VICTORIAN CURRICULUM AND ASSESSMENT AUTHORITY

2012 Music Industry (Technical Production) GA 2: Examination

GENERAL COMMENTS

This was the first year of the revised VCE VET Music Industry (Technical Production) program, and teachers and students seemed to have adapted quickly. However, students seemed to lack confidence with processors; more homework tasks may assist students in this area. Students also seemed to lack understanding of some terminology and underpinning knowledge, often giving more than one answer to some questions. As a result, these students were not awarded any marks, even if one of the answers was correct.

SPECIFIC INFORMATION

Note: Student responses reproduced in this report have not been corrected for grammar, spelling or factual information.

This report provides sample answers or an indication of what the answers may have included. Unless otherwise stated, these are not intended to be exemplary or complete responses.

Section A

Question 1

Marks	0	1	Average
%	50	50	**0.5**

Any of

- earth hum
- buzz
- bad lead
- pick-up.

This question was reasonably well answered, although many students confused buzz/hum with feedback. A number of students gave two answers – in this case, neither answer was accepted.

Question 2

Marks	0	1	Average
%	74	26	**0.3**

Either of

- chorus
- wah.

Students need more exposure to different FX and to be able to manipulate them and name them.

Question 3

Marks	0	1	Average
%	6	94	**1.0**

Either of

- delay
- echo.

Question 4

Marks	0	1	2	3	4	Average
%	28	24	15	14	19	**1.7**

a. 1 kHz
b. 4 kHz
c. 250 Hz
d. 500 Hz

Only a small number of students correctly identified all of the specific frequencies. Students need to be consistently assessed on frequency identification, which is a fundamental part of tuning a room.

Question 5

Marks	0	1	2	3	4	Average
%	4	14	28	31	23	**2.6**

a. lead guitar muted
b. drums muted
c. vocals muted
d. reverb added to the vocals

Most students answered this question well, although it was clear from some responses that some students had misread the question.

Question 6

Marks	0	1	Average
%	72	28	**0.3**

Time expansion/stretch

Students need more exposure to different FX and to be able to manipulate them and name them.

Question 7

Marks	0	1	Average
%	79	21	**0.2**

Pitch shift

Again, students need more exposure to different FX and to be able to manipulate them and name them.

Question 8

Marks	0	1	Average
%	35	65	**0.7**

HPF

Many students did not read the question properly and gave various incorrect names for the filter.

Question 9a–c.

Marks	0	1	2	3	Average
%	10	38	17	34	**1.8**

9a.
Delay

9b.
Delay time

9c.
The delay time has been shortened.

Only a few students could identify the parameters of the delay FX.

Question 10

Marks	0	1	Average
%	27	73	**0.8**

Either of

- reverse
- play backwards.

Question 11

Marks	0	1	Average
%	13	87	**0.9**

Either of

- distortion added
- overdrive added.

Question 12

Marks	0	1	Average
%	96	4	**0.1**

Gated reverb

This question challenged all students, even though it is an effect that is still used quite frequently.

Question 13

Marks	0	1	2	3	4	Average
%	8	21	27	25	19	**2.3**

Problem 1: popping/plosives
Solution: HPF, equalisation to cut pops

Problem 2: voice moves off-mic
Solution: automation or compression

Most students identified the problems quite easily but did not offer a 'post production' solution. Students are reminded that they must read questions thoroughly.

Question 14

Marks	0	1	Average
%	66	34	**0.4**

Either of

- mids
- low mids.

Many students named individual frequencies rather than the band.

Section B

Question 1

Marks	0	1	Average
%	83	17	**0.2**

Treble or higher

Only a small number of students knew about directional frequency range. This is something that needs to be reinforced regularly as it is directly linked to PA work.

Question 2

Marks	0	1	2	Average
%	12	39	49	**1.4**

2a.
One with a built in amplifier

2b.
The amplifier/speaker power

This question was generally answered well, although some students did not read the question properly and were confused about whether it was power from an amplifier or power from a 240 V outlet.

Question 3

Marks	0	1	2	3	Average
%	14	58	16	11	**1.3**

3a.
An unbalanced cable has one core and one shield, whereas a balanced cable has two cores and one shield.

3b.
Balanced

Too many students became confused with the term 'balanced' cable and thought it had something to do with AC power and earthing. This information is underpinning knowledge, and a lack of understanding could become a high-risk problem with electricity.

Question 4

Marks	0	1	2	3	Average
%	42	23	19	16	**1.1**

4a.
Either of

- allows various inputs to be adjusted to achieve unity gain
- increases/decreases the input signal.

The majority of students were aware that gain and input are connected.

4b.
A shelf is pre-set cut boost, whereas sweep is adjustable frequency cut boost.

Very few students could explain what a shelf EQ was. Most attributed it to a set frequency knob that increases or decreases the gain of the specific frequency. Once again, this is an area that students at this level should be familiar with.

Question 5

Marks	0	1	Average
%	27	73	**0.7**

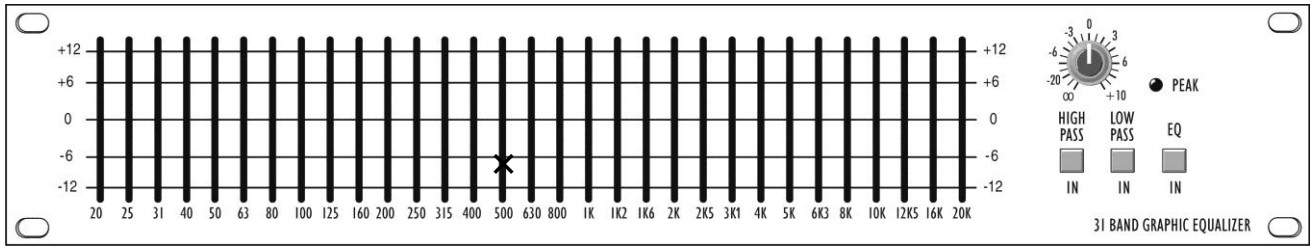
Octave

Question 6

Marks	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Average
%	4	1	2	3	7	10	19	6	1	2	2	4	8	21	9	**8.3**

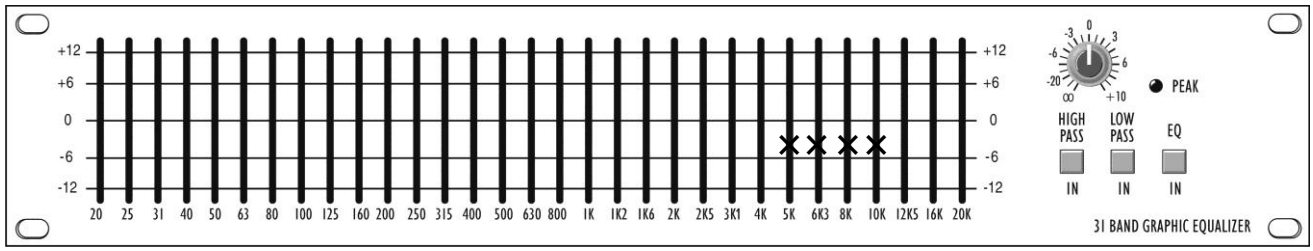
All faders should have been at 0 unless otherwise marked.

6a.



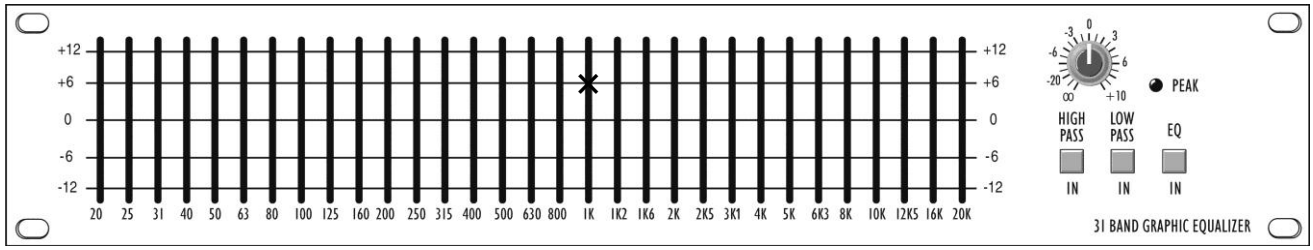
A mark at 6 dB below 0 on the 500 Hz fader. All other faders should have been at 0.

6b.



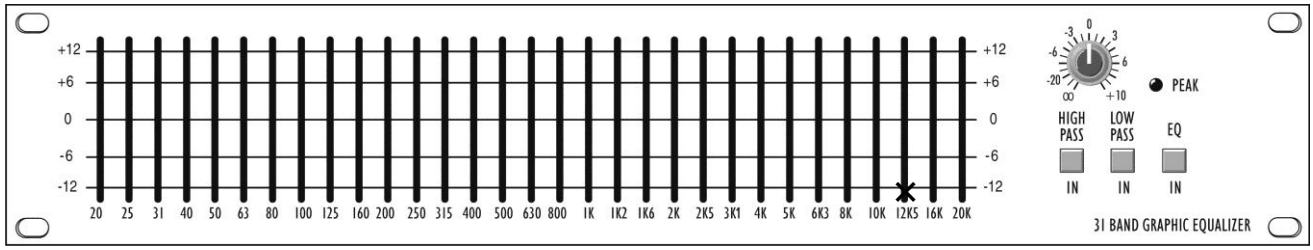
Marks at 3 dB below 0 on 5 K, 6 K, 8 K and 10 K: this is the sibilance area. All other faders should have been at 0.

6c.



A mark at 6 dB above 0 on the 1 K fader. All other faders should have been at 0.

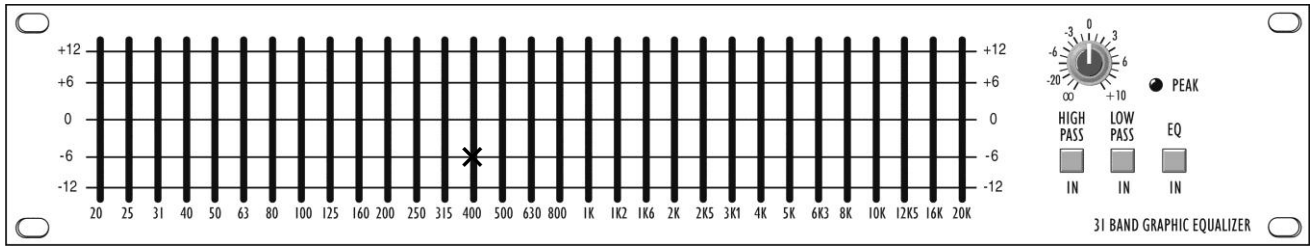
6d.



A mark at 12 dB below 0 on the 12.5 kHz fader. All other faders should have been at 0.

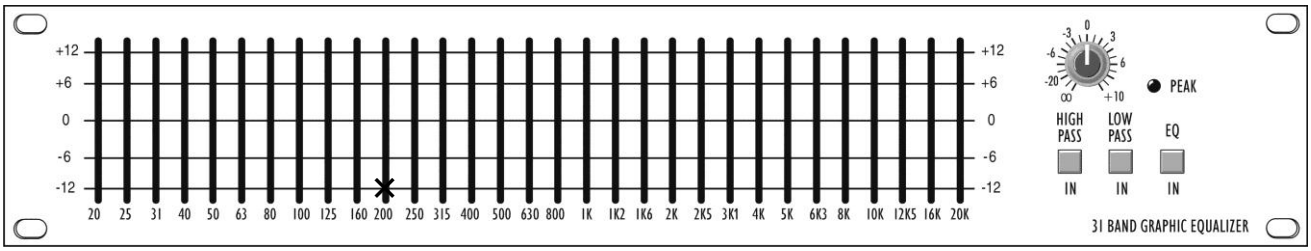
This question should have read 12.5 kHz; students read it accordingly.

6e.



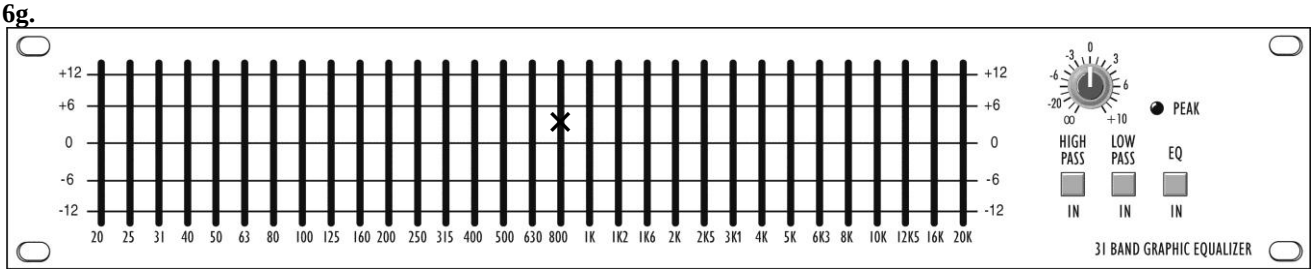
A mark at 6 dB below 0 on the 400 Hz fader. All other faders should have been at 0.

6f.



A mark at 12 dB below 0 on the 200 Hz fader. All other faders should have been at 0.

6g.



A mark at 3 dB above 0 on the 800 Hz fader. All other faders should have been at 0.

Question 7

Marks	0	1	2	3	4	Average
%	2	3	11	21	64	**3.4**

Any four of

- leads taped down
- volume and foldback not too loud
- all electrical cables test tagged
- all unnecessary equipment removed from the stage
- lighting has safety chains
- PA speakers are stacked/strapped safely
- no exits blocked
- proper lifting
- correct manual handling
- tripping hazards are identified and removed
- sufficient lighting is provided
- safety precautions are undertaken when using electricity
- communication when team lifting.

Most students answered this question very well, although there was some repetition of hazards.

Question 8

Marks	0	1	Average
%	52	48	**0.5**

Because it balances an unbalanced signal/strong signal/low noise.

Not many students could identify why you would use a balanced signal over a long run.

Question 9

Marks	0	1	2	Average
%	1	8	92	**1.9**

9a.

The first graph was the low frequency.

9b.
The second graph had the lower amplitude.

Question 10

Marks	0	1	2	3	4	5	Average
%	0	3	10	17	27	42	**4.0**

Scenario	Microphone
location recording for a film shoot	A.
vocalist in a loud rock band	C.
synthesiser in a large rock gig	E.
aerobics fitness instructor	B.
voice-over booth in a recording studio	D.

Students showed good microphone selection overall.

Question 11

Marks	0	1	2	3	4	5	Average
%	9	14	14	14	14	35	**3.1**

Equipment	Order
passive speaker	bass guitar
bass guitar	DI box
multicore	multicore
amplifier	mixer
graphic equaliser	graphic
DI box	amp
mixing desk	passive speaker

Many students positioned the amplifier incorrectly. More attention needs to be paid to signal flow.

Question 12

Marks	0	1	2	3	Average
%	40	52	4	3	**0.7**

12a.
Any of

- different impedance
- different gauge
- speaker has two cores, or multiples of two and no shield
- mic cable has two cores plus shield/ground.

Very few students could explain why the shielding was an important factor of a guitar cable and that the speaker cable would introduce unwanted noise to the signal.

12b.
The DI has no phantom power or the battery is flat.

Question 13

Marks	0	1	2	3	Average
%	43	36	17	5	**0.8**

13a.
It sends current to the ground, helping make it safe.

While many students agreed that the earth pin was important, they were unable to explain its function.

13b.
2 and 2/3 ohms

A potential problem could be overload/overheating of the amplifier.

Very few students were able to do the maths for parallel speakers and therefore could not explain the effect this would have on the amplifier.

Question 14

Marks	0	1	2	3	4	Average
%	41	27	18	9	5	**1.1**

14a.
Any two of

- use a reverb auxiliary to which to route all 16 sends
- increase the hardware buffer size
- allocate more CPU to the application.

Most students tried to say that Emma should forget about reverb; therefore they didn't offer a solution to the problem. Those who did offer a solution generally knew the process of creating a reverb bus, assigning all the tracks to the bus. Few mentioned anything about CPU load.

14b.
The effect is made permanent.

14c.
It processes audio in real time – that is, it doesn't render/bounce an effect.

Very few students could explain the difference between a rendered plug-in effect and a real-time plug-in effect.

Question 15

Marks	0	1	2	3	4	Average
%	7	13	24	25	31	**2.6**

Click track: a metronome count to record to
Scratch/glide track: a rough track recorded at the beginning of the session and used as a timeline guide for recording
Overdub: tracks recorded while listening back to previous recorded tracks
Mixdown: combining all recorded tracks plus effects, etc. to a two-track master, etc.

Most students who attempted this question answered all four parts correctly.

Question 16

Marks	0	1	2	Average
%	24	64	12	**0.9**

16a.
The in and out loop is used for connecting signal processing devices.

Students showed reasonable knowledge but did not explain the send and return component.

16b.
B. compressor

Most students knew that the compressor was a dynamics processor.

Question 17

Marks	0	1	Average
%	12	88	**0.9**

B. active crossover

Most students recognised the position as being for an active crossover.

Question 18

Marks	0	1	Average
%	75	25	**0.3**

To avoid loud clicks that result when repatching (live) inputs. Faulty cable/mic.

Very few students made mention of popping when equipment was unplugged or that other microphones, such as ribbon mics, would be damaged. Most simply said it was wasting power, which was not relevant.

Question 19

Marks	0	1	Average
%	72	28	**0.3**

Any of

- switch input sensitivity between line input to mic pre amp
- gain up signal
- to make it much louder.

The majority of students knew about the mic/line section of a powered speaker, stating that the function was to connect a guitar lead or mic lead, but few explained what the button did.

Question 20

Marks	0	1	Average
%	17	83	**0.9**

Any of

- no spill
- to hear previously recorded tracks
- to create a selective mix.

Most students answered this well.

Question 21

Marks	0	1	2	3	Average
%	1	36	38	25	**1.9**

21a.

It is due to the proximity effect: closer gets more bass response, further away gets more reverberant.

Many students gave the same answer twice, writing about delay in the sound reaching the room microphone and then mentioning delay in sound. The majority of students talked about the overall quality of the sound. Very few mentioned the proximity effect of the close microphone and the roominess sound of the room microphone. A number of students stated good reasons but did not indicate which microphone they were talking about. Some students gave the same reason twice; for example, 'The close mic will capture a more direct sound and the room mic will capture more room sound'.

21b.

A. small diaphragm condenser

Most students answered this question well.

Question 22

Marks	0	1	Average
%	7	93	**1.0**

C. male XLR to female XLR

Question 23

Marks	0	1	2	3	4	5	6	7	8	9	10	Average
%	11	7	9	10	8	9	10	9	9	8	9	**4.9**

- 1. Ø button: phase switch
  typical application: to put microphones back in phase
- 2. HF knob: alters the amount of high frequency in the channel
  typical application: to increase clarity or decrease sibilance
- 3. Aux 1 pre knob: alters the level of aux 1 before the output fader
  typical application: foldback, occasionally effects send
- 4. 1–2 button: group 1 and 2 selection
  typical application: sub mix of drums or vocals, etc.
- 5. PFL button: pre-fade(r) listen
  typical application: listening to the input of a channel before output, checking input levels