

FEDERAL UNIVERSITY OF TECHNOLOGY, MINNA

DEPARTMENT OF PLANT BIOLOGY

MTECH SECOND SEMESTER EXAMINATION 2018/2019 COURSE CODE: BOT 724

COURSE TITLE: PLANT DISEASE EPIDEMIOLOGY

CREDIT UNIT: 3

TIME ALLOWED: 3 HOURS

INSTRUCTION: ANSWER ANY FOUR QUESTIONS

1. a. Give a concise meaning of epidemiology.
b. i. Write notes on the development of epidemiology.
ii. What are the prerequisites for the development of epidemic?
2. "Plant disease epidemic develops as a result of the timely combination of the same elements that result in plant disease." Discuss.
3. Explain the measurement of plant diseases and of yield loss under the following headings:
i. Incidence of the disease ii. Severity of the disease iii. Yield loss caused by the disease.
4. Explain how interactions of the structural elements of epidemics as influenced over time by factors of environment and human interference are expressed in patterns and rates.
5. a. Write notes on any three of the followings:
i. Disease diagnosis ii. Evaluation of epidemic thresholds iii. Evaluation of economic damage threshold iv. Assessment of initial inoculum of disease.
b. To what extent is forecasting useful in disease management?
6. Succinctly examine the contributions of modern tools in the study of plant disease epidemic.