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University Examinations 2023/2024

FOURTH YEAR SECOND SEMESTER EXAMINATION FOR THE DEGREE OF
BACHELOR OF SCIENCE IN BIOTECHNOLOGY

SHD 3453: BIOETHICS, BIOSAFETY AND BIO-POLICY

DATE: APRIL 2024

TIME: 2 HOURS

INSTRUCTIONS: Answer question *one* and any other *two* questions

QUESTION ONE (30 MARKS)

- a) Define the following terms (6 marks)
 - i. Bioethics
 - ii. Biosafety
 - iii. Bio-policy
- b) Describe the four commonly accepted principles of health care ethics (4 marks)
- c) Describe the role of biosafety clearing house and its relation to the Cartagena protocol (4 marks)
- d) Explain the difference between biosafety level one and biosafety level two laboratory (4 marks)
- e) Define the terms patent and intellectual property (4 marks)
- f) Describe good laboratory procedures and practices in relation to biosafety (4 marks)
- g) Describe class II and III biosafety cabinets (4 marks)

QUESTION TWO: (20 MARKS)

Discuss the principle of respect for autonomy and principle of non-maleficence as applicable in bio-ethics

QUESTION THREE: (20 MARKS)

Discuss the four classes of biosafety laboratories (BSL1, BSL2, and BSL 4)

QUESTION FOUR: (20 MARKS)

Discuss the Cartagena protocol on biosafety and its relation to Kenya's biosafety act of 2019