FEDERAL UNIVERSITY OF TECHNOLOGY, OWERRI
SCHOOL OF AGRICULTURE AND AGRICULTURAL TECHNOLOGY
DEPARTMENT OF CROP SCIENCE AND TECHNOLOGY
2016/2017 HARMATTAN SEMESTER EXAMINATIONS

COURSE TITLE: CROP DISEASES AND THEIR CONTROL
COURSE CODE: CST 301
TIME ALLOWED: 3 HOURS
INSTRUCTION: ANSWER FIVE QUESTIONS, AT LEAST ONE FROM EACH SECTION

SECTION A

1. Write short notes on the following:
(a)Pathogen (b) Pathogenicity (c) Disorder (d) Inoculum (e)Biotroph (f) Systemic infection (g) Epiphytotic

2. Briefly distinguish between the following terms:
(i) Septate and non-septate hypha (ii) Intercellular mycelium and intracellular mycelium
(iii) Vegetative mycelium and reproductive mycelium

SECTION B

3(a) What are Bacteria?
(b)With the aid of a diagram describe the growth curve of a typical Bacteria cell.

4. (a)What are Mycoplasma-like orgamisms?
(b)What are the morphological features of mycoplasmas that distinguish them from most other organisms?

SECTION C

5. Discuss Rice blast under the following subtitles: (i) Transmission and spread (ii)Symptoms and damage (iii)Prevention and control

6.(a)Describe one (1) named disease of Mango (*Mangifera indica*), stating the following:
(i)Causal organism (ii) Symptoms (iii) Conditions for development (iv) Control strategies
(b)(i)Give the common name for the disease caused by *Erwinia carotovora*
(ii)Hot water can be used to control the ..Post..harvest...disease of mango
(iii)The .....is the most susceptible and initial point of infection in chilli pepper
(iv)The removal of diseased plants during inspection in the field is termed as..Roguing.....

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HARMATTAN SEMESTER EXAMINATION

Course code: CST 301: Title: Crop Diseases and their Control

Session: 2018/2019 Date: 14th June 2019

Time allowed: 3 hrs.

Instructions: Answer any five Question.

1. Differenciate between the following: (a) Healthy and diseased plant (b) A parasite and a pathogen (c) Disease and disorder (d) Epidemic and endemic disease.

2. (a) Briefly explain the following structural features of a fungal organism (i) Hausterium (ii) Septate hyphae (iii) Mycelium (iv) Vegetative mycelium
(b) Briefly discuss reproduction in fungus
(c) From the classification of fungi proposed by G.C. Ainsworth (1975) and J.Webster (1980), diagramatically show the following: (i) Division of fungi (ii) The classes of one division.

3. Describe the Anthracnose disease of mangoes under the following headings: (i) Biological name of plant (ii) Causal organism of disease (iii) Two (2) observable symptoms (iv) Two (2) conditions for development (v) Two (2) management practices.

4. (a) State conventionally the causative agents of the following crop diseases (i) African cassava mosaic disease (ii) Stalk and ear rot (iii) Maize rust (iv) Cassava bacterial blight (v) Corn smut .
(b) With a well – labelled diagram, discuss the transmission and spread of corn smut.

5. (a) State the characteristics of bacteria
(b) Write short notes on the following structures of bacteria (i) Cytoplasmic membrane (ii) Mesosomes (iii) Structure of cell wall (iv) Flagella
(c) State two beneficial and two harmfull activities of bacteria

6. (a) Define a virus and briefly describe its morphology and structure
(b)What is the meaning of disease diagnosis and briefly explain the two methods of diagnosing a diseased plant.
(c) Discuss extensively the economic importance of plant viruses in crop production.