



WI-2-60-1-6

JOMO KENYATTA UNIVERSITY OF AGRICULTURE AND TECHNOLOGY
UNIVERSITY EXAMINATIONS 2024/2025

SEMESTER TWO 2024/2025 MAIN EXAM FOR THE DEGREE OF MASTER OF
SCIENCE IN PUBLIC HEALTH

PPH 3106: ADVANCED OCCUPATIONAL AND ENVIRONMENTAL HEALTH

DATE: DECEMBER 2024

TIME: 3 HOURS

INSTRUCTIONS: ANSWER ANY FOUR OF THE SIX QUESTIONS BELOW

1.
 - a. Using a suitable diagram, explain the hierarchy of control of occupational hazards
10 marks
 - b. Describe the attributes that would qualify a condition to be an occupational disease
15 marks
2. An incident that has led to spillage of Sodium cyanide, a potentially hazardous toxic substance has been reported in one of your highways. Propose how the incident should be investigated and illustrate the factors that would influence the absorbed dose among those who would be exposed to it
25 marks
3. The end of the year 2023 audit report for Kazi Njema steel rolling mills showed that there were six lost time work-related injuries and two mortality cases and the company had a total of 2,500,000 hours worked. Similar audit report in the previous year showed that the company's nine hundred workers had four work-related injuries and one mortality case.
 - a. Using a named suitable relative measure of workplace incidents, compare the incidents for the two years' audits?
15 marks
 - b. What are the limitations associated with the quality of the above data?
10 marks
4. In compliance with active aging policy, you have decided to construct houses for the aged in your Sub-County. Analyze the biotic and abiotic factors that you must consider in order to comply with Healthy Houses concept
25 marks
5. Illustrate the sources of greenhouse gases and the probable indicators of global climate change over the last one hundred years.
25 marks
6. Citing appropriate environmental health examples, discuss how edaphic factors influence the health of children under five years of age in a population.
25 marks