



JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY

SCHOOL OF HEALTH SCIENCES

UNIVERSITY EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE

PUBLIC HEALTH/COMMUNITY HEALTH AND DEVELOPMENT

2ND YEAR 1ST SEMESTER 2024/2025 ACADEMIC YEAR

KISUMU CAMPUS

COURSE CODE:

HCB 1304

COURSE TITLE:

OCCUPATIONAL HEALTH AND SAFETY

EXAM VENUE:

STREAM: BSc Public/ Comm. Hlth & Dev

DATE:13/1/25

EXAM SESSION:9-11.00 AM

TIME: 2.00 HOURS

Instructions:

- 1. Answer all the questions in Section A and 2 questions in Section B.**
- 2. Candidates are advised not to write on the question paper.**
- 3. Candidates must hand in their answer booklets to the invigilator while in the examination room.**

SECTION A- ANSWER ALL QUESTIONS (30 MARKS)

1. Give THREE differences between noise and sound. (3mks)
2. Describe THREE engineering controls that can be applied to reduce noise levels in a workplace. (3mks)
3. Explain THREE differences between rotary motion and reciprocating motion in machinery hazards. (3mks)
4. Explain THREE potential risks associated with oscillating motions in machinery. (3mks)
5. Outline THREE reasons why monitoring is important for occupational health. (3mks)
6. Explain THREE biological effects of radiation exposure on human cells. (3mks)
7. Explain THREE strategies used to minimize radiation exposure in workplaces. (3mks)
8. Mention THREE importance of personal protective equipment (PPE) in the workplace. (3mks)
9. Explain THREE limitations of PPE as a safety measure in the workplace. (3mks)
10. Explain THREE aims of occupational safety and health. (3mks)

SECTION B - ANSWER ANY TWO QUESTIONS FROM THIS SECTION

1. (i) Discuss the measures that can be taken to prevent accidents during excavation activities on construction sites. (10mrks)
(ii). Explain how different types of Personal Protective Equipment protect workers from specific hazards. (10mrks)
2. (i) Explain how workplace conditions impact the selection of PPE in Kenya. (10mrks)
(ii). Describe the importance of fit and comfort when selecting PPE for employees in Kenya. (10mrks)
- 3 (i) Explain FIVE reasons that may make biological monitoring more advantageous than environmental monitoring in certain situations. (10mrks)
(ii) Give and explain FIVE roles of the Directorate of Occupational Health and Safety Services (DOSHS) in promoting workplace safety in Kenya. (10mrks)
- 4(i) Explain FIVE ways of how the nature of the hazard affects the selection of Personal Protective Equipment (PPE) for employees in Kenya. (10mrks)
(ii) Explain FIVE key elements that should be considered when planning and laying out a construction site to ensure safety. (10mrks)