



UNIVERSITY EXAMINATIONS 2022/2023

SECOND YEAR, SECOND SEMESTER EXAMINATION FOR BACHELOR OF SCIENCE
IN HEALTH SYSTEMS MANAGEMENT

NNH 3252: PRINCIPLES OF ENVIRONMENTAL HEALTH

DATE: APRIL 2023

TIME: 2 HOURS

INSTRUCTIONS: Answer question one and any other two questions

QUESTION ONE (30 MARKS)

- a) Analyze five levels of ecological organization that explain the interrelationships of micro and macro organisms in the environment (5 marks)
- b) State the main role of National Environmental Management Authority (NEMA) (1 marks)
- c) State the three interacting factors of disease causation in the epidemiologic triad (3 marks)
- d) Describe three classifications of waste stabilization ponds used in treatment of community waste water (6 marks)
- e) Trench latrines are constructed usually in emergencies such as natural disasters and wars. Provide the rationale of recommending trench latrine in emergency situation as a viable fecal waste disposal technology (3 marks)
- f) Discuss the use of biochemical oxygen demand and chemical oxygen demand as measures of waste water standards (4 marks)
- g) Explain why foods with low water activity would be ideal for a community outreach feeding program (2 marks)
- h) After eating lunch at the students' center, a group of students complained of nausea, vomiting, diarrhea but no fever. State three likely causes leading to these symptoms (3 marks)
- i) Describe three circumstances that would call for water testing by a water service provider (3 marks)