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**FEDERAL UNIVERSITY OF TECHNOLOGY, OWERRI
SCHOOL OF AGRICULTURE AND AGRICULTURAL TECHNOLOGY
DEPARTMENT OF CROP SCIENCE AND TECHNOLOGY
2018/2019 Rain Semester Examination**

Course code: CST 512: Course Title: Plant Pathology 11

Time allowed: 3 hrs.

Instructions: Answer any four Questions.

- 1(a) Briefly discuss how crop density can affect the rate of disease spread and how it can be manipulated to reduce disease spread in the field.
 - (b) Briefly discuss the disadvantages and advantages of mulching and soil amendments in relation to diseases spread and improvement of the soil.
 - (c) Briefly discuss the effects of the application of nitrogen fertilizer on crops in relation to disease development.
- 2(a) The assessment of plant diseases and their effects on yield involves five distinct processes. Discuss.
 - (b) Write short notes on the following: (i) Experimental approach of assessing diseases. (ii) Statistical approach of assessing diseases.
- 3(a) List the seven (7) principles of plant disease management.
 - (b) Discuss any four (4) of these principles with examples.
- 4(a) Outline the ecological factors that influence crop disease incidence.
 - (b) How do the following ecological variables impact on crop disease incidence and severity: (i) Wind (ii) Temperature (iii) Moisture.
- 5(a) Discuss the importance of assessing yield and crop loss in any agricultural research programme that has plant protection as a component.
 - (b) Explain explicitly why plant pathology evolved into its own Science.
 - (c) Define the following terms: (i) Yield loss (ii) Economic damage threshold (iii) Crop injury (iv) Crop damage.