



**Professional Qualification in  
Public Health Management  
Level 4 Diploma**

**UNIT 4 – Introduction to Epidemiology and Statistics**

Question 1

- (a) Explain what is meant by epidemiology. (6 marks)
- (b) Describe the role of epidemiologists in helping to bring epidemics under control. (14 marks)

Question 2

A professor of epidemiology is planning a study of the spread of the new coronavirus (which causes the disease COVID-19) to countries all around the world. Explain the benefits and difficulties of such a large-scale project. (20 marks)

Question 3

- (a) Explain what is meant by experimental methods in epidemiology. (6 marks)
- (b) Explain the advantages and disadvantages of an experimental method such as a randomised controlled trial. (14 marks)

Question 4

- (a) Explain the difference between the mode, median and arithmetic mean of a set of data. (8 marks)
- (b) Explain what is meant by a frequency distribution in statistics. (12 marks)

Question 5

Prudence is a community health worker who has collected data on the number of men, women and children who have had communicable diseases before and after they received education on handwashing. Describe how Prudence could display this data in a presentation at the community clinic. (20 marks)