



**NATIONAL OPEN UNIVERSITY OF NIGERIA  
UNIVERSITY VILLAGE, PLOT 91, CADASTRAL ZONE  
NNAMDI AZIKIWE EXPRESS WAY, JABI, ABUJA  
FACULTY OF HEALTH SCIENCES  
DEPARTMENT OF PUBLIC HEALTH SCIENCE**

**2025\_1 EXAMINATION\_**

**COURSE TITLE: Occupational Health and Safety (PHS404)**

**COURSE UNITS: 3 Units**

**TIME ALLOWED: 2 Hours**

**TOTAL MARKS: 70 %**

**INSTRUCTION: Answer ALL Questions**

**Question 1 (20 marks).**

Q1a). Work-related accidents or diseases are very costly and can have many serious direct and indirect effects on the lives of workers. Mention the direct costs of an injury or illness for workers. **(2marks).**

Q1b). Discuss five key principles of occupational health **(5 marks).**

Q1c). The worker is one of four basic elements in the working environment. Explain the work environment. **(3 marks).**

Q1d). Differentiate between toxicology and toxicologists. **( 5 marks).**

Q1e). i. What is an occupational hazard? **(1 mark).**

ii. List 8 purposes of identifying occupational health **(4 marks).**

**Question 2 (20 marks).**

Q2a). What are the reasons for the identification of health and safety problems with regards to occupational hazards **(7 marks).**

Q2b). Discuss the biological effects of ionizing radiation on animals. **(3 marks).**

Q2c). i. Effects of poor illumination. **(2 marks).**

ii. Purpose of good lighting **(3 marks)**

Q2d). i. What are the effects of chemical hazards dependent on? **(3 marks)**

- ii. List how to evaluate chemical hazards. **(2 marks).**

**Question 3 (15 marks)**

**Q3a).**i. What factors determine how a biohazard can be contracted **(2 marks.)**.

ii. Mention two points that are important to remember when classifying biological agents. **(2 marks).**

**Q3b).** i. What is a biohazard safety cabinet **(1 mark)**

ii. Occupational exposure to biohazards also occurs in agriculture. Define the types of relationships in terms of disease transmission between humans and animals. **(3 marks).**

**Q3c).** Write on prevention of ergonomic hazards **(7 marks).**

**Question 4 (15 marks)**

**Q4a).** Discuss the routes of entry for toxic chemicals **(8 marks).**

**Q4b).** How would you manage emergency care for exposure of the skin to molten chemicals? **(2 marks).**

**Q4c).** Define the following: **(5 marks)**

1). Lethal dose 50%

2). Lethal dose 10%

3). Lethal concentration 50%

4). Toxic doses

5). Inhalation route of exposure