

BMI2602

May/June 2016

MEDICAL EPIDEMIOLOGY

Duration 2 Hours

100 Marks

EXAMINERS

FIRST
SECOND

PROF J DEWAR
DR S GILDENHUYS

Closed book examination

This examination question paper remains the property of the University of South Africa and may not be removed from the examination venue

This paper consists of 2 pages

ANSWER FIVE (5) OF THE EIGHT (8) QUESTIONS

Students must answer the questions in the examination answer book provided

Dear student, take a deep breath, exhale and relax. Now you are ready to start answering the questions. All the best!

[TURN OVER]

QUESTION 1 [20]
Discuss how you would apply the epidemiological discoveries of Snow, Semmelweis and Jenner to improving the health of rural communities

QUESTION 2 2 x 10 = [20]
2 1 Discuss the important questions to be asked in an epidemic (10)
2 2 List and describe the steps to be taken during a disease outbreak (10)

QUESTION 3 [20]
Using influenza and human immunodeficiency virus as examples, discuss the global spread of diseases

QUESTION 4 2 x 10 = [20]
4 1 Discuss how the quality of newly available screening and diagnostic tests is assessed, and how such tests can be used in disease prevention programmes (10)
4 2 Discuss the natural history of disease and various ways in which prognosis can be expressed (10)

QUESTION 5 [20]
Discuss the phases in the natural history of disease in a patient

QUESTION 6 [20]
Discuss with examples how rates and proportions are used to express the extent of morbidity and mortality in a population resulting from a specific cause

QUESTION 7 [20]
Discuss important factors associated with drug study design

QUESTION 8 2 x 10 = [20]
8 1 Discuss genetic and environmental factors in disease causation (10)
8 2 Discuss features of cohort studies and case-control studies (10)

TOTAL MARKS: 100