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ACR 407



**MASINDE MULIRO UNIVERSITY OF SCIENCE AND
TECHNOLOGY**

**UNIVERSITY EXAMINATIONS
2022/2023 ACADEMIC YEAR**

**FOURTH YEAR SECOND SEMESTER EXAMINATIONS
FOR THE DEGREE OF
BACHELOR OF SCIENCE IN AGRICULTURE &
BIOTECHNOLOGY**

COURSE CODE: ACR 407

COURSE TITLE: SEED SCIENCE AND TECHNOLOGY

DATE: 24.04.2023

TIME: 12:2PM

INSTRUCTION TO CANDIDATES

Answer ALL Question in Section A and any other Two Questions from section B

MMUST observes ZERO tolerance to examination cheating

This paper consists of TWO (2) printed pages. Please turnover

SECTION A: ANSWER ALL QUESTIONS (40 MARKS)

Q1 Define the following terms as normally used in seed science and technology studies
(10 marks)

- (a) Seed Technology
- (b) Seed certification
- (c) Seed quality
- (d) Genetic purity
- (e) Isolation distance

Q2. (a) State the objectives of seed testing and explain common seed quality assessment tests that are used to meet each of the objectives given (10 marks)

(b) Define the term seed treatment and write comprehensive notes on the importance of seed treatment in seed technology (10 marks)

Q3. (a) Give five advantages of efficient seed drying (5 marks)

(b) Explain the factors that may influence the rate of seed drying (5 marks)

SECTION B: ANSWER ANY TWO QUESTIONS (30 MARKS)

Q4. Describe the procedure for maize seed certification employed in Kenya highlighting the various requirements for the process (15 marks)

Q5. Discuss the plant breeder's rights as provided for in the Seeds and Plant Varieties Act CAP 326 of the Laws of Kenya (15 marks)

Q6. Discuss the challenges encountered by certified seed marketers and users in Kenya (15 marks)