



FEDERAL UNIVERSITY OF TECHNOLOGY, MINNA
SCHOOL OF LIFE SCIENCES
DEPARTMENT OF MICROBIOLOGY
FIRST SEMESTER EXAMINATION 2016/2017 SESSION

COURSE CODE: MCB 414

COURSE TITLE: PRINCIPLE OF EPIDEMIOLOGY AND PUBLIC HEALTH (3 UNITS)

CLASS: 400 LEVEL

TIME: 2 HOURS

Instruction: Answer any 4 questions

1. (a) Differentiate between the following pairs as they relate to epidemiological study:
 - (i) Epidemic and endemic
 - (ii) Pathogenicity and infectivity
 - (iii) Incidence rate and prevalence rate
 - (iv) Herd immunity and risk factors(b) How would you control an epidemic of a reported case of typhoid fever in your locality?
2. (a) Describe the various steps involved in epidemiological investigation.
(b) In 2016, a study was carried out regarding an outbreak of Flu in Bosso with a population of 150, 800. Using 1000 as a constant, determine the incident rate if the number of new cases is given as 100 and if 560 are already diagnosed with Flu before 2016.
3. Explain in details the strategies you can use to effectively control the spread of communicable disease from one state to another in Nigeria.
4. Discuss Nosocomial infection
5. Write short note on antigenic shift and antigenic drift and explain their effect on the efficacy of vaccines against specific pathogens.
6. Explain the spectrum of disease