2011 Assessment Report

VICTORIAN CURRICULUM AND ASSESSMENT AUTHORITY

2011 VCE VET Music Industry (Tech Prod) GA 2: Aural and written exam

Students did well on the 2011 VCE VET Music Industry (Technical Production) examination, indicating that both students and teachers are becoming more familiar and confident with the subject. Although the results were positive, there are always areas for improvement, especially when it comes to reading the questions clearly and thoroughly. During revision, students should be encouraged to read each question carefully and note how many marks are allocated to the question, as students sometimes wrote much more than required. Audio terminology concepts still require more work, and students need to be doing extra work around operating equipment and becoming familiar with the changes that can be made just by turning a knob or pushing a fader.

Section A

Question 1

Marks	0	1	2	Average
%	54	37	9	**0.6**

1a.
Any one of:

- pitch shift
- frequency shift
- transpose.

1b.
Either of:

- time stretch
- time expansion.

Time compression was not accepted as the audio was slower.

Students who answered these questions with some level of knowledge used both expansion and compression in their answers, showing that they had some understanding of the concepts but still were not fully conversant with them.

Question 2

Marks	0	1	2	3	4	Average
%	4	18	41	24	12	**2.2**

Most students answered part a. reasonably well, but few were able to identify that centre pan was the required answer for part b.

2a.
Any three of:

- bass
- kick
- snare
- vocal.

Drum kit was not accepted.

2b.
Centre pan

Question 3

Marks	0	1	2	3	4	Average
%	14	15	26	22	23	**2.3**

3a.
Both of:

- cough
- the person goes off-mic.

3b.
Any two of:

- edit/delete the cough
- mute the cough
- automate the off-mic volume
- compress the off-mic section.

Most students responded well to this question. Students need to read the questions thoroughly; this question was about post-production but a lot of students suggested re-recording.

Question 4

Marks	0	1	2	3	4	Average
%	82	11	5	0	1	**0.3**

4a.
Aliasing

4b.
The audio was sampled with a frequency less than half the sample rate.

4c.
Quantisation noise

4d.
Either of:

- bit reduction
- low-bit resolution.

Very few students made the connection between the sound they heard and sample rate/bit resolution.

Question 5

Marks	0	1	2	3	Average
%	4	26	44	26	**1.9**

Generally, this question was answered reasonably well; however, many students provided 'compression' as their answer for part c, which was incorrect.

5a.
Either of:

- pitch correction
- auto tune

5b.
Either of:

- delay
- echo.

5c.
Noise gate

Question 6

Marks	0	1	Average
%	41	59	**0.6**

B. data compression

Most students answered this question well.

Question 7

Marks	0	1	2	3	Average
%	14	28	36	22	**1.7**

7a.
Wind noise

7b.
Any two of:

- use a windsock over the mic
- use a hi-pass filter
- move the mic.

As with Question 3, many students tried to use audio jargon for 'wind'. Other students gave one answer and then expressed it in a different way as their second answer; this was not accepted.

Questions 8a. and 8b.

Marks	0	1	2	Average
%	2	27	71	**1.7**

8a.
The vocals have been muted.

8b.
The drums have been muted.

Most students readily identified the changes made and showed good listening skills.

Questions 8c. and 8d.

Marks	0	1	2	Average
%	7	19	74	**1.7**

8c.
Vocal reverb has been added.

8d.
The synth line/lead melody has been muted.

Section B

Question 1

Marks	0	1	2	3	Average
%	4	39	37	20	**1.8**

Most students answered part a. with at least one compressed format. A significant number of students selected 'split stereo left/right' rather than 'stereo interleaved' as their answer to part b.

1a.
Any two of:

- mp3
- mp4
- m4a
- AAC
- Ogg Vorbis
- wmv.

Uncompressed formats were not accepted. Lossless formats (for example, FLAC) were not accepted as they are not generally compatible with streaming audio.

1b.
C. stereo interleaved

Question 2

Marks	0	1	2	Average
%	17	14	69	**1.5**

2a.
880 Hz

2b.
110 Hz

Question 3

Marks	0	1	Average
%	78	22	**0.3**

It reduces in level/turns down/lowers the volume.

Very few students knew what the term 'attenuate' means. This question was either left unanswered or the answer related to frequency response. Students should know the meaning of this term.

Question 4

Marks	0	1	2	3	Average
%	19	21	56	4	**1.5**

4a.
Any of:

- bass
- sub frequencies
- low frequencies
- below ~200Hz.

4b.
Both of:

- use an equaliser to reduce low frequencies
- use a compressor/limiter to control levels/dynamics.

Most students recognised that the bass frequencies were the issue and these could be adjusted in the EQ. Very few thought of compression as a means of controlling the problem.

Question 5

Marks	0	1	Average
%	82	18	**0.2**

Power amplifier

Most students gave 'speakers' as their answer, but few identified the reason why they needed to be turned off first. Very few students identified that avoiding the 'pop' through the speakers was the reason for this. 'Powered speakers' was acceptable.

Question 6

Marks	0	1	2	Average
%	34	52	14	**0.8**

Students needed to state that it results in an uneven mix/uneven spectrum/the bass is not balanced, etc. They also had to understand that the bass will either be too loud or too soft when the mix is played on a system without subs. Simply saying 'bad mix' was not enough to get a mark.

Students provided good answers, but most only received one of the two available marks.

Question 7

Marks	0	1	2	3	4	5	6	Average
%	11	6	24	24	20	10	5	**2.9**

Both of:

- Universal Serial Bus
- Digital Versatile Disc or Digital Video Disc.

Many different names were given for USB and DVD. Most students understood the use of the DVD, but when it came to USB, most thought of the device that plugs into the USB port, not the port itself. Once again, students did not read the question thoroughly and made incorrect assumptions.

Question 8

Marks	0	1	2	3	Average
%	34	30	19	17	**1.2**

Any three of:

- get in position/be on standby/be ready to mix
- ensure the audio equipment is turned on and operational
- play the background/walk-in music
- check talkback/communications
- prepare/standby recording equipment.

Very few students provided a meaningful answer. Students should be thoroughly familiar with presentation as well as operation. Most students suggested procedures that should have been completed before the audience was given access to the venue.

Question 9

Marks	0	1	2	Average
%	41	38	21	**0.8**

Many students did not attempt this question, but those who did recognised that phase cancellation would occur, even if their maths was incorrect in part a.

9a.
6 dB

9b.
Phase cancellation

Question 10

Marks	0	1	2	3	4	Average
%	9	15	27	25	25	**2.4**

Any four of:

- check for earth loops/bonds
- check insulation
- check plugs/connections
- check solder points
- check wear and tear/physical damage
- test +/– polarity
- check for short circuits
- measure current/power/voltage.

Most students scored some marks. Many repeated themselves and were unable to gain full marks.

Question 11

Marks	0	1	2	Average
%	54	24	22	**0.7**

To get two marks, two main points needed to be stated, such as:

- there is a range/difference/low to high, etc.
- it refers to loudness/volume/SPL, etc.

For example, 'The range (or difference) between the quietest and loudest level'.

Half of the cohort identified a low/high range, and then talked about frequency response. Teachers need to assist students to comprehend these concepts.

Question 12

Marks	0	1	Average
%	55	45	**0.5**

She did not copy the audio files (folder) as well as the session file.

Many students recognised that the audio files were not copied.

Question 13

Marks	0	1	2	3	Average
%	2	9	35	54	**2.4**

Any three of:

- no time allowed to change bands over safely
- no time allowed to run a line/sound check between bands
- no time allowed to check if equipment is working
- no time allowed to load out after the last band
- no allowance for bands running over or under time
- no break for patrons and crew.

As with Question 10, most students earned some marks. Many repeated themselves.

Question 14

Marks	0	1	2	3	4	Average
%	1	10	27	43	18	**2.7**

B. mini lapel condenser microphone
C. active Direct Injection (DI) box
E. boundary/PZM microphone
I. large diaphragm condenser microphone

The majority of students recognised the active DI box and the large diaphragm condenser, but many missed the other two.

Question 15

Marks	0	1	2	3	4	Average
%	19	19	25	10	27	**2.1**

15a.

- 44.1k Hz
- 16 Bits

15b.

- 96 dB
- 144 dB

Question 16

Marks	0	1	2	3	Average
%	49	13	20	18	**1.1**

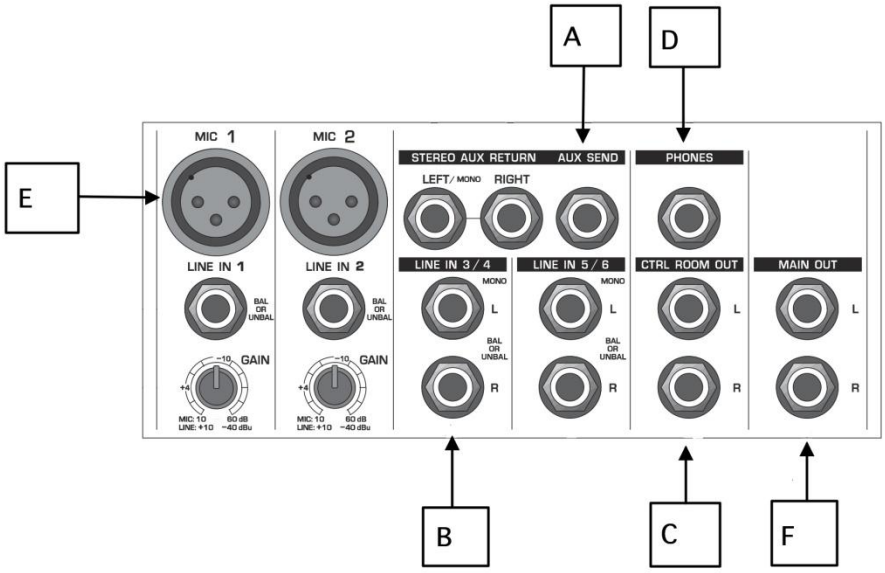
For three marks, three main points needed to be stated, such as:

- set up a microphone in the room (in front of the speakers)
- boost graphic EQ frequencies to (near-) feedback in speakers
- pull down/cut graphic EQ frequencies until feedback goes away.

Students provided a wide variety of responses and it was obvious that many had not trained in this procedure for tuning a room. While it may be a clinical approach, it is still widely used and should be referenced by teachers along with other methods.

Question 17

Marks	0	1	2	3	4	5	6	Average
%	0	0	1	11	23	1	64	**5.2**



Question 18

Marks	0	1	2	3	4	5	Average
%	2	7	15	27	21	28	**3.4**

A. amplifying a kick drum in a live band – 6. large diaphragm dynamic
B. recording a vocalist in a recording studio – 2. large diaphragm condenser
C. amplifying a saxophone for a live band – 5. instrument dynamic
D. recording dialogue on a film location – 4. 'shotgun' long-range condenser
E. amplifying an actor's voice in a theatrical musical – 8. wireless lapel condenser

Most students had little trouble with this question.

Question 19

Marks	0	1	2	3	Average
%	5	34	33	29	**1.9**

19a.
2

19b.
4

19c.
10 or 11 (either was allowed, as some students may have assumed exactly 700 MB per disc, while others may have assumed they wouldn't get the full 700 MB in a 'real-world' burn)

Most students did not know the capacity of DVDs or CDs.

Question 20

Marks	0	1	2	3	Average
%	44	11	25	20	**1.2**

20a.
5 dB

20b.
2 dB

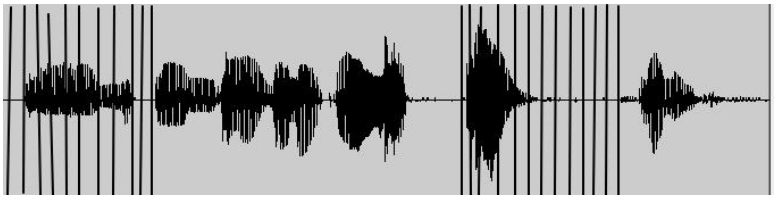
20c.
Limiter/limiting ('brick wall limiting' was also acceptable)

Many students were able to do the maths, but had little idea of the term for the ratio of 100:1.

Question 21

Marks	0	1	2	3	Average
%	10	13	44	33	**2.0**

21a.



22b.
The audible result is like a click or pop.

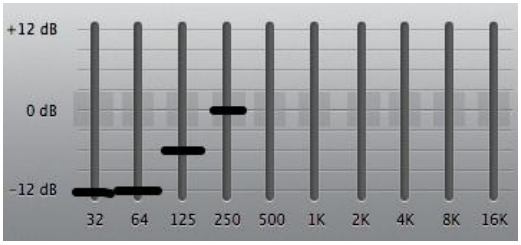
Generally, this question was answered well.

Question 22

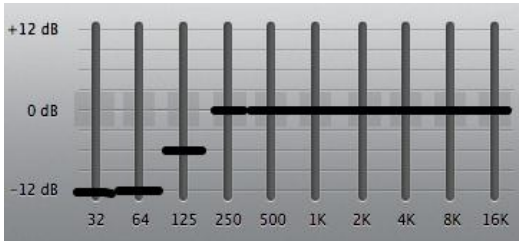
Marks	0	1	2	3	4	5	6	Average
%	44	3	18	3	17	1	14	**2.1**

Most students did well on parts a. and b. For part c., many students got the first part of the graphic right, but not the left-hand side. Students need to read questions more carefully.

22a.

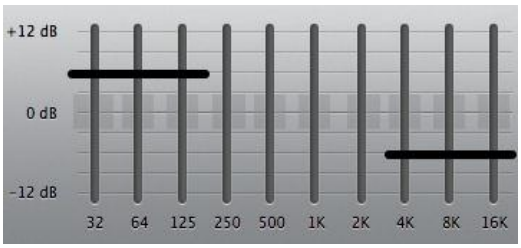


One mark

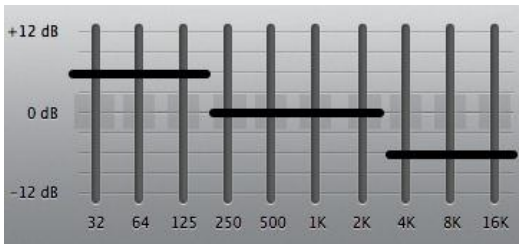


Two marks

22b.

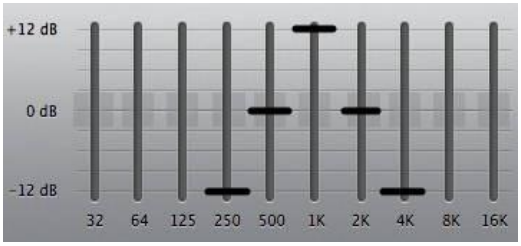


One mark

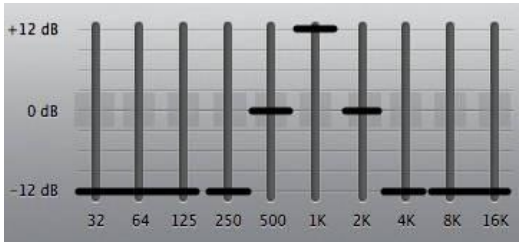


Two marks

22c.



One mark



Two marks

Question 23

Marks	0	1	2	3	4	5	Average
%	1	0	3	13	1	82	**4.6**