



# TECHNICAL UNIVERSITY OF MOMBASA

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SCHOOL OF HUMANITIES AND SOCIAL SCIENCES

DEPARTMENT OF COMMUNICATION STUDIES

**UNIVERSITY EXAMINATION FOR:**

**BACHELOR OF JOURNALISM AND MASS COMMUNICATION**

**BMC 4213: RADIO PRODUCTION**

**END OF SEMESTER EXAMINATION**

**SERIES: APRIL 2016**

**TIME: 2 HOURS**

**DATE:** Pick Date Select Month 2016

## **Instructions to Candidates**

You should have the following for this examination

-Answer Booklet, examination pass and student ID

This paper consists of **FIVE** questions. Attempt question ONE (Compulsory) and any other TWO questions

**Do not write on the question paper.**

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## **Question ONE: Compulsory**

Using a well labeled diagram, write short notes on the following using

- i. Frequency, (3 marks)
- ii. Amplitude (3 marks)
- iii. Wave shape and phase (3 marks)

b) Briefly explain any 4 techniques an audio engineer can use employ for HUM! Reduction (4 marks)

c) Describe what ADSR envelope means (with an illustration) and how this is applied in digital audio synthesis (8 marks)

c) Audio signals are often sampled at different rates. CD quality audio is sampled at 44.1 kHz rate while telephone quality audio sampled at 8 kHz. Briefly outline the maximum frequencies in the input signal that can be fully recovered for these two sampling rates and identify the theory you use to obtain the results (6 marks)

## **Question TWO**

Assume you were invited to make a presentation on how to set up equipment for studio recording at the TUM audio studios.

a) Briefly outline your presentation including demonstrations for the assignment. (12 marks)

b) Describe different types of equipment you need for the assignment. (8 marks)

### **Question THREE**

3. Music and audio programs have to be converted from analogue to digital format before being stored in the digital media. Explain this statement using a well labeled diagram (20 marks)

### **Question FOUR**

You have been approached by a group of students to explain to them how sound travels from the studio to the audience. Outline your presentation using an appropriate diagram. (20 marks)

### **Question FIVE**

a) Highlight the importance of digital editing in radio broadcasting today. (10 marks)

b) Distinguish between destructive and non-destructive editing in radio production (4 marks)

c) outline any TWO techniques one can use to reduce HUM