

UNIVERSITY OF FORT HARE

Music Technology
MUS 508 E

EXAMINATIONS

November

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Time: 3 hours

Subject: MUS 508 E – Music Technology

Marks: 100

This paper consists of 4 pages including the cover page

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INSTRUCTION

Answer all questions

1. Describe a transducer. [2]
2. What is the audio frequency spectrum of human hearing (answer in Hz)? [2]
3. Describe each element of a typical recording studio signal chain comprising of the following equipment, and explain what each element or piece of equipment does:
 - a. Microphone
 - b. Microphone preamp
 - c. A/D converter
 - d. DAW
 - e. D/A converter [12]
 - f. Audio Monitoring
4. Discuss the differences between a Dynamic and a Condenser microphone. [6]
5. Define what a transient is. [2]
6. In audio, what is meant by the term headroom? [2]
7. Describe the process of overdubbing (multitrack recording). In your description, discuss advantages and disadvantages of this process. [8]
8. What is a software synthesizer? How is it different from a hardware synthesizer? [4]
9. Describe a sampler, and explain how does it differ from a Synthesizer? [4]
10. What is a compressor? Give an example where compression could be used? [4]

11. Explain the process of Equalisation? [2]

12. List two common uses for equalisation [2]

13. MIDI is an acronym which stands for what? [2]

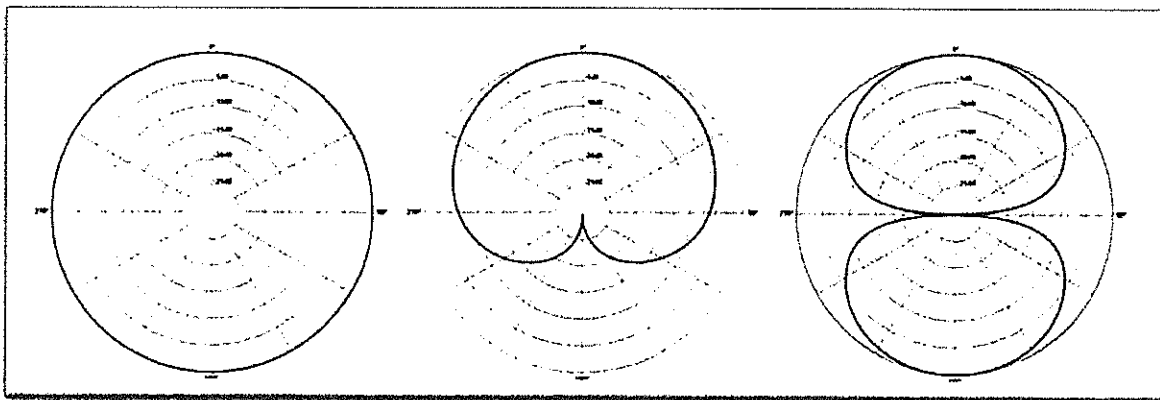
14. In the context of a MIDI recording, what does 'quantizing' mean? [2]

15. Frequency is measured in: [1]

- a. Octaves
- b. Milliseconds
- c. Samples
- d. Hertz
- e. Millimetres

16. What is panning? How can panning be used in mixing? [2]

17. Identify the following microphone polar patterns: [3]



18. Name and describe 3 commonly used stereo recording microphone techniques. [12]
Explain which type of microphones should be used in each case, and describe the necessary placement for each technique.

19. Discuss the about 5 areas of which a music technologist in the music industry could find themselves working is. Consider all aspects and roles of music and sound design. [20]

20. Name the pieces of equipment that make up a basic PA system. [4]

21. When editing in a DAW, what 4 tools are likely to get used? [4]