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University Examinations 2023/2024

FIRST YEAR, SECOND SEMESTER EXAMINATION FOR THE DEGREE OF BACHELOR OF PUBLIC HEALTH, EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE IN PUBLIC HEALTH,

HPP 3125: LABORATORY TECHNIQUES AND BIOSAFETY

DATE: APRIL 2024

TIME: 2 HOURS

INSTRUCTIONS:

1. Answer Question ONE, and any other TWO
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QUESTION ONE (30 MARKS)

1. Describe four types of laboratory acquired infections (6 Marks)
2. Describe components of a Maximum containment laboratory (4 Marks)
3. Briefly describe 3 main dis-advantages of Micro-organisms (6 Marks)
4. Describe procedure for disposal of an animal carcass suspected to be infected with bacteria anthracis (4 Marks)
5. Describe procedure for using an Autoclave during Moist heat sterilization (6 Marks)
6. Describe four types of samples for diagnosis of particular diseases (4 Marks)
7. Often biohazard samples e.g. COVID 19 samples are collected from health care facilities and shipped to referral laboratories for diagnosis. Discuss circumstances when such samples may be rejected (6 Marks)
8. Requirements for laboratory acceptance of a specimen after shipment (4 Marks)



QUESTION TWO (20 MARKS)

After the October rain floods Karimi reported to have profuse watery diarrhea that smelled like fish, that left them completely dehydrated. As the public health officer, you suspect infections by Vibrio-Cholerae. In view to this, Discuss, the following;

- a) Sample collection and shipment (10 Marks)
- b) Prevention and control (10 Marks)

QUESTION THREE (20 MARKS)

- a. Without reliable laboratory services the health of the people are at risk. Discuss the statement (10 Marks)
- b. Describe the different laboratory organization structure that enables clear sample referral process in Kenya (10 Marks)

QUESTION FOUR (20 MARKS)

Describe procedures used during sterilization and disinfection processes (20 Marks)

