2007 VET Music Industry (Tech Prod) GA 2: Aural and written exam

SPECIFIC INFORMATION

For each question, an outline answer (or answers) is provided. In some cases the answer given is not the only answer that could have been awarded marks.

Section A

Question 1

Marks	0	1	Average
%	27	73	0.8
Davarh add	ad		

Reverb added

Question 2

Marks	0	1	2	Average
%	15	55	30	1.2

2a.

Delay echo

2b.

- Any one of:
 - regeneration
 - feedback
 - repeats.

Question 3

Marks	0	1	2	3	4	Average
%	19	12	10	25	34	2.5
2						

3a.

1 kHz

3b.

125 Hz

3c.

8 kHz

3d.

4 kHz

Question 4

Marks	0	1	2	Average
%	84	9	7	0.3

Any one of:

- high shelving boost
- more treble
- high frequencies added.

Question 5

Marks	0	1	2	3	4	Average
%	44	18	24	8	6	1.2

5ai.

The vocal has had compression added.

5aii.

The dynamic range has been reduced.

1



V

5bi.

The drums have been time compressed.

5bii.

The audio plays back more quickly (but the pitch remains the same).

Question 6

Marks	0	1	2	Average
%	15	26	60	1.5

Problem

- popping
- plosives

Solution

- use a pop shield, popper stopper, etc.
- use a HPF, bass roll off, move microphone

Question 7

Marks	0	1	2	3	4	Average
%	11	31	31	22	5	1.8

7a.

A harmony part was added – doubled not double tracked.

7b.

Either of:

- reverb was taken off snare
- gate was added to snare.

7c.

Delay was added to the guitar.

7d.

Band pass filter was added.

Question 8

Marks	0	1	2	Average
%	17	8	75	1.6

Problem

- guitar lead has an intermittent connection
- faulty guitar lead
- faulty guitar socket

Solution

- replace guitar lead
- replace guitar

Question 9

Marks	0	1	Average
%	44	56	0.6
Either of			

Either of:

- crossfade
- fades.

Question 10

Marks	0	1	2	3	Average
%	28	27	32	13	1.3



- Error: click
- Solution: change edit point to zero crossing and adjust edit points such that the tempo is maintained

Section B

Question I						
Marks	0	1	2	3	4	Average
%	1	3	26	30	41	3.1
1a.						

ii.



1b. i.



1c.

- X = time
- Y = amplitude, volume or voltage

Question 2

Marks	0	1	2	3	4	Average
%	22	40	28	9	2	1.3

2a.

10 dB/decibels

2bi.

Threshold of hearing: 0 dB

2bii.

Threshold of pain: 120-140 dB

2c.

8 hours

Question 3

Marks	0	1	2	Average
%	89	1	10	0.2
2.42 /	-1 .		1	

343 m/s or ms⁻¹ or meters per second

Question 4

Marks	0	1	2	3	4	Average
%	22	1	1	4	72	3.1

• A = attack

- D = decay
- S = sustain
- R = release



Question 5

N	Iarks	0	1	2	3	Average
	%	19	18	18	45	1.9

5a. 20–20 kHz

5b. 150 Hz

Question 6

Marks	0	1	2	3	4	Average
%	7	28	31	10	25	2.2

6a.

96 kHz

6bi.

20-22.05 kHz

6bii.

48 kHz

6c.

ii. 1 minute @ 96 kHz, 16 bit

Question 7

Marks	0	1	Average
%	25	75	0.8
Audio CD			

Question 8

Marks	0	1	2	Average
%	54	23	22	0.7
0				

8a. 0:0.114

8b.

Click, pop, etc.

Question 9

warks	U	1	2	3	Average
%	64	11	12	13	0.8

9a.

- Either of:
 - incorrect sample rate
 - the imported file has a sample rate that is lower than the DAW.

9b.

Both of:

- convert the sample rate of the imported file to match the DAW
- change the sample rate of the DAW to match the imported file.

Question 10

Marks	0	1	2	Average
%	62	15	23	0.6

Normalising is a process that involves finding the highest peak (loudest part) of a waveform and then increasing the volume (gain) of the whole waveform until the peak is at its allowable maximum before clipping occurs.



Question 11

Marks	0	1	2	3	4	5	Average
%	4	26	18	22	18	13	2.6

• 1. phase reverse, invert polarity

- 2. high mid frequency select
- 3. high mid cut/boost control
- 4. pan control sends signal between left and right or odd and even buses
- 5. PFL pre fader listen to monitor the channel through headphones or on meter without affecting the mix

Question 12

Marks	0	1	2	Average
%	20	29	51	1.3

- 1. mix control allows the balance between wet/dry signal to be set
- 2. decay controls the time taken for the reverb to decay away (RT₆₀)

Question 13

Marks	0	1	2	3	Average
%	39	8	23	29	1.4

13a.

- Any one of:
 - phase cancellation
 - snare gets softer
 - body of snare sound is decreased.

13b.

- Both of:
 - reverse the phase of one microphone
 - move one microphone further away/closer.

Question 14

Marks	0	1	2	3	Average
%	12	29	33	26	1.7

All of:

- only the PA mix is recorded, not the stage sound
- softer instruments come out loudest
- no crowd noise is recorded.

Question 15

Marks	0	1	2	3	Average
%	5	12	34	50	2.3

Any three of:

- reduce the LF of the acoustic guitar channel, feedback stopper
- reduce the LF of the foldback send
- reduce the level of the guitar
- reverse the phase of the channel.

Question 16

Marks	0	1	2	3	4	Average
%	17	10	19	21	33	2.4
16a.						

Either of:

- 48 v that can be sent down a microphone cable/balanced line to any device that requires it
- the power supply for condenser microphones or active DIs that does not interfere with the audio signal.





16b.

Both of:

•

- condenser microphone
 - active DI.

Question 17

Marks	0	1	2	3	Average
%	23	24	29	24	1.5
18 .		·	·	·	

17ai.

Ohms

17aii.

Resistance or impedance

17b.

4Ω

Question 18

Marks	0	1	2	3	Average
%	24	32	31	13	1.3

18a.

Any two of:

- recording out
- drum (or other instrument, vox, CD, fx, etc.) master
- delay feed
- sidefill/foldback/drumfill.

18b.

Any of one:

- unity gain
- 1:1
- no attenuation no boost.

Question 19

Marks	0	1	2	3	Average
%	43	4	9	44	1.6
			0		

It splits the incoming audio into three frequency bands - lo, mid and hi.

One mark was awarded for identifying the split, and the further three marks for naming each of the frequency bands.

Question 20

Marks	0	1	2	3	4	Average
%	58	17	13	5	8	0.9

It allows the individual cut/boost of frequencies in one third of an octave bands across the 20-20 kHz spectrum.

Question 21

Marks	0	1	2	Average
%	72	3	24	0.5
0.1				

21a.

post (fader) aux

21b. pre (fader) aux



Question 22

Marks	0	1	2	Average
%	8	32	60	1.5

Any two of:

- microphone/volume/gain too loud
- microphone too close to speaker
- (directional) microphone pointing at speaker PA.

Question 23

Marks	0	1	2	3	Average
%	63	22	6	9	0.6

23a.

It is an increased low frequency response/output when the microphone is very close (closer than a few centimetres) to the sound source.

23b.

Cardioid/unidirectional microphones

Question 24

Marks	0	1	2	3	Average
%	22	54	15	9	1.1

24a.

To avoid audible hum loops.

24b.

Both of:

- it might draw too much current/power
- it could create audible buzz.

Question 25

Marks	0	1	2	3	Average
%	21	24	22	32	1.7

25a.

Omni-directional

25b.

Cardioid/unidirectional

25c.

Figure 8/bi-directional