



## Professional Qualification in Public Health Management Level 4 Diploma

### UNIT 4 – Introduction to Epidemiology and Statistics

#### Question 1

- (a) Describe the role of epidemiologists in describing and analysing trends of diseases within populations. (10 marks)
- (b) Explain how epidemiologists can help to identify the determinants of diseases. (10 marks)

#### Question 2

A group of universities is planning a study into the increase in Type 2 diabetes in children in high resource countries. They intend to study the health of a large sample of children for ten years. Assess the advantages and disadvantages of such a large-scale study. (20 marks)

#### Question 3

- (a) Discuss the advantages of using interviews as a method of data collection in epidemiology research. (10 marks)
- (b) Discuss the disadvantages of using interviews as a method of data collection in epidemiology research. (10 marks)

#### Question 4

- (a) State what is meant by 'variables' in epidemiology. (4 marks)
- (b) Adelle is a doctor in a clinic. She has noticed an increase in the number of young adults with chest infections. She is unsure if this is caused by an increase in air pollution since a new factory opened nearby or other factors such as a trend for taking up cigarette smoking in this age group. Explain why variables such as these are important factors to consider in epidemiology research. (16 marks)

#### Question 5

- (a) Describe how data may be presented in an epidemiology research paper or journal. (10 marks)
- (b) Evaluate the importance of interpreting epidemiology research data correctly. (10 marks)