

Mark Scheme (Results)

Summer 2012

GCE Music Technology (6MT02)
Paper 01

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Section A

1. Gloria Estefan: Get On Your Feet

Question Number	Question	Mark
1(a)	This recording is a fusion of pop and world music. Which term best describes the world music style?	1
	Acceptable Answers	
	C Latin American	

Question Number	Question	Mark
1(b)	Identify three 1980's production techniques that are heard in this recording.	3
	Acceptable Answers	
	<p style="text-align: center;">Any three of:</p> <ul style="list-style-type: none"> • bright, clean guitar sound • guitar is <u>very</u> ' heavily compressed • light chorus on guitar • timed / panned delay on vocal • electronic drums (esp. toms) / 'power' kit / Simmonds • sequenced feel to much of the keyboards and drums • synth bass • FM / DX timbres • Heavy use of synths • long reverb time • high reverb level • bright / digital reverb • low frequencies not very loud 	

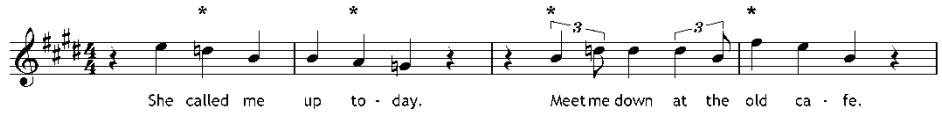
Question Number	Question	Mark
1(c)	Fill in the boxes below to identify the chords between 1'27" and 1.'35".	2
	Acceptable Answers	
	<i>clear is now</i> - C or C/D	
	<i>emotion</i> - G	

Question Number	Question	Mark
1(d)	The intro and verse are in the key of D major. What is the key of the chorus (1'43")?	1
	Acceptable Answers	
	E / E maj / e maj / E major / e major Reject: e	

Question Number	Question	Mark
1(e)	Describe the delay on the lead vocal on the word 'weather', starting at 2'08".	3
	Acceptable Answers	
	<p>Any three of:</p> <ul style="list-style-type: none"> • 3 / 4 / multiple repeats • tempo / timed delay • repeats not evenly spaced / timed • multitap • any description of <u>moving</u> panning • may have been achieved using a sampler • any valid reference to constriction of EQ • delay quieter than original signal 	

2. Belle and Sebastian: Step Into My Office, Baby

Question Number	Question	Mark
2(a)	What performance technique does the guitarist use at 0'21"?	1
	Acceptable Answers	
	Uses a whammy bar / tremolo arm / vibrato	

Question Number	Question	Mark
2(b)	Fill in the four missing pitches from the opening vocal line (each marked by an asterisk).	4
	Acceptable Answers	
	 <p style="text-align: center;">She called me up to - day. Meet me down at the old ca - fe.</p>	

Question Number	Question	Mark
2(c)	What production technique enables the listener to differentiate between the two guitars in the verse starting at 0'24"?	1
	Acceptable Answers	
	Stereo separation / panned opposite / panning	

Question Number	Question	Mark																
2(d)	A flute is used in this recording. Complete the table below, describing how to close mic a flute to capture its full frequency range with minimal room ambience, avoiding key noise.	4																
	Acceptable Answers																	
	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 70%;"></th> <th style="width: 30%;"></th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">Type of mic</td> <td></td> </tr> <tr> <td>condenser / capacitor / electret / ribbon (1)</td> <td></td> </tr> <tr> <td style="text-align: center;">Polar pattern</td> <td></td> </tr> <tr> <td>cardioid / uni-directional / super-cardioid / hyper-cardioid (1)</td> <td></td> </tr> <tr> <td style="text-align: center;">Placement</td> <td></td> </tr> <tr> <td> <ul style="list-style-type: none"> 6 - 20 inches / 15 - 51cm away from centre of flute / above the flute pointing <i>towards</i> sound (embouchure) hole / lip plate / head joint / mouth mic must be out of the airflow NB 'hole' is not enough </td> <td></td> </tr> <tr> <td>(2)</td> <td></td> </tr> </tbody> </table>			Type of mic		condenser / capacitor / electret / ribbon (1)		Polar pattern		cardioid / uni-directional / super-cardioid / hyper-cardioid (1)		Placement		<ul style="list-style-type: none"> 6 - 20 inches / 15 - 51cm away from centre of flute / above the flute pointing <i>towards</i> sound (embouchure) hole / lip plate / head joint / mouth mic must be out of the airflow NB 'hole' is not enough 		(2)		
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3. Sandie Shaw: (There's) Always Something There To Remind Me

Question Number	Question	Mark
3(a)	In which decade was this track recorded?	1
	Acceptable Answers	
	B 1960s	

Question Number	Question	Mark										
3(b)	Fill in the grid below to indicate the placement in the stereo field of the instruments listed.	4										
	Acceptable Answers											
	<table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th style="width: 33%;">Left</th> <th style="width: 33%;">Centre</th> <th style="width: 33%;">Right</th> </tr> </thead> <tbody> <tr> <td></td> <td style="text-align: center;">Lead Vocal</td> <td></td> </tr> <tr> <td style="text-align: center;">Trombone</td> <td></td> <td style="text-align: center;">Acoustic Guitar</td> </tr> <tr> <td></td> <td style="text-align: center;">Electric Guitar</td> <td></td> </tr> </tbody> </table>		Left	Centre	Right		Lead Vocal		Trombone		Acoustic Guitar	
Left	Centre	Right										
	Lead Vocal											
Trombone		Acoustic Guitar										
	Electric Guitar											

Question Number	Question	Mark
3(c)	What is the approximate tempo of this recording expressed as beats per minute?	1
	Acceptable Answers	
	C 175 bpm	

Question Number	Question	Mark		
3(d)	The verse has three phrases. In the table below, identify how many bars there are in each phrase.	3		
	Acceptable Answers			
	Phrase		Location	Number of bars
1	begins on the last note of the trombone (0'17")	5 (1)		
2	begins on the last note of the guitar (0'24"0)	5 (1)		
3	begins on the word 'I' (0'31")	3 (1)		

Question Number	Question	Mark	
3(e)	Tremolo is used on the electric guitar. Describe how this effect changes the sound.	1	
	Acceptable Answers		
	Modulation of volume / accept any valid description.		

4. Ella Fitzgerald: Got A Pebble In My Shoe

Question Number	Question	Mark
4(a)	This track is an example of big band jazz. Identify three musical features, apart from instrumentation, that support this statement.	3
	Acceptable Answers	
	<p style="text-align: center;">Any three of:</p> <ul style="list-style-type: none"> • comping / stride piano • close harmonies • extended / altered chords (or example) • use of solo sections • improvisation • (brass / sax / horn) stabs / interjections • swung rhythm • syncopated rhythms • use of brushes on kit • use of mutes on brass • blue notes • call and response 	

Question Number	Question	Mark
4(b)(i)	There is an instrumental lead line between 0'13" and 0'21".	1
	(i) What instruments play this lead line?	
	Acceptable Answers	
	Saxophones	

Question Number	Question	Mark
4(b)(ii)	(ii) What is the pitch range of this lead line?	1
	Acceptable Answers	
	A Minor seventh	

Question Number	Question	Mark
4(c)	This recording was probably captured using a single microphone. The drum kit is often masked in the mix. How could a 1930s engineer have prevented this?	1
	Acceptable Answers	
	Any appropriate reference to changing the distance between the microphone and the instruments / telling the players to play louder or quieter.	

Question Number	Question	Mark
4(d)	What effect would you use to give this mono recording a natural stereo feel using a digital audio workstation?	1
	Acceptable Answers	
	(Stereo) reverb / direction mixer / stereo spreader (enhancer) / very short stereo delay / middle and side (MS) processing	

Question Number	Question	Mark						
4(e)	There are some problems with the recording of the lead vocal. Complete the table below, describing how these problems could be avoided using modern recording equipment.	3						
	Acceptable Answers							
	<table border="1"> <tr> <td style="background-color: #cccccc;">Distortion</td> <td>Compression / limiting / turning down gain / more headroom in modern equipment (1)</td> </tr> <tr> <td style="background-color: #cccccc;">Limited frequency response</td> <td>Condenser mics with / flat frequency response / good HF response / EQ / higher fidelity recording media (1)</td> </tr> <tr> <td style="background-color: #cccccc;">Balance</td> <td>Multitrack recording / recording to separate tracks / use of spot mics / compression (1)</td> </tr> </table>		Distortion	Compression / limiting / turning down gain / more headroom in modern equipment (1)	Limited frequency response	Condenser mics with / flat frequency response / good HF response / EQ / higher fidelity recording media (1)	Balance	Multitrack recording / recording to separate tracks / use of spot mics / compression (1)
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Balance	Multitrack recording / recording to separate tracks / use of spot mics / compression (1)							

Total for Section A: 40 Marks

Section B
 Special Focus Style: Punk and New Wave
 Siouxsie and the Banshees: Carcass

Question Number	Question	Mark
5(a)	In what year was this track recorded?	1
	Acceptable Answers	
	1975 -82	

Question Number	Question	Mark
5(b)	The vocal performance is typical of early punk. Identify two aspects of the performance that support this statement.	2
	Acceptable Answers	
	<p>Any two of:</p> <ul style="list-style-type: none"> • almost shouted / aggressive delivery • indeterminate pitches / out of tune • glissandos / slides / note bends • semi-spoken at times • simple, repetitive melody • restricted pitch range • London/Cockney/Estuary accent 	

Question Number	Question	Mark
5(c)	Choosing from the words below, complete the sentence to describe what the bass guitar is playing in the introduction.	2
	<p>fifth passing pedal root suspended third</p>	
	<p>Acceptable Answers</p> <p>In the first four bars the bass plays a pedal note, and in the next four bars it plays the root note of the chord.</p>	

Question Number	Question	Mark
5(d)	What element of a standard drum kit is absent from this recording?	1
	Acceptable Answers	
	Snare (drum) / ride cymbal	

Question Number	Question	Mark
5(e)	What production technique has been used to fatten the vocal in the chorus (1'00"-1'20")?	1
	Acceptable Answers	
	Double-tracking	

Question Number	Question	Mark
5(f)	What is the high pitched noise at 2'31" and how would this be achieved?	3
	Acceptable Answers	
	Name of noise	
	feedback (1)	
	How this has been achieved	
	<ul style="list-style-type: none"> • holding the guitar close to the amp / to face the speaker • with the gain high • return of output signal to input • causing a loop <p style="text-align: right;">(2)</p>	

Question Number	Question	Mark
5(g)	<p data-bbox="331 264 1342 331">Distortion has been used on the guitars on this recording. Identify two ways in which this could have been achieved.</p> <p data-bbox="331 331 1342 405">Acceptable Answers</p> <p data-bbox="528 443 683 477">Any two of:</p> <ul data-bbox="480 517 1002 768" style="list-style-type: none"><li data-bbox="480 517 1002 551">• Distortion / overdrive / fuzz pedals<li data-bbox="480 591 699 624">• Boost pedals<li data-bbox="480 665 839 698">• Boost the pre-amp gain<li data-bbox="480 739 995 772">• Boost the output level significantly	2

Question Number	Question	Mark
5(h)	<p data-bbox="331 264 1326 360">Outline the musical styles of two of the following bands and their place in Punk and New Wave. Support your answer with reference to a specific track.</p> <p data-bbox="331 367 603 398">Acceptable Answers</p> <p data-bbox="379 450 488 481">Blondie</p> <ul data-bbox="379 495 1326 1305" style="list-style-type: none"> • East Coast / New York • Formed in 1974 • Eclectic approach incorporating Pop / disco / reggae along with new wave • Not simply guitar based but used keyboards • Heavy influence of electronic music • Deadpan vocal delivery • More melodic / focus on musicianship • Initially more successful outside the US (particularly Australia and the UK) • One of the first US New Wave bands to make the UK top ten • <i>Parallel Lines</i> was their breakthrough album in the US and brought them firmly into the mainstream • Appealing to a wider demographic than the purely Punk/New Wave market • Commercially successful singles • very radio-friendly • Gradually moved away from their initial New Wave sensibilities • Towards a jazz-inflected style • Losing popularity in the process • Reforming in the late 90's with little change of their original (classic/most popular) style and enjoyed some commercial success • Accept suitable reference to song / album <p data-bbox="1294 1308 1326 1339">(4)</p> <p data-bbox="379 1346 517 1377">The Clash</p> <ul data-bbox="379 1384 1326 1977" style="list-style-type: none"> • London-Based • Formed in 1976 • Originally a "pub rock" band (the 101'ers) • Part of the original wave of UK Punk • Shouted vocals / distorted guitars • Adopted working class demeanour / accents • Eclectic approach incorporating Reggae / ska / dub / rockabilly along with punk • Politicised lyrics • <i>London Calling</i> was their breakthrough album • Refused to perform on Top of The Pops • Release of <i>Sandinista</i> saw their UK market shrink and the US market grow and contained • Use of dub and rap alongside their punk roots • Became more commercial / radio-friendly • Demonstrating more polished production values than previous work • Accept suitable reference to song / album <p data-bbox="1294 1980 1326 2011">(4)</p>	8

	<p>The Sex Pistols</p> <ul style="list-style-type: none"> • London-based • Formed in 1975 • Initiated the UK Punk movement • Set the basic style for what was to follow • Arguably the most iconic UK punk band both musically and visually • A raw sound / shouted vocals / distorted guitar • Simple harmonies and melodies • Fast tempos and • Lyrics responded to the socio-economic problems of 70's UK / anti-establishment • Seen as controversial and banned from radio airplay in the UK • Manufactured by Malcolm McLaren as a hoax • Ironic cover versions with inverted / deliberately offensive lyrics • The band purported to be musically non-technical • Nihilistic music, lyrics and anarchic /angry behaviour • Failed to break the US • Tremendously influential despite releasing only one album • Accept suitable reference to song / album <p style="text-align: right;">(4)</p> <ul style="list-style-type: none"> • NB Allow up to 3 marks for style / contribution and an additional mark for naming of track(s) 	
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Special Focus Style: Club Dance
Goldie: Crystal Clear

Question Number	Question	Mark
6(a)(i)	Brass instruments feature heavily in this track. Answer the three questions below. (i) What brass instrument can be heard in the intro? Acceptable Answers Trumpet / flugel / cornet	1

Question Number	Question	Mark
6(a)(ii)	What performance technique does the brass instrument use between 1' 51" and 2'13"? Acceptable Answers A Mute	1

Question Number	Question	Mark
6(a)(iii)	What rhythm best represents the brass instrument's opening phrase in the introduction (0'06" to 0'11")?	1
	Acceptable Answers	
<p>B</p>		

Question Number	Question	Mark
6(b)	This track uses a combination of styles. Which two words below best reflect that combination? Choosing one from column A and one from column B, put a cross in the two correct boxes.	2
	Acceptable Answers	
<p>Drum 'n' Bass</p> <p>Jazz</p>		

Question Number	Question	Mark	
6(c)	Electronic music uses sampling extensively. Fill in the missing words in the sentences below.	5	
	Acceptable Answers		
	A higher sample rate results in a higher / wider / larger frequency range.		(1)
	A common sample rate used for high fidelity sampling is 44.1 / 48 / 88.2 / 96 / 192 kHz		(1)
The higher the bit depth, the higher the signal to noise ratio.	(2)		
A common bit depth used for high fidelity sampling is 16 / 20 / 24 / 32	(1)		

Question Number	Question	Mark
6(d)	Describe two ways in which the drum samples in this recording have been used or manipulated to add interest.	2
	Acceptable Answers	
	<p>Any two of:</p> <ul style="list-style-type: none"> • Cut into smaller sections / beat slicing • Copy and paste drum samples to produce different rhythms (looping) • Same basic sample but with missing instruments (eg kick) for textural variety • Sounds reversed (snare) • To leave gaps • Reference to relevant FX processing (max 1 mark) <p>(2)</p>	

Question Number	Question	Mark
6(e)	Describe the filtering on the bass guitar part.	2
	Acceptable Answers	
	<ul style="list-style-type: none"> • Wah • LPF • Band pass • Changing cut-off (centre) frequency 	

Question Number	Question	Mark
6(f)	<p data-bbox="331 300 1287 367">Club Dance includes a wide variety of sub-genres. Describe the stylistic elements of two of the styles listed below.</p> <p data-bbox="331 367 603 405">Acceptable Answers</p> <p data-bbox="331 443 432 472">Trance</p> <ul data-bbox="339 479 1283 869" style="list-style-type: none"> • Tempo generally between 120 and 150 bpm • Four-on-the-floor • Melodic, repeated saw-tooth synths • Pads • Often has a break where rhythm track disappears • Leaving washes of 'atmospherics' • Lots of timed delay • Often instrumental • Form builds up and breaks down often with • use of (resonant) filtering / sounds change over time • Generally has more dynamic range than most forms of dance music <p data-bbox="1241 869 1283 898">(3)</p> <p data-bbox="331 943 421 972">House</p> <ul data-bbox="339 978 1078 1330" style="list-style-type: none"> • Tempo generally between 120 and 140 bpm • Prominent four-on-the-floor kick drum • Derived from Disco with • Kick fills and • Extended breakdowns • Off-beat hi-hats • Sparse texture • Electronically generated bass lines (SH-101, TB-303) • Use of vocal samples • Staccato, syncopated synth or piano stabs <p data-bbox="1241 1364 1283 1393">(3)</p> <p data-bbox="331 1402 453 1431">Dubstep</p> <ul data-bbox="339 1438 1283 1928" style="list-style-type: none"> • Tempo generally between 135 and 145 bpm • Syncopated (shuffle / triplet) rhythms • Dub delay / prominent use of delay • Rhythm lines often follow a half step pattern (seeming to be at half the tempo of the track) • Prominent / heavy bass • The bassline usually functioning to double the tempo of the rhythm track / half-time rhythm track • Harsh sounding synth interjections • Often use tribal loops • Loops are often longer than in other dance forms • Features 'wobble' bass • 'Bass drops' inherited from D 'n' B • A largely instrumental style of dance music 	6

	<p>The following apply to all Club Dance Styles</p> <ul style="list-style-type: none">• Use of samples (if qualified)• Use of synths (if qualified)• Repetitive / use of loops (if qualified)• Use of drum machine <p>Award up to three marks for TWO styles.</p>	<p>(3)</p>
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Total for Section B: 40 Marks
Total for Paper: 80 Marks

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