



KENYATTA UNIVERSITY

EXAMINATION FOR THE DEGREE OF MASTER OF SCIENCE IN MEDICAL LABORATORY SCIENCE

HML 825: CLINICAL LABORATORY BIOSAFETY

1ST SEMESTER 2022/2023

TIME: 3 HOURS

INSTRUCTIONS: Answer any 3 Questions (30mks each)

1. a. Outline the components of comprehensive laboratory biosecurity program. (10 marks)
b. Discuss the concept biosecurity in relation to:
 - i. Responsible life science research (10 marks)
 - ii. The international treaties on biological weapons (10 marks)
2. a. Explain the:
 - i. Role of autoclave in laboratory biosafety (5 marks)
 - ii. Quality Control in the process of autoclaving (5 marks)
b. Relate the various types of biosafety cabinets to laboratory biosafety levels (20 marks)
3. a. Risk assessments are very important as they form an integral part of clinical laboratory biosafety. Explain (10 marks)
b. Explain when a risk assessment should be done (10 marks)
c. Describe the concept of dual use and dilemma in Laboratory biosecurity (10 marks)
4. Describe the
 - a. Categorization of the laboratory waste segregation (10 marks)
 - b. The microbiological procedures for biosafety level 1 laboratory (20 marks)