Answers

Component 3

Practice Paper 1

SECTION A

Points in italic are for A Level only

Question 1

Ultravox: 'Vienna' (1981)

***a.** Acceptable answers:

Electric/synthesised/white noise (1)

High reverb send amount (1)

Unusual panning/unconventional/R in intro and L in verse (1)

LFO/modulation used as sound decays (1)

[max. 3 marks]

***b.** Acceptable answers:

Analogue synthesisers often go out of tune in the heat (1)

Lack of presets/have to set up sounds manually (1)

Can't sync LFOs/have to listen to get them in time (1)

Can only have one synth unless you buy more/lack of multiple instances (1)

CV-gate more difficult to synchronise with other equipment (1)

[max. 3 marks]

***c.** Accept any value between 1 and 3 seconds (1)

***d.** i. Use DAW to reverse sample (1)

ii. Record cymbal onto tape (1)

Reverse tape/play tape backwards (1)

Question 2

The Beatles: 'In My Life' (1965)

***a.** Acceptable answers:

Extreme/polarised panning/drums and vocals opposite (1)

Flange (allow phaser) (1)

Hiss/noise (1)

Plate reverb (1)

Constricted EQ on the vocal (1)

Clean/slightly overdriven/rhythm guitar (1)

Distant/muffled kick (1)

Jangly guitar sound (1)

[max. 2 marks]

b. *i. Acceptable answers:

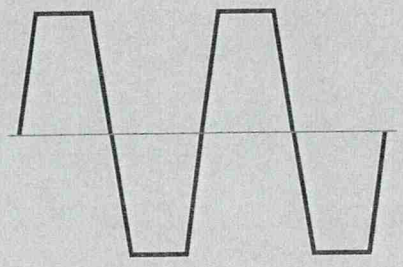
Overdriving the amp (1)

Increasing the gain on the desk (1)

(Not slashing the cone)

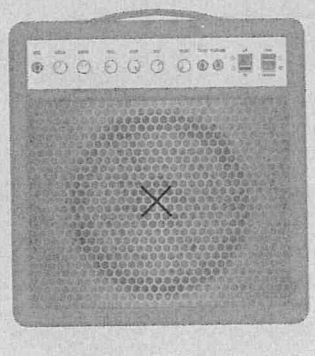
[max. 2 marks]

ii.



(Allow suitable soft clipped waveform) (1)

c. (1)



d. Acceptable answers:

Copy and paste the audio to another track (1)

Apply a short (1) 10–60ms (1) delay/time difference (1) to only one channel with no feedback (1)

Delay time shouldn't be too short otherwise phasing/flanging/comb filtering would occur (1)

Allow:

Apply slight (1) 5–15 cents (1) de-tuning/pitch shift (1) to one channel (1)

Pan (slightly) left and right (1)

[max. 4 marks]

Question 3

Billie Holiday: 'On The Sunny Side Of The Street' (1944)

***a.** Spot mic on vocal, combine with other mics on a mixer and record to tape (1)

Move vocalist closer to single mic (1)

***b.** Acceptable answers:

See table on page 47: one mark is awarded for each point (max. 3) with a further mark for an explanation of the point (max. 3).

Sensitive, giving effective capture of quiet sounds	Vocal is generally quietly delivered/quiet parts of vocal part
Flat/accurate/wide frequency response	To capture the full range of frequencies in the vocal part
Generally able to capture a brighter signal than dynamic microphones/ better high frequency response	Female voice has lots of high frequencies/ appropriate capture of high frequencies to give a breathy quality to the vocal
Good signal-to-noise ratio/high output volume	Low noise/reduce background noise/hiss
Wide dynamic response	Vocal has some louder bits so can capture full range of the part

***c.**

Piano sounds muddy	■ Separate mic for piano ■ Record the piano on a separate track ■ Use two microphones on the piano for a stereo recording (1)
Drums are not well balanced	■ Mic up each part separately ■ Multitrack individual drums (1)

Question 4

Galantis: 'Runaway (U&I)' (2014)

***a.** Acceptable answers:

Use of doubletracking/overdubbing multiple vocal layers (1)

Octaves (1)

Copy and paste of vocal syllables/repetition/samples (1)

Starts of words have reversed syllables (e.g. 0'49") (1)

Ambience effects (e.g. increased wet signal/send/reverb level at 1'03") (1)

Pitch shift across vocal gives artefacts (e.g. 0'51") (1)

Extreme pitch shifts of single words/phrases (e.g. pitch bend at 1'05") (1)

[max. 4 marks]

***b.** Acceptable answers:

Master EQ/match to commercial tracks/match other album tracks (1)

Control stereo width/mid side (1)

Radio edit/remove lengthy sections of drums at start/long solos (1)

Top and tail to leave short silence at the beginning and end without cutting reverb tail (1)

EQ/increase upper-mids and LFs to increase perceived loudness (1)

(Aural) exciter to increase brightness (1)

[max. 3 marks]

c. Acceptable answers:

Sidechain (1) compression/ducking – kick controlling ducking of bass/synths (1)

Mix compression/limiting (1) used to give high/loud overall master level (1)

Vocals/piano use heavy (1) compression/limiting (do not double credit 'limiting' unless reference to vox and mix) (1)

[max. 3 marks]

SECTION B

Remember that in the exam you only have about 20 minutes for your essay for question 5. The mark schemes given in this book are more extensive, to cover as many points as possible and help you with your revision. At A Level make sure you allow enough time to answer both questions in this section.

*Question 5

Avicii: 'Levels' (2011)

Avicii: 'Levels' (Skrillex remix) (2012)

Total for AS Level: 16 marks – AO3 8 marks, AO4 8 marks
Total for A Level: 15 marks – 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:

AS Level:

- 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.

A Level:

- 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.

Content shown below is for AS and A Level. Content specific to A Level only is shown in italics.

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:

AO3	AO4
Capture	
Avicii – sequenced on a DAW Skrillex – sequenced on a DAW	Despite both being sequenced on a DAW, the two tracks are in different styles: the first evokes a commercial style of electronic dance music, the second is a dubstep remix

The vocal in the Avicii could be a sample or it could be sung live The Avicii vocal part is sampled in the remix	New vocal recordings/samples are used in the Skrillex remix to lead into the drop. In the original, the sample for 'oh' is looped to create a sustained note underneath the vocal when it comes in (1'42"). The middle sustained part of the sample has been looped to create a sustained note where you can't hear a very obvious join
The vocal in the remix is pitch shifted (0'13")	Pitch shift means that the sampled vocal fits the key of the remix/vice versa. Extreme pitch shift can introduce artefacts to the sound. These are sometimes used creatively in electronic dance music (e.g. Galantis)
The instrumental parts in the remix are synthesised/electronic	The remix adds many new parts to create a new synthesised/electronic accompaniment with a completely different musical structure to the Avicii track
Sampling	
The remix uses the vocal part of the original as a sample source	The original vocal could be a sample or recorded live. If a sample, it has been cleaned up to better fit with the modern, synthesised parts. As the majority of other parts are electronic/sequenced, compression would be needed to ensure that the dynamic range of the vocal matches that of the electronic parts
The synthesiser riff also makes an appearance in the remix (could be replayed/interpolated)	The remix uses a small fragment of the synthesiser riff from the original at the start. The rhythm is changed and reverb is applied to integrate it into the mix. As a producer you could use a sample of the original to do this, or you could replay the synthesiser riff on a similar sounding bright synthesiser setting
Avicii is based on loops to build up textures and establish different sections	The Avicii track uses reverse cymbals as section transition effects, whereas the remix tends to use rhythmic build ups and progressive diminution
Synthesis	
The original uses an arpeggiator and bright synthesiser leads sound in octaves to create the hook	The synthesiser part is originally treated with a high pass filter, but low frequencies are gradually added back in as the cut off frequency is lowered. This creates a sense of build which is a common stylistic feature of electronic dance music, but a low pass filter is normally used rather than a high pass filter
The remix uses synthesis to create a 'wub'/'wobble' bass, with other synthesiser parts to create more interest	The Skrillex remix is in a dubstep style, and makes use of the characteristic 'wub'/'wobble' bass sound. The volume and filter cut off frequency of the synthesiser bass line have been manipulated, creating a repeated note/tremolo effect, which in this song is used to create a complex rhythm in the drops
Many of the synthesiser notes have a short/clipped envelope in the remix	*Many of the synthesiser notes here use envelopes with little or no release so they cut very suddenly/use gating to 'clip' synthesiser notes. This is a stylistic feature of dubstep, and is also true of the percussion sounds, and helps them to cut through the mix*

The remix makes use of pitch bend	*The Skrillex remix adds octave portamentos/pitch bends in the bass parts and synthesiser parts in the drop. Portamentos are also used towards the end of the extract on a high synthesiser part in the original*
Effects	
The original opening uses changing amounts of reverb on the arpeggiated synthesiser line	The synthesiser in the opening of the original changes in ambience over the whole section. It starts with less reverb, but the wet signal and reverb time are increased as the section progresses
Use of delay and reverb; the cymbal sound at the beginning of the original uses timed delay	Use of creative effects processing is stylistic of electronic dance music. There is timed delay at the start of the original, whereas the remix uses a very reverberant lead synth at the start to play the hook
Use of compression as a mix/creative effect	*Sidechain compression is used in the original to give rhythmic drive; this is a common feature of electronic dance music. It is audible on the synthesiser pads before the hook melody enters around 1'04". Use of compression here creates a ducking/pumping effect and gives rhythm for dancing*

AS Level: Levels based assessment grid:

Level	Mark	Descriptor
	0	■ No rewardable material.
Level 1	1–4	■ Demonstrates and applies limited knowledge and understanding of production techniques used, some of which may be inaccurate or irrelevant (A03) ■ Gives limited analysis and deconstruction of production techniques used, making limited comparisons between the two recordings and/or little attemot at chains of reasoning (A04)
Level 2	5–8	■ Demonstrates and applies some knowledge and understanding of production techniques used, which is occasionally relevant but may include some inaccuracies (A03) ■ Gives some analysis and deconstruction of production techniques used, making some comparisons between the two recordings and/or simplistic chains of reasoninq (A04)
Level 3	9–12	■ Demonstrates and applies clear knowledge and understanding of production techniques used, which is mostly relevant and accurate (A03) ■ Gives clear analysis and deconstruction of production techniques used, making clear comparisons between the two recordings and competent chains of reasoninq (A04)
Level 4	13–16	■ Demonstrates and applies detailed knowledge and understanding of production techniques used, which is relevant and accurate throughout (A03) ■ Gives detailed and accurate analysis and deconstruction of production techniques used, making detailed comparisons between the two recordings and loqical chains of reasoninq (A04)

A Level: Levels based assessment grid:

Level	Mark	Descriptor
	0	■ No rewardable material.
Level 1	1–3	■ 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	■ 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	■ 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	■ 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	■ 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)

Question 6 (A Level only)

Jimi Hendrix: 'Purple Haze' (1967)

AO3 (5 marks)/AO4 (15 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.

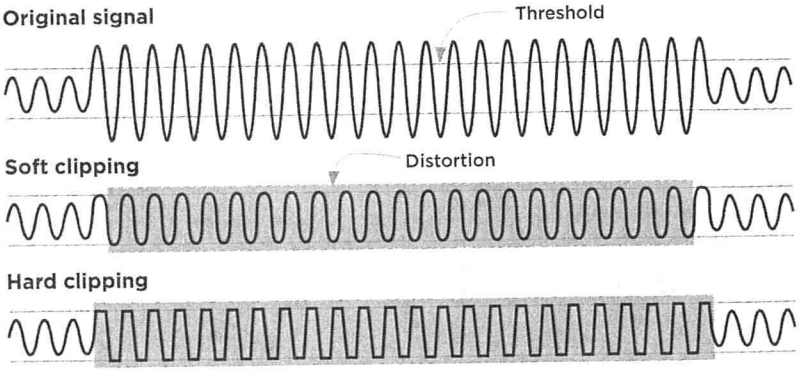
Responses that demonstrate only AO3 without any AO4 should be awarded marks as follows:

- 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.

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:

AO3	AO4
Recorded on multitrack tape – audible hiss	While Hendrix would have recorded onto four-track tape, 1970s technology would allow for more guitar overdubs and 16/24 tracks. Bouncing down would have helped to give more flexibility in recording, but it would have built up hiss as tracks were bounced onto another
Some layering of guitar tracks/overdubs but limited tracks in 1967	16/24 track technology in the 1970s enabled the recording of more layers and avoided having to bounce down/gave more flexibility to mix after recording/bigger guitar sound by doubletracking and panning. Improved signal-to-noise ratio as avoided the need to bounce tracks
Stompboxes used to created distorted effects	Use of fuzz/distortion, stompboxes/Fuzz Face. Use of stompbox gives more flexibility with routing guitar effects. Modern guitar recordings could use similar technology as stompboxes have seen something of a resurgence in recent years, but amp integrated distortion and multi-effects units are also common
Fuzz/heavy distortion used on the guitar parts	In the 1970s distortion became easier to achieve; Hendrix tended to overdrive his amplifier to create distorted effects, whereas (e.g.) Marshall amps in the 1970s had a separate distortion channel
Although solid-state/ transistor technology existed in the late 1960s and 1970s, transistor amps had reliability issues, and use of valve amplification and so soft clipping (for distortion), was common. In the 1970s transistor amps became more common	Valve amps have a 'warmer tone'; many experienced guitarists prefer this to the harsher, hard clipping exhibited by transistor amps that exhibit hard clipping 
Hendrix was a virtuosic guitarist and used many techniques to play the instrument	Hendrix uses a number of tremolo arm effects on the song. At the time, extensive tremolo arm use could lead to detuning of the instrument. Floyd Rose tremolo arm systems and locking nuts helped to remedy this
Hendrix uses an octave pedal in the solo	This could have been created in the 1970s (and 60s with varispeed) using a pedal, or using varispeed tape, where music is recorded with the tape machine slowed down or speeded up. This also would change the length of the solo/timbre (e.g. The Beatles, 'In My Life' piano solo)

Levels based assessment grid:

Level	Mark	Descriptor
	0	■ No rewardable material.
Level 1	1–4	■ 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	■ 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	■ 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	■ 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 5	17–20	■ 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)