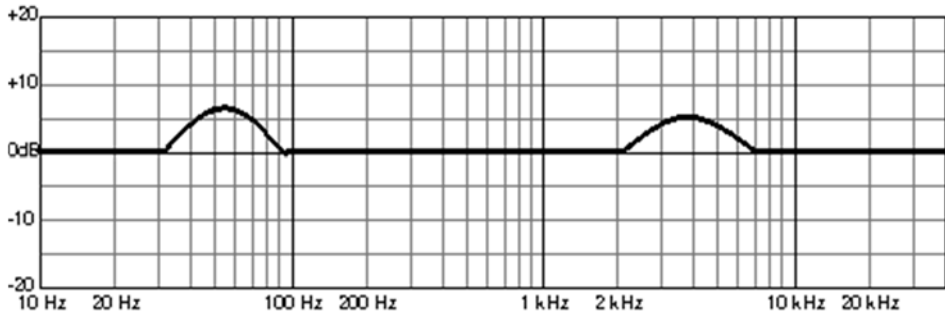
Question Number	Answer	Mark
1(d)	<p>Any two of:</p> <ul style="list-style-type: none"> • Rumble filter/high pass filter/remove low frequencies • Low pass filter/high shelf cut/remove high frequencies • Notch filter/band reject filter • Noise reduction/de-noiser/Dolby • Filter based on a noise 'print' analysed in the start/end gaps • Click/crackle removal filter • Fades at start/end of tracks • Gate/expander • De-esser <p><i>Don't award a general reference to EQ/cutting noise</i></p>	2

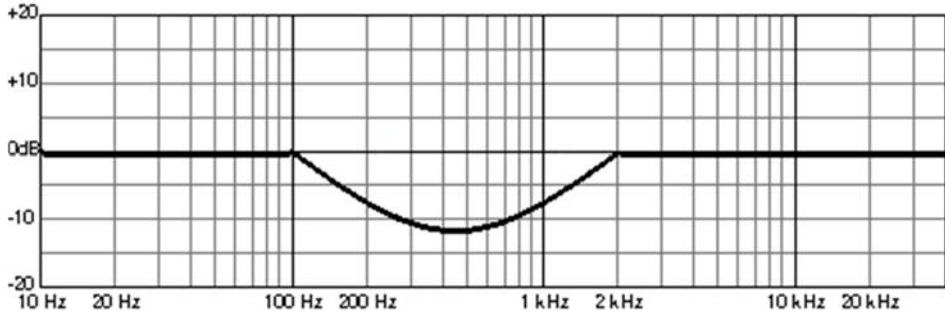
2. Rush: Tom Sawyer (remastered edition)

Question Number	Answer	Mark
2(a)	<p>Any one of:</p> <ul style="list-style-type: none"> • Compression/limiting/Maximiser • Multi-band/linear phase processing • Normalise • Stereo widening / mid-side processing / Direction Mixer / stereo spread • EQ/noise reduction • Reducing length of silences at start/end of tracks • Re-digitisation at a higher sample rate/bit rate/dithering • Input of meta data • Analogue to digital conversion/ADC/digital to analogue conversion/DAC/analogue summing 	1

Question Number	Answer			Mark
2(b)	Location	Aspect	Describe setting(s)	3
	1:33	Portamento	<p>Any one of:</p> <ul style="list-style-type: none"> • Fast/short <i>NOT</i> 'low' • 0.1s - 0.4s (<i>don't apply SONC if fast/short given</i>) • Legato (on) <p>(1)</p>	
	1:57	LFO	<p>Any two of:</p> <ul style="list-style-type: none"> • Vibrato / set to modulate pitch • High depth/high LFO amplitude/high intensity • Depth increases/ turns up modulation wheel/LFO amplitude increases/intensity increases • 1/8 / 1/16 rate • Between 2-8Hz (<i>don't apply SONC if note value is correct</i>) • Sine / triangle wave <p>(2)</p>	

Question Number	Answer	Mark
2(c)	<p>Any two of:</p> <ul style="list-style-type: none"> • Heavy/hard compression/squashing/pumping/narrow dynamic range/limiting • Adds sustain • Soft clipping/distortion results <i>NOT hard clipping</i> • High ratio/5:1 or higher • Low threshold • Fast attack (time) • Fast release (time) • High/increased <u>make-up</u> gain/output level (1) 	2

Question Number	Answer	Mark
2(d)	<p>Bass guitar EQ (2)</p>  <p>Midrange <u>band</u> boost with centre frequency between 200Hz and 2kHz (1) The midrange band boost covers at least two divisions on the graph (1)</p> <p><i>Max 1 if any additional boosts outside of 200Hz-2kHz range or any cuts between 100Hz and 10kHz.</i></p> <p>Kick drum EQ (2)</p>  <p>Low frequency band boost with centre frequency between 40-100Hz (1) OR Low frequency shelving boost with midpoint of slope between 60-150Hz (1)</p> <p>High mid/high frequency band boost with centre frequency between 2-10kHz (1) OR High frequency shelving boost with midpoint of slope between 1-4kHz (1)</p>	4

	<p>Ignore additional filtering below 50Hz and above 10kHz, and mid band scoops between the two boosts drawn. Max 1 if any additional boosts present.</p> <p>OR where only scoop(s) present:</p>  <p>Mid scoop between 100Hz-5kHz (1) Covers at least five divisions on the graph (1)</p> <p>Max 1 if any additional cuts outside the range of 100Hz-5kHz.</p>	
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3. Emeli Sandé – My Kind Of Love

Question Number	Answer	Mark
3(a)	Type <ul style="list-style-type: none"> • Hall (1) Pre-delay <ul style="list-style-type: none"> • Accept any value between 200ms-400ms (1) Reverb time <ul style="list-style-type: none"> • Accept any value between 2.5s-4s (1) 	3

Question Number	Answer	Mark
3(b)	Any four of: <ul style="list-style-type: none"> • Drums • Bass/synth pad • Distortion • Filtering on drums • Electric guitar/synth (delayed, at 1:02) • (Lead) vocal doubled an octave lower/lower octave vocal • Layered/overdubbed backing vocals added in chorus • <u>Wordless/‘ah/oh’</u> backing vocals • Lead vocal reverb reduced/shorter in chorus • More varied stereo field/panning 	4

Question Number	Answer	Mark
3(c)	<ul style="list-style-type: none"> • Low pass/high cut (filter)/LPF/removes high frequencies/parts become duller/less bright (1) • Cut-off starts low/sweeps <u>upwards</u>/filter opens/high frequencies gradually re-introduced/becoming brighter again (1) • Filter applied to backing instruments (and not the vocal) (1) • Resonant (1) • Steep slope (1) 	3

4. Nitin Sawhney (featuring Tina Grace): *Nostalgia*

Question Number	Answer	Mark
4(a)	Any two of: <ul style="list-style-type: none"> • Crackle / vinyl/record surface noise (1) • Found sound/atmosphere samples/field recordings/talking/banging/clicking/train noise (1) • Telephone effect/restriction of frequency response/filtering/loudspeaker distortion (1) 	2

Question Number	Answer	Mark
4(b)	Any four of: <ul style="list-style-type: none"> • Condenser mics • Mics with high sensitivity/low noise/wide dynamic range (only when qualified with condenser) • Mics with a good high frequency response/flat frequency response (only when qualified with condenser) • Mics with fast transient response • Large diaphragms for lower instruments/small diaphragms for higher instruments • Omnidirectional mics for ambience • Ambient mics placed at between 2m-5m/6-18 feet from the string section • Mic(s) placed above/over head • Stereo pairs of microphones/left and right microphones/XY/coincident pair/mid-side/A-B/spaced omni/ORTF • Cardioid, hyper-cardioid or directional for spot/close mics/to reduce ambience slightly/to reduce spill • Close mics placed between 30cm-90cm/12-36 inches • Position null points of polar patterns to minimise spill • Place multiple mics to avoid phase issues/for good mono compatibility • Omnidirectional mics can be used for very close spot mic placement (since they do not exhibit the proximity effect) • Separate spot mics/mics for each section or instrument • Acoustic screens <p>Accept other reasonable responses</p>	4

Question Number	Answer	Mark
4(c)	One mark is awarded for each point to a maximum of two marks, with a further mark for an explanation of each of the two points. <p>Answers might include:</p> <ul style="list-style-type: none"> • Delay/repeated audio (1), to bring out key words in the song/on 'dreams' / with repeats panned / which is tempo-sync'ed (1) • Reverse (reverb) effects (1) at the start of phrases/between phrases / creating a dynamic change / feeling of motion /mirroring the forthcoming vocal phrase / created by reversing a phrase that has reverb already applied (1) • Filtering/EQ/telephone effect (1) causing the vocal to move back in the mix / restricting the frequency response (1) • Reverb decreases/bypasses (1) bringing voice closer/reduces apparent brightness of vocal (1) 	4

5. Elvis Presley: *A Little Less Conversation* (1968) and
 Elvis vs. JXL: *A Little Less Conversation Radio Edit Remix* (2002)

Question Number	Answer		Mark
5	<p>AO3 (5 marks)/AO4 (10 marks) 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 mark • Level 2 AO3 performance: 2 marks • Level 3 AO3 performance: 3 marks • Level 4 AO3 performance: 4 marks • Level 5 AO3 performance: 5 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>		15
AO3		AO4	
Capture, performance & production approach			
Recording/release medium	<p>Original Recorded using tape/analogue technology. Multi-track.</p> <p>Remix Uses DAW/digital technology.</p>	<p>Original Tape saturation. Shorter in duration. The short duration may be related to the limitations of the release medium and requirements of 1960s radio stations.</p> <p>Remix Longer in duration (<i>don't credit if shorter original mark already awarded</i>) Extended to create a longer piece to dance to. Fewer limitations with length for commercial release/radio play.</p> <p>The sonic characteristics of both versions reflect the limitations of 1960s recording technology.</p>	
Capture/style	<p>Original Live/acoustic instruments. All recorded in a single, live session. Drums use limited mics.</p> <p>Remix Tracks all added in post-production.</p>	<p>Original Uses fewer tracks/instruments. Retro, soul/rock 'n' roll sound. Variable balance/ambient sound.</p> <p>Remix Increased number of tracks/instruments (<i>don't credit if fewer tracks original mark already awarded</i>) Contemporary production techniques commonly found in dance music.</p>	

Rhythm/sync	<p>Original No use of /ability to quantise.</p> <p>Remix Quantise. Time stretch apparent.</p>	<p>Original A human/loose feel is established. Less rigid than the remix.</p> <p>Remix A more mechanical result. Can be beat-matched with other songs in a DJ set.</p>
Sequencing & sampling		
Overview	<p>Original No sequencing or sampling.</p> <p>Remix Uses sequencing (<i>Don't credit twice</i>) Truncating and looping samples. Reversing, e.g. cymbal. Modifying balance, pan effects using sequencing.</p>	<p>Original Live instruments playing continuous takes. Expressive performance created by live musicians playing parts. Fewer contrasting sections/layers.</p> <p>Remix Uses sampled stems/individual parts of tracks from the original. Small sections from the original vocal are chopped up/looped. Chopped/looped vocals offer a repetitive, rhythmic hook during instrumentals. Develops a number of different layers and timbres using sequencing, sampling and sample manipulation to create an exciting dance sound. More variation in instrumentation – things dropping in and out. More regular changes in mood and texture.</p>
Looping	<p>Original No looping.</p> <p>Remix Uses looping (<i>don't credit twice</i>)</p>	<p>Remix A two bar-loop from the original is repeated to form an introduction. Stuttering. The loop point is really obvious/jumpy. The use of 'stuttering' and repetitive loops in the remix provides an infectious beat to dance to. Original performance isn't exactly in time and making a loop to a regular tempo reveals this. Lo-fi looping effect.</p>
Pitch/time	<p>Remix Pitch-shifting.</p>	<p>Remix The vocal from the original is time-stretched. Vocal at a lower pitch. These sections are looped in the remix instrumental sections. Time stretching gives a processed quality which sounds contemporary/synthetic.</p>

	Arrangement	<p>Remix Features an instrumental section with repeating 1-bar loops from a guitar and resonant synth. Extra drum beats/fills/drum machine. Sub bass/synths added. Siren/LFO synth added.</p>	<p>Remix Sub bass riff is based on a section of the original bass line. Structural characteristics of dance music. Instrumental sections enhance a groove and extend the otherwise short structure. Increases perceived loudness due to additional bass frequencies.</p>
	Mixing & processing		
	Pan	<p>Original Uses LCR (left-centre-right)/very hard panning. Remix Uses panning across the entire stereo field.</p>	<p>LCR panning gives a clear separation of instruments. Sounds unusual/disjunct to our ears. Retro panning/typical of era. Compare to the contemporary norm of 'graduated' panning across the entire stereo field.</p>
	Reverb	<p>Original Appears to use reverb from natural sources/ambient reverb. Remix Natural reverb apparent on some of the samples. Also uses digital/convolution reverb.</p>	<p>Original Room and/or chamber. Most apparent on drums and lead vocal. Ambient drum miking. Gives a natural sense of acoustic space and blend between the instruments. Remix Retains some of the real acoustic spaces captured in the original Vocals have more reverb.</p>
	Delay	<p>Original No obvious delay effects. Remix Vocal has delay (<i>don't credit twice</i>)</p>	<p>Original Could be considered unusual as rock 'n' roll sometimes has slapback/tape delay added. Remix Modulated delay/phase/flange on vocal. Filtered delay. Retro delay/tape/analogue delay Filtering sets delay back in the mix. Effective when layering new beats and the re-programmed bass line over the top.</p>
	Filtering/effects	<p>Remix Remix uses filter sweep and 'spacey' motion effects. Resonant filter on synth riff/squelchy synth. Distortion on synth riff. Ring modulator on synth.</p>	<p>Remix Stems/samples from the original are often filtered in the remix. The wider use of effects and synthesis techniques creates motion/spatial changes within timbres, often giving a sense of build or interesting variation within the stereo field. Commonly used to link sections. Forceful/gritty sounds.</p>

	EQ	<p>Original Appears to use little EQ.</p> <p>Remix Individual tracks are equalised.</p>	<p>Original Fewer extremes of EQ/restriction of frequency responses. More natural/transparent.</p> <p>Remix EQ used to differentiate/blend tracks in a busy mix. Lots of low/high frequencies compared to original. Loudness curve – supposed to sound exciting. Thinning out of low/mids on parts sampled from the original. Sub bass frequencies make it suitable for playback in a club or commercial radio.</p>	
	Dynamics	<p>Original Little/no compression. Only mix compression.</p> <p>Remix Individual tracks are compressed. The mix has heavy master compression/limiting.</p>	<p>Original Very few tracks have dynamics processing. Mostly a wide dynamic range of individual tracks and master. Parts jump out of the mix, e.g. lead vocal. Lower perceived master level.</p> <p>Remix Compression used to differentiate/blend tracks in a busy mix. Compression to help blend multiple voices/tracks. The heavy use of mix compression make it suitable for playback in a club or commercial radio, where a consistently high and even output level is required. Very narrow dynamic range/pumping. Loudness wars.</p>	

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).

6. Tears For Fears: *Shout*

Question Number	Answer	Mark										
6	<p>AO3 (5 marks)/AO4 (15 marks)</p> <p>Marking instructions</p> <p>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 mark • Level 2 AO3 performance: 2 marks • Level 3 AO3 performance: 3 marks • Level 4 AO3 performance: 4 marks • Level 5 AO3 performance: 5 marks <p>Indicative content guidance</p> <p>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> <table border="1" data-bbox="389 846 1422 1727"> <thead> <tr> <th data-bbox="389 846 719 887">AO3 - song specific</th> <th data-bbox="719 846 1422 887">AO4 - song specific</th> </tr> </thead> <tbody> <tr> <td data-bbox="389 887 719 1081">Drums sequenced/drum machine. Parts quantised. MIDI. CV.</td> <td data-bbox="719 887 1422 1081">Sequencer is triggering a sampler/drum machine. Sequencer plays back almost all the parts. Tighter/mechanical/robotic. Identical velocity.</td> </tr> <tr> <td data-bbox="389 1081 719 1308">Layered percussion lines. Copy & paste/duplication. Looping.</td> <td data-bbox="719 1081 1422 1308">Strong, layered percussion reinforces the narrative of the song. Copy/paste has been used to create similar drum fills for each chorus / the same pattern has been retriggered. The copy/pasted fills help to provide landmarks and 'punctuate' the choruses.</td> </tr> <tr> <td data-bbox="389 1308 719 1632">Synth bass line. Velocity. Note lengths editing. Step editor/piano roll/event list/list edit/arrange window/pattern editor.</td> <td data-bbox="719 1308 1422 1632">The synth bass line has note lengths and velocities edited. Choppy/short notes. 16ths. Bass guitar and synth bass together gives interesting timbral contrast. The rhythmic repetition of the bass notes provides an arpeggiator-like effect. MIDI editing in the synth bass line used to add interest by varying articulation/accents.</td> </tr> <tr> <td data-bbox="389 1632 719 1727">Synth pads/leads/flute-like sound sequenced.</td> <td data-bbox="719 1632 1422 1727">The alternation/layering of synth pad/chord sounds creates interesting variation in the texture and the stereo field.</td> </tr> </tbody> </table>	AO3 - song specific	AO4 - song specific	Drums sequenced/drum machine. Parts quantised. MIDI. CV.	Sequencer is triggering a sampler/drum machine. Sequencer plays back almost all the parts. Tighter/mechanical/robotic. Identical velocity.	Layered percussion lines. Copy & paste/duplication. Looping.	Strong, layered percussion reinforces the narrative of the song. Copy/paste has been used to create similar drum fills for each chorus / the same pattern has been retriggered. The copy/pasted fills help to provide landmarks and 'punctuate' the choruses.	Synth bass line. Velocity. Note lengths editing. Step editor/piano roll/event list/list edit/arrange window/pattern editor.	The synth bass line has note lengths and velocities edited. Choppy/short notes. 16ths. Bass guitar and synth bass together gives interesting timbral contrast. The rhythmic repetition of the bass notes provides an arpeggiator-like effect. MIDI editing in the synth bass line used to add interest by varying articulation/accents.	Synth pads/leads/flute-like sound sequenced.	The alternation/layering of synth pad/chord sounds creates interesting variation in the texture and the stereo field.	20
AO3 - song specific	AO4 - song specific											
Drums sequenced/drum machine. Parts quantised. MIDI. CV.	Sequencer is triggering a sampler/drum machine. Sequencer plays back almost all the parts. Tighter/mechanical/robotic. Identical velocity.											
Layered percussion lines. Copy & paste/duplication. Looping.	Strong, layered percussion reinforces the narrative of the song. Copy/paste has been used to create similar drum fills for each chorus / the same pattern has been retriggered. The copy/pasted fills help to provide landmarks and 'punctuate' the choruses.											
Synth bass line. Velocity. Note lengths editing. Step editor/piano roll/event list/list edit/arrange window/pattern editor.	The synth bass line has note lengths and velocities edited. Choppy/short notes. 16ths. Bass guitar and synth bass together gives interesting timbral contrast. The rhythmic repetition of the bass notes provides an arpeggiator-like effect. MIDI editing in the synth bass line used to add interest by varying articulation/accents.											
Synth pads/leads/flute-like sound sequenced.	The alternation/layering of synth pad/chord sounds creates interesting variation in the texture and the stereo field.											

AO4 – impact of the technology

- Sequencing technology made it possible for one person to develop multiple instrumental parts for a song.
- Hardware sequencers/MPC etc/drum machines with sequencers e.g. 808 etc.
- Rhythm editing.
- Features such as tempo/step entry/pencil tool.
- Creation of complex lines that couldn't easily be played live/allowed those without instrumental skills to make music/eliminating human error.
- Rise of the bedroom/home studio.
- Emphasis taken away from using live/acoustic instruments/song composed 'on the fly'.
- Acoustic drums were replaced by drum machine parts.
- Quantised parts became more common.
- More emphasis on synthesisers providing chords/solo rather than guitar.
- MIDI meant synthesisers, drum machines etc could be easily interconnected and used together in songs, with the sequencer controlling them all.
- MIDI events e.g. notes, controllers, pitch bend.
- Non-destructive, faster editing was possible.
- Graphical user interfaces/software sequencers/Logic, Cubase etc/home computers with MIDI, e.g. Atari, Amiga.
- As few live/acoustic instruments were recorded, home studios could use 4- and 8-track tape machines synchronised to the sequencer.
- Sequencing technology encouraged the composition of music in 'blocks' or loops.
- Users often retained the default values for tempo and time signature (e.g. 120 bpm and 4/4).
- Creation of dance music genres.
- Considerable advancements in computer processing power and memory in the late 1990s.
- The digital audio workstation (DAW) was born (must have some reference to chronology/modern methods).
- This technology allowed for all sequencing, sampling, recording and effects processing to be handled natively on the computer.
- Audio editing in sequencer.
- Contemporary music production predominantly uses DAW sequencing technology for production process.
- More recent rhythm and pitch processing have made it possible to easily correct pitch and rhythm errors in audio recordings of and apply quantise to them.
- This has led to the production of songs with 'perfect' pitch and rhythm.
- Many consider to be lacking a human feel/groove.

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
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).