VICTORIAN CURRICULUM AND ASSESSMENT AUTHORITY

2005 VCE VET Music Industry (Tech Prod) GA 2: Aural and written exam

GENERAL COMMENTS

The Music Industry Technical Production examination was made up of two sections. The first section consisted of seven listening questions and was worth 25 marks. The second section consisted of 28 questions and was worth 75 marks.

Overall the results were an improvement on 2004, which was to be expected as this was the second year of the study. As in 2004, the examination was based on underpinning knowledge of the four units of competence in Units 3 and 4.

Students and teachers should also refer to the 2004 Assessment Report.

SPECIFIC INFORMATION

Section A

Students generally needed to listen more closely to what was being played and what was being done to the sound. Students need to understand the settings and parameters of the processors being used and observe the changes in the audio. They should also listen to different frequencies (possibly using signal generators) to learn more about 'difficult' frequencies. Teachers must ensure that students do a lot of listening and have access to effects processors as a matter of priority. All of the above needs to be reinforced regularly and constantly. Some students' answers in this section appeared to be very much guesswork.

Question 1

Marks	0	1	Average
%	48	52	**0.6**

The signal processor being applied was delay.

Question 2

Marks	0	1	2	Average
%	66	23	11	**0.5**

The parameters were set to:

- delay with long feedback
- short delay.

'Parameters' seemed to cause problems for some students.

Question 3

Marks	0	1	2	Average
%	18	63	19	**1.0**

The two signal processors were:

- distortion
- chorus.

Question 4

Marks	0	1	2	3	4	Average
%	9	9	32	16	34	**2.6**

The two editing processes were:

- pitch shift down/boost bottom end
- heavy reverb (or just reverb).

One mark was awarded for each process identified, and one mark for each description. Answers to this question showed that students could benefit from operating and listening to equipment more often.

Question 5

Marks	0	1	2	3	4	5	6	7	8	9	10	Average
%	4	3	12	3	25	5	24	4	13	2	5	**5.0**

The modifications were:

- no backing vocals
- wah wah on guitar
- bass softer
- no snare (taken snare away)
- reverb on voice
- hand claps added.

One mark was awarded for identifying a modification, and one mark for explaining how it was modified in the mixdown.

Question 6

Marks	0	1	2	3	4	Average
%	17	21	18	21	23	**2.1**

6a.
8 kHz

6b.
125 Hz

6c.
1 kHz

6d.
500 Hz

Students may benefit from further work in this area.

Question 7

Marks	0	1	2	Average
%	8	2	90	**1.8**

7a.
sawtooth

7b.
sine

Section B

Students need to have a greater understanding of basic audio terminology. Students who are undertaking their training program in a studio-based environment need training in live audio and vice-versa. Teachers should ensure that students have an in-depth knowledge of mixing consoles in both studio and live applications. Students need to avail themselves of equipment at every possible opportunity to reinforce what is taught in the classroom.

Areas of weakness included understanding of:

- wavelengths
- frequencies
- terminology
- basic audio theory.

Areas to improve on include understanding of:

- mixing and mixing consoles
- pitch
- wave types
- processing (both for function and effect).

Students need to take note of the marks allocated to each question as well as the space available in order to determine the breadth of knowledge required in their response.

Question 1

Marks	0	1	2	Average
%	28	39	32	**1.1**

1a.
400 Hz

1b.
A

Responses indicated that many students need practice in this area.

Question 2

Marks	0	1	2	Average
%	6	57	37	**1.3**

- SPL: sound pressure level
- kHz: kilohertz

Question 3

Marks	0	1	2	3	Average
%	10	18	11	61	**2.2**

- flute: sine
- clarinet: square
- trumpet: sawtooth

Question 4

Marks	0	1	2	3	4	Average
%	34	22	24	7	13	**1.4**

- DeEsser: reduces sibilance and hiss
- Noise Gate: allows sound to pass only at a certain threshold; opens a microphone at a threshold

Students seemed confused by this question and need to operate and listen to equipment more often.

Question 5

Marks	0	1	2	Average
%	30	36	35	**1.1**

- A axis: dB/pressure/amplitude
- B axis: time/seconds

Question 6

Marks	0	1	2	Average
%	35	57	8	**0.7**

- amplitude: volume
- sibilance: having a hissing sound

The use of ‘frequency’ instead of ‘sound’ showed a lack of underpinning knowledge.

Question 7

Marks	0	1	2	3	4	Average
%	5	5	16	21	53	**3.1**

	digital recording	analogue recording
advantage	clean	resampled/dropouts
disadvantage	continuous/warm	dirty

Question 8

Marks	0	1	2	Average
%	34	21	45	**1.1**

8a.
volume/amplitude (low frequency)

8b.
frequency/high frequency

Question 9

Marks	0	1	Average
%	21	79	**0.8**

16 bit

Question 10

Marks	0	1	2	3	4	Average
%	20	5	17	6	51	**2.6**

- advantage: more accurate
- disadvantage: space storage

Question 11

Marks	0	1	2	Average
%	10	27	64	**1.5**

A mark was awarded for any two of the following copyright considerations when re-recording a song:

- if a piece of music has not been released you need permission
- audio manufacture licence
- contact the individual copyright owner
- royalty distribution.

Question 12

Marks	0	1	2	3	4	5	6	Average
%	2	5	8	17	16	21	30	**4.2**

One mark was awarded for each of the following functions of the identified components:

- AUX – auxiliary/send
- PRE – pre-fade aux switch
- PAN – left/right panorama
- CLIP – peak LED
- 1–2, 3–4 – sub groups/assign
- MAIN – main mix/master level assign.

Experience with a mixing console enabled students to answer this question.

Question 13

Marks	0	1	2	Average
%	10	14	76	**1.7**

- reverb
- delay
- amplifier/monitor processor

Any signal processor was acceptable. A mark was awarded for any of the above, or answers that were very similar.

Question 14

Marks	0	1	2	Average
%	48	19	33	**0.9**

14a.
Non-fixed EQ where you can adjust a specific frequency within the mids/notch filter/parametric.

14b.
By using frequency to select pot and cut/boost pot.

Experience with a mixing console was a prerequisite for being able to answer these questions.

Question 15

Marks	0	1	2	Average
%	54	9	37	**0.8**

15a.
Allows only low frequencies to pass.

15b.
To cut highs on a sound; for example, thin vocal, reduce guitar cabinet hiss, or for sending to subs.

Some students confused LOW pass and LOW cut. The question asked for the function of a LOW **pass** filter.

Question 16

Marks	0	1	2	3	Average
%	12	15	31	42	**2.1**

16a.

- 48v DC
- power derived from the desk

16b.

- direct input (DI) box
- condenser microphone

Question 17

Marks	0	1	2	Average
%	18	30	51	**1.3**

- mix: percentage of wet to dry signal
- decay: room size/reflectivity/Rt60

Question 18

Marks	0	1	2	3	4	Average
%	18	13	24	18	27	**2.3**

- compression: reduces dynamic range and increases perceived loudness
- limiting: stops sounds going above a specified level, used often for system protection

One mark was awarded for naming each function, or two marks if the function was described.

Question 19

Marks	0	1	2	Average
%	51	29	20	**0.7**

Signals varying in level from soft to loud influence the setting of input gain.

Question 20

Marks	0	1	Average
%	48	52	**0.6**

85 db for 8 hours

Question 21

Marks	0	1	Average
%	47	53	**0.6**

hi/mid/low speakers (tweeter, woofers, subs, etc.)

Question 22

Marks	0	1	2	3	4	5	Average
%	6	11	12	27	0	44	**3.4**

- microphone
- mixer
- effects unit
- stereo graphic
- poweramp
- speakers

The only variation that was accepted was to have the effects unit before the mixer (for example, Peter Frampton and Ani Di Franco).

Question 23

Marks	0	1	Average
%	31	69	**0.7**

- aux send
- monitor mixer
- mono set up – left/right out or subgroup

Question 24

Marks	0	1	Average
%	46	54	**0.6**

Equalising a room is achieved by balancing overpowering frequencies.

Question 25

Marks	0	1	2	Average
%	20	53	27	**1.1**

Set the right channel (click) to the drummer using aux/sub group/headphone out using solo button. Set the left channel (music) to front of house.

Many students explained how to send the click to the drummer but neglected to explain how to send the music track through to the main mix.

Question 26

Marks	0	1	2	3	4	Average
%	13	8	19	14	46	**2.7**

- dynamic: robust, no battery, moving coil
- condenser: thin plate, battery or power, fragile, extended frequency response

Question 27

Marks	0	1	2	3	Average
%	12	8	18	61	**2.3**

- move away from the microphone

- low cut filter
- reduce low frequency in EQ
- reduce overall system volume

One mark was awarded for each method identified.

Question 28

Marks	0	1	2	3	4	5	6	Average
%	11	3	3	9	17	21	36	**4.3**

Setup and equipment modifications

- use a condenser microphone
- move closer to the microphone

Acoustic modifications

- move near hard/reflective surfaces
- sing louder and more clearly

Mixing procedures

- add high, mid-high EQ
- add bright reverb

There was some confusion between ‘equipment changes’ and ‘acoustic changes’.