

FEDERAL UNIVERSITY OF TECHNOLOGY OWERRI
SCHOOL OF PHYSICAL SCIENCE
DEPARTMENT OF SCIENCE LABORATORY TECHNOLOGY
STM 503: PRINCIPLES OF EPIDEMIOLOGY AND PUBLIC HEALTH
HARMATTAN SEMESTER EXAMINATION 2015/ 2016 ACDEMIC SESSION

Instructions: Answer five questions and at least two from each section.

Time allowed: 2 ½ Hrs

Date: 28/04/2016

SECTION A

1. Write extensively on:
 - (i) Primary response
 - (ii) Secondary response.
- 2a. What is immunization?
- b. What does immunization tend to achieve?
- c. Give two examples of immunization agents and their achievements.
3. Write short notes on the following:
 - (i) Mortality
 - (ii) Morbidity
 - (iii) Epidemiology
 - (iv) Surveillance

SECTION B

- 4a. Epidemiologic investigations are normally conducted in series of stages; carefully outline and elaborate the series of stages involved in the epidemiological studies.
- b. Describe the following terms according to the various outcomes that may occur after exposure to an infectious disease agent; (a) infectivity (b) pathogenicity (c) virulence.
- c. Explain what you understand by case definition. Mention the clinical criteria involved in case definition.
- 5a. Explain sequentially the processes involved in the chain of infection.
- b. Discuss the concept of Herd immunity.
- c. Write short notes on epidemiologic triad, with emphasis on its components
- 6a. Compare and contrast the following epidemiological study designs; (i) experimental and observational studies, (ii) Cohort and case-control studies.
- b. Differentiate between natural history of disease and spectrum of disease.
Explain the following terms relating to disease; (i) hyperendemic, (ii) sporadic, (iii) zoonosis, (iv) epizootic.
- c. "Antigenic drift" is one of the ways through which influenza viruses change. Discuss!
Differentiate between antigenic drift and antigenic shift.