



MACHAKOS UNIVERSITY

University Examinations for 2022/2023 Academic Year

SCHOOL OF AGRICULTURE, ENVIRONMENT AND HEALTH SCIENCES

DEPARTMENT OF HEALTH SCIENCES

THIRD YEAR SECOND SEMESTER EXAMINATION FOR

BACHELOR OF SCIENCE IN PUBLIC HEALTH

HPH312: OCCUPATIONAL HEALTH & SAFETY

DATE:

TIME:

INSTRUCTIONS:

This paper consists of two sections A and B

SECTION A

Specific Instructions

- **This section has one question**
- **The question is compulsory**
- **The question is 30 marks**

QUESTION ONE (30 MARKS)

- a) Define the following terms: (2 marks)
- i) Workplace audit
 - ii) Occupational health surveillance
- b) In defining occupational health and safety, state the aspects of ergonomics outlined (4 marks)
- c) State the factors influencing occurrence of occupational diseases (3 marks)
- d) Outline the techniques used to investigate accidents in the workplace (4 marks)

- e) Explain the priority for evacuation in a workplace incident (3 marks)
- f) Describe the characteristics of Occupational Safety & Health policy (3 marks)
- g) Classify fire and extinguishing agents (4 marks)
- h) Explain the first aid for a worker with nose bleeding in a workplace (3 marks)
- i) Explain the factors you would consider in setting up a job safety analysis at a workplace (4 marks)

SECTION B:

Specific Instructions

- **This section has four (4) questions**
- **Answer any two (2) questions**
- **Each question is 20 marks**

QUESTION TWO (20 MARKS)

The Ebola outbreak in Uganda is yet another occupational health threat to health workers in the East African region some of whom have already succumbed. You are in charge of the Risk management for Ebola in Busia County, describe the steps you will take to control the risk.

QUESTION THREE (20 MARKS)

- a) You are an occupational health consultant for a food processing plant that is in the process of forming a safety committee. Provide a write up to the employer on his duties. (10 marks)
- b) Nurse X in medical ward of a referral Hospital has been duly provided with N95 masks for respiratory isolation unit. She throws caution to the wind by evidently treating her patient without donning her protective gear. She contracts Pulmonary TB in due course and decides to file a law suit against the employer. Discuss the legal outcomes of her conduct (10 marks)

QUESTION FOUR (20 MARKS)

- a) Industry X changes its working policy from 8 hour shifts to 12 hour shifts. Instead of observing the intended increased productivity, productivity gradually decreases and some of the workers actually resign and moves to the next door industry to work. This employer could have accrued more than just increased productivity had he been concerned about the welfare of his employees. Discuss (10 marks)

- b) Mr. X loses his hand in an accident while operating a machine in a ginnery where he has worked for ten years. He is sacked immediately since he is no longer capable of handling the machine. Advise Mr. X on the appropriate course of action (10 marks)

QUESTION FIVE (20 MARKS)

- a) A cash crop wheat farmer in Kapsabet has newly acquired machines for his operations. In view of this, discuss possible hazards, their modes of exposure and effects and the prevention measure for those hazards (10 marks)
- b) A fire breaks out in a four story building with lecture rooms while the classes were going on. A fire alarm goes off triggering mass confusion that led to severe injuries and some fatalities. The direct injury resulting from the fire was so minor that the fatalities were unwarranted. Analyse possible pitfalls in fire preparedness in this institution. (10 marks)