

**FEDERAL UNIVERSITY OF TECHNOLOGY OWERRI**  
**SCHOOL OF SCIENCE**  
**DEPARTMENT OF SCIENCE LABORATORY TECHNOLOGY**  
**STM 503: PRINCIPLES OF EPIDEMIOLOGY AND PUBLIC HEALTH**  
**HARMATTAN SEMESTER EXAMINATION 2014 / 2015 ACDEMIC SESSION**

*Instructions: Answer any five question*

*Time allowed: 3 hours*

- 1a. Define Epidemiology.
- b. The definition of epidemiology includes several terms which reflect some important principles of the discipline. Explain some of the terms listed below
  - (i) Determinants
  - (ii) Health-related states or events
  - (iii) Specified populations
- 2a. Differentiate between the following:
  - (i) Asymptomatic carriers and incubatory carriers
  - (ii) Convalescent carriers and chronic carriers
- b. What do you understand by natural history of disease?
- 3a. Write short note on the following:
  - (i) Descriptive Epidemiology
  - (ii) Analytical Epidemiology
- b. State the main difference between the following epidemiological study designs
  - (i) Experimental and observational studies
  - (ii) Cohort and case-control studies.
- 4a. Explain the concept of Herd immunity.
- b. Write short notes on Nosocomical infections
- c. State four possible ways through which prevention and control of noscomical urinary tract infection can be achieved.
- 5a. Explain the following terms relating to disease levels
  - (i) Endemic
  - (ii) Epidemic
  - (iii) Pandemic
- b. Differentiate between common source outbreak and propagated outbreak.
- 6a. One of the ways through which influenza viruses change is called "antigenic drift". Discuss.
- b. Differentiate between antigenic drift and antigenic shift.
- 7a (i) What is zoonosis
- (ii) Differentiate between Enzootic and Epizootic
- b. Explain vividly the sequence or processes that are involved in the chain of infection.