

Mark Scheme (Results)

June 2011

GCE Music Technology (6MT02)
Paper 01 Listening and Analysing

Edexcel is one of the leading examining and awarding bodies in the UK and throughout the world. We provide a wide range of qualifications including academic, vocational, occupational and specific programmes for employers.

Through a network of UK and overseas offices, Edexcel's centres receive the support they need to help them deliver their education and training programmes to learners.

For further information, please call our GCE line on 0844 576 0025, our GCSE team on 0844 576 0027, or visit our website at www.edexcel.com.

If you have any subject specific questions about the content of this Examiners' Report that require the help of a subject specialist, you may find our **Ask The Expert** email service helpful.

Ask The Expert can be accessed online at the following link:
<http://www.edexcel.com/Aboutus/contact-us/>

June 2011

Publications Code US028506

All the material in this publication is copyright

© Edexcel Ltd 2011

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.

Section A**Yes : Roundabout**

Question Number	Question	Mark
1(a)	Which word below best describes the style of this music? Put a cross in the correct box.	1
	Acceptable Answers	
	D Progressive Rock	

Question Number	Question	Mark
1(b)	What technique is used to produce the bell-like tone of the first acoustic guitar chord?	1
	Acceptable Answers	
	harmonics (or description of the technique)	

Question Number	Question	Mark
1(c)	In this recording, which was made in 1972, the opening piano chord was reversed. Explain how this was achieved.	2
	Acceptable Answers	
	Recorded onto tape (1) which was initially reversed (1) The appropriate track selected (1) and returned to its original orientation (1) (credit any appropriate description)	

Question Number	Question	Mark
1(d)	What is the approximate tempo of the first verse of this track (0'59") expressed as beats per minute?	1
	Acceptable Answers	
	135 bpm (allow +/- 10 bpm)	

Question Number	Question	Mark
1(e)	What rhythm best represents the bass guitar line when it enters at 44"? Put a cross in the correct box.	1
	Acceptable Answers	
	Rhythm B	

Question Number	Question	Mark
1(f)	This recording has been remastered. Identify three ways in which this may have altered the sound of the track.	3
	Acceptable Answers <ul style="list-style-type: none"> • Altered frequency range • Clarity • Reduced hiss • Louder (referring to overall volume, not individual tracks in the mix) • Compressed • Enhanced stereo image • Appropriate description of overall sound eg more brittle, less warm, less analogue, clean etc. (max 3)	

Question Number	Question	Mark
1(g)	Name one keyboard instrument used in this recording other than piano.	1
	Acceptable Answers	
	Organ Moog/synthesiser	

Kate Bush: *Hounds Of Love*

Question Number	Question	Mark
2(a)	In which decade was this track recorded? Put a cross in the correct box.	1
	Acceptable Answers	
	B 80's	

Question Number	Question	Mark
2(b)	The drummer uses a limited kit. Name one part of a regular kit which is conspicuously missing?	1
	Acceptable Answers	
	Hi-hat / Cymbal / Snare	

Question Number	Question	Mark
2(c)	Which characteristic type of reverb has been used on the drums? Put a cross in the correct box.	1
	Acceptable Answers	
	A Gated	

Question Number	Question	Mark
2(d)	Fill in the three missing pitches from the backing vocal line at 0'17" (marked by an asterisk)	3
	Acceptable Answers	

Q. No.	Question	Mark							
2(e)	The Cello features heavily in the texture of this recording. Look at the picture below and describe the choice of mic, the distance and the intended result of this setup.	4							
	Acceptable Answers								
	<table border="1"> <thead> <tr> <th></th> <th>Description</th> <th>Results</th> </tr> </thead> <tbody> <tr> <td>Choice of mic.</td> <td>Large diaphragm (1) Condenser / capacitor (1) (max 1)</td> <td>Flat frequency response (1) Good for HF/LF capture (1) Captures wide frequency range accurately (1) Less self noise (1) More sensitive (1) Accurate transient response (1) Sound source has low SPL (1) (max 1)</td> </tr> <tr> <td>Distance</td> <td>10 – 20 inches (25 – 50 cm) (1) (max 1)</td> <td>Captures sound of bow on strings/performance noise (1) Focused sound capture(1) Little reverb/ambience (1) (max 1)</td> </tr> </tbody> </table>			Description	Results	Choice of mic.	Large diaphragm (1) Condenser / capacitor (1) (max 1)	Flat frequency response (1) Good for HF/LF capture (1) Captures wide frequency range accurately (1) Less self noise (1) More sensitive (1) Accurate transient response (1) Sound source has low SPL (1) (max 1)	Distance
	Description	Results							
Choice of mic.	Large diaphragm (1) Condenser / capacitor (1) (max 1)	Flat frequency response (1) Good for HF/LF capture (1) Captures wide frequency range accurately (1) Less self noise (1) More sensitive (1) Accurate transient response (1) Sound source has low SPL (1) (max 1)							
Distance	10 – 20 inches (25 – 50 cm) (1) (max 1)	Captures sound of bow on strings/performance noise (1) Focused sound capture(1) Little reverb/ambience (1) (max 1)							

David Bowie : *Space Oddity*

Question Number	Question	Mark
3(a)	What technique is used by the electric guitarist in the intro (e.g. at 0'26")? Put a cross in the correct box.	1
	Acceptable Answers	
	B Harmonics	

Question Number	Question	Mark
3(b)	What is the interval between the two vocal parts in the first verse from 0'37" to 0'50"? Put a cross in the correct box.	1
	Acceptable Answers	
	C Octave	

Question Number	Question	Mark
3(c)	Name the volume modulation effect used on the guitar at 1'12"?	1
	Acceptable Answers	
	Tremolo	

Question Number	Question	Mark
3(d)	This track features the use of a 1960s keyboard instrument to play string parts. What is the name of that instrument?	1
	Acceptable Answers	
	Mellotron	

Question Number	Question	Mark
3(e)	Two orchestral instruments are added to the texture in the middle eight from 2'13". What are they?	2
	Acceptable Answers	
	Flute Violin	

Question Number	Question	Mark
3(f)	There is a change in the ambience of the vocals throughout the repetition of the words "Can you hear me, Major Tom?" from 3'35" to 3'45". Describe that change.	1
	Acceptable Answers	
	Amount of / depth of reverb is increased (added)	

Question Number	Question	Mark				
3(g)	This track was recorded in 1969. Outline three musical and/or technological features that support this statement.	3				
	Acceptable Answers					
	<table border="1"> <tr> <td>Musical Feature</td> <td> <ul style="list-style-type: none"> • Hippy, psychedelic vibe • Shifting time signatures • Extended form, more than verse/chorus structure • Instrumental interludes • 'Arty' quasi-orchestral feel / experimental • Loose drum feel • Rhythmically loose / vague </td> </tr> <tr> <td>Technological Feature</td> <td> <ul style="list-style-type: none"> • Use of Mellotron • Use of Stylophone (<u>primitive / analogue</u> synth sounds) • Extreme panning • Exaggerated use of FX </td> </tr> </table>		Musical Feature	<ul style="list-style-type: none"> • Hippy, psychedelic vibe • Shifting time signatures • Extended form, more than verse/chorus structure • Instrumental interludes • 'Arty' quasi-orchestral feel / experimental • Loose drum feel • Rhythmically loose / vague 	Technological Feature	<ul style="list-style-type: none"> • Use of Mellotron • Use of Stylophone (<u>primitive / analogue</u> synth sounds) • Extreme panning • Exaggerated use of FX
	Musical Feature		<ul style="list-style-type: none"> • Hippy, psychedelic vibe • Shifting time signatures • Extended form, more than verse/chorus structure • Instrumental interludes • 'Arty' quasi-orchestral feel / experimental • Loose drum feel • Rhythmically loose / vague 			
Technological Feature	<ul style="list-style-type: none"> • Use of Mellotron • Use of Stylophone (<u>primitive / analogue</u> synth sounds) • Extreme panning • Exaggerated use of FX 					

The Killers : *Human*

Question Number	Question	Mark
4(a)	Is this song in a major or a minor key?	1
	Acceptable Answers	
	Major	

Question Number	Question	Mark																		
4(b)	Complete the table below to describe the production and arrangement at the given points in the song. Give one reference to instrumentation and one reference to the use of technology in each box.	6																		
	The sections are shown in the table below, and an example has been given for you in the first section.																			
	Acceptable Answers																			
	<table border="1"> <thead> <tr> <th>Time</th> <th>Instrument</th> <th>Use of Technology</th> </tr> </thead> <tbody> <tr> <td>0'00" to 0'07"</td> <td>(Muted) <u>guitar</u> (1)</td> <td>Looped sample</td> </tr> <tr> <td>0'07" to 0'21"</td> <td>String pad</td> <td>Filter has a <u>low</u> cut-off frequency. (1)</td> </tr> <tr> <td>0'21" to 0'35"</td> <td>String pad</td> <td>Filter cut-off frequency <u>rises</u>. (1)</td> </tr> <tr> <td>0'28" to 1'02"</td> <td><u>Bass / Kick drum</u> added (1)</td> <td>Panned <u>centrally</u>.(1)</td> </tr> <tr> <td>1'03"</td> <td><u>Snare drum</u> (1)</td> <td>Long, dense reverb effect.</td> </tr> </tbody> </table>		Time	Instrument	Use of Technology	0'00" to 0'07"	(Muted) <u>guitar</u> (1)	Looped sample	0'07" to 0'21"	String pad	Filter has a <u>low</u> cut-off frequency. (1)	0'21" to 0'35"	String pad	Filter cut-off frequency <u>rises</u> . (1)	0'28" to 1'02"	<u>Bass / Kick drum</u> added (1)	Panned <u>centrally</u> .(1)	1'03"	<u>Snare drum</u> (1)	Long, dense reverb effect.
	Time		Instrument	Use of Technology																
	0'00" to 0'07"		(Muted) <u>guitar</u> (1)	Looped sample																
	0'07" to 0'21"		String pad	Filter has a <u>low</u> cut-off frequency. (1)																
0'21" to 0'35"	String pad	Filter cut-off frequency <u>rises</u> . (1)																		
0'28" to 1'02"	<u>Bass / Kick drum</u> added (1)	Panned <u>centrally</u> .(1)																		
1'03"	<u>Snare drum</u> (1)	Long, dense reverb effect.																		

Question Number	Question	Mark
4(c)	Which word best describes the scale used on the words "And I'm on my knees looking for the answer" (0'49")? Put a cross in the correct box.	1
	Acceptable Answers	
	C Pentatonic	

Question Number	Question	Mark
4(d)	Identify the dynamic processing applied to the whole mix and describe how this affects the music.	2
	Acceptable Answers	
	<ul style="list-style-type: none"> • (heavy, high ratio) compression / limiting • Pumping • High perceived volume • Sounds punchy • Narrow dynamic range • Evens out volumes of the whole mix 	

Total for Section A: 40 Marks

Section B

Special Focus Style: Soul

Wilson Pickett : *I'm A Midnight Mover*

Question Number	Question	Mark
5(a)	Describe three features of Soul music that are present in this recording.	3
	Acceptable Answers	
	Soulful/expressive/powerful/virtuosic vocals (1) Aggressively delivered vocals/vocal screams (1) Vocal slides (1) Gospel style vocals (1) Use of horn section (<u>not</u> brass) (1) Syncopation (1) Rhythmic stabs (1) Driving rhythm/strong rhythm section (1) Fairly static harmony in verse (1) Prominent bass riff (1) Blue notes/scale (1) Rhythmic/muted guitar playing (1) Call & response (1) Improvisation (1)	

Question Number	Question	Mark	
5(b)	Identify one technical challenge to be considered when recording this kind of vocal performance and give two possible solutions.	3	
	Acceptable Answers		
	Technical challenge		Solution
	Wide dynamic range (1)		leave adequate headroom / turn down gain (1) compression (1) / limiting
Plosives (1)	Pop shield (1) mic distance(1) positioning relative to performers' mouth (1) singing over top of mic (1)		
Sound of room (1)	Damping (1) microphone distance (1) use a booth (1) use a cardioid mic (1)		

Question Number	Question	Mark	
5(c)	Identify two production techniques you might use when mixing multiple guitar tracks and explain why you would use them.	4	
	Acceptable Answers		
	Production technique		Explanation
	Panning (1)		clarity of individual parts / separate parts with similar frequencies (1)
	EQ (1)		differentiate / highlight different parts (1)
Use of FX (reverb, delay, chorus etc) / plug-ins	add depth / differing sound qualities		
dynamic processing (1)	even out volumes / sit better in mix / punchier sound (1)		
Level setting (1)	differentiate / highlight different parts (1)		

Question Number	Question	Mark				
5(d)	Fill in the grid below to indicate the placement in the stereo field of the instruments listed. Bass guitar Drum kit Horn section Lead vocal	4				
	Acceptable Answers					
	<table border="1"> <thead> <tr> <th>Left</th> <th>Centre</th> <th>Right</th> </tr> </thead> <tbody> <tr> <td>Bass guitar Horn section</td> <td>Lead vocal</td> <td>Drum kit</td> </tr> </tbody> </table>		Left	Centre	Right	Bass guitar Horn section
Left	Centre	Right				
Bass guitar Horn section	Lead vocal	Drum kit				

Question Number	Question	Mark
5(e)	What is the difference in the rhythm of the bass guitar between the verse (0'08" to 0'33") and the pre-chorus (0'33" to 0'41").	1
	Acceptable Answers	
	Verse is syncopated/offbeat / pre-chorus is on the beat (simpler)	

Q. No.	Question	Mark		
5(f)	<p data-bbox="256 304 1257 405">Outline the development of soul music from the 60s to the present day. Support your answer with reference to important artists and styles, explaining their significance.</p> <p data-bbox="256 412 555 445">Acceptable Answers</p> <table data-bbox="256 483 1273 763"> <tr> <td data-bbox="256 517 863 763"> <p data-bbox="304 517 751 763">Appropriate artists: James Brown (Early) Ray Charles Booker T & the MGs Otis Redding Diana Ross / The Supremes Jackson Five / (early) Michael Jackson</p> </td> <td data-bbox="863 517 1273 763"> <p data-bbox="879 517 1241 763">Styles/labels/producers: Stax/Volt Atlantic Cameo Parkway Verve Phil Spector Motown</p> </td> </tr> </table> <p data-bbox="256 770 576 1010"> Jackson Smokey Robinson Marvin Gaye Stevie Wonder Wilson Pickett Dusty Springfield Aretha Franklin </p> <p data-bbox="256 1055 1246 1832"> Combination of elements of Gospel, R'n'B (not Blues) Use of vocal improvisation and call and response Work of Ray Charles was a precursor of the soul sound White people's growing acceptance of black music helped to make soul popular Its association with the civil rights movement helped it to move from purely love songs to incorporate more socially aware lyrical content Southern soul was raw and gritty, often featuring horn sections and highly syncopated grooves Soul singers began to develop distinctive / virtuosic vocal styles Motown developed in Detroit and provided a smoother, more pop-orientated sound with glossy production and big arrangements / more highly produced sound in 1970's whilst Stax, in Memphis, had a grittier, more stripped-back approach Soul developed into Funk at the end of the 1960's Northern Soul prominent in the 1970's UK (Midlands) Songs chosen for their danceability In-house teams and collectives of songwriters and musicians </p> <p data-bbox="256 1872 1134 1939">Award max 4 marks for development and max 2 marks for reference to appropriate artists and styles.</p>	<p data-bbox="304 517 751 763">Appropriate artists: James Brown (Early) Ray Charles Booker T & the MGs Otis Redding Diana Ross / The Supremes Jackson Five / (early) Michael Jackson</p>	<p data-bbox="879 517 1241 763">Styles/labels/producers: Stax/Volt Atlantic Cameo Parkway Verve Phil Spector Motown</p>	5
<p data-bbox="304 517 751 763">Appropriate artists: James Brown (Early) Ray Charles Booker T & the MGs Otis Redding Diana Ross / The Supremes Jackson Five / (early) Michael Jackson</p>	<p data-bbox="879 517 1241 763">Styles/labels/producers: Stax/Volt Atlantic Cameo Parkway Verve Phil Spector Motown</p>			

Special Focus Style: Indie Rock
Idlewild : *When I Argue I See Shapes*

Question Number	Question	Mark
6(a)	The Smiths were a spearheading Indie band in the 80's. Describe three stylistic similarities between this track and the work of The Smiths.	3
	Acceptable Answers	
	Guitar based (1) Jangly guitar sound (1) contrasted with distorted guitar (1) repetitive picked riffs (1) limited melodic range (1) similar lyrical content (mood) (1) loose tuning and rhythm of vocal performance (1) half spoken vocal (1) whiney vocal tone (1) simple, chord-based guitar solos (1) punk influences (1)	

Question Number	Question	Mark
6(b)	Describe the harmonic function of the repeated pitch in the guitar track during the first verse.	1
	Acceptable Answers	
	(Tonic) Pedal	

Question Number	Question	Mark
6(c)	The chorus is made up of four two-bar phrases. How many different chords are in the first three phrases and how many in the fourth ?	2
	Acceptable Answers	
	First three phrases – 5 chords Last phrase – 4 chords	

Question Number	Question	Mark
6(d)	The vocals in this recording are overdubbed and sometimes double-tracked. Complete the phrases below to explain the difference between these two terms and give a timing reference for each term with regard to the vocal tracks.	4
	Acceptable Answers	
	<p>(i) Overdubbed means: recorded sound added to previously recorded material.</p> <p>(ii) any times between:</p> <ul style="list-style-type: none"> • 0'21" – 3'07" • 3'20" – 4'23" <p>(+/- 2 seconds)</p> <p>(iii) Double-tracked means: Two performances of the same part, recorded on separate tracks for simultaneous playback.</p> <p>(iv) An example occurs at :</p> <ul style="list-style-type: none"> • 0'48" to 1'02" • 1'16" to 1'57" • 2'25" to 3'08" • 3'55" to 4'23" <p>(+/- 2 seconds)</p> <p>(max 1 mark each part)</p>	

Question Number	Question	Mark
6(e)	Describe the interplay between the vocal parts from 3'13" to 3'40".	2
	Acceptable Answers	
	<p>Counterpoint / polyphony (1)</p> <p>Cross-phrasing / overlapping (1)</p> <p>Phrasing / rhythmic displacement (1)</p> <p>two different melodies / rhythms (1)</p> <p>sung using different phrase lengths (1)</p> <p>The two phrases are different lengths (1)</p> <p>The word 'shapes' is echoed in the BV's (1)</p> <p>Appropriate reference to opposite panning (1)</p>	

Question Number	Question	Mark
6(f)	This track has quite a 'live' feel to it despite being a studio recording. How has this been achieved?	2
	Acceptable Answers	
	Minimal overdubs except in the vocal tracks Limited obvious use of post-production FX / processing Immediate sound (especially kit) Loose timing between vocals Drum clicks No obvious fade at end Less reliance on individual drum mics Prominent use of overhead or room mics Use of short reverbs Prominent vocal Simple arrangement that is easily reproduced live	

Question Number	Question	Mark
6(g)	Outline the musical styles of two of the following artists and their place in Indie Rock, referring to specific tracks where appropriate to illustrate your answer. Tick two boxes to indicate your choices.	6
	Acceptable Answers	
	<p>Pixies:</p> <ul style="list-style-type: none"> Extreme and abrupt dynamic changes Combination of male and female vocals Simple/thin arrangements and Minimal production Not technically accomplished musicians More popular and influential in the UK and Europe than in their native US Punk-influenced Bossanova was a breakthrough album in terms of commercial success <p>Award marks for specific track (up to 1 mark)</p> <p>Suede:</p> <ul style="list-style-type: none"> Rich, layered guitar sound Hints of Glam mixed with British Indie style of bands like The Smiths Vocals influenced by Bowie Critically and commercially successful 	

	<p>Eventually moved away from guitar-based music to more synth-orientated work</p> <p>Award marks for specific track (up to 1 mark)</p> <p>The Stone Roses:</p> <p>Combination of 60's guitar pop Psychedelic influences with 80's dance groove Laid back vocal delivery Embracing acid house vibes Manchester sound/Madchester Inspired band such as Happy Mondays Successful, won several NME awards</p> <p>Award marks for specific track (up to 1 mark)</p>	
--	--	--

Total for Section B: 40 Marks
Total for Paper: 80 Marks

Further copies of this publication are available from
Edexcel Publications, Adamsway, Mansfield, Notts, NG18 4FN

Telephone 01623 467467

Fax 01623 450481

Email publication.orders@edexcel.com

Order Code US028506 June 2011

For more information on Edexcel qualifications, please visit
www.edexcel.com/quals

Pearson Education Limited. Registered company number 872828
with its registered office at Edinburgh Gate, Harlow, Essex CM20 2JE

Ofqual




Llywodraeth Cynulliad Cymru
Welsh Assembly Government

