Total No. of Questions: 6 *Total No. of Printed Pages:2*

Enrollment No.....

Faculty of Agriculture

End Sem (Odd) Examination Dec-2018

AG3CO05 Fundamentals of Plant Pathology

Programme: B.Sc. (Ag.) Branch/Specialisation: Agriculture

Duration: 3 Hrs. **Maximum Marks: 60**

Note: All questions are compulsory. Internal choices, if any, are indicated. Answers of Q.1 (MCQs) should be written in full instead of only a, b, c or d.

Q.1 i. Bengal famine is caused by **1**
(a) Helminthosporium maydis
(b) Hemileia vastatrix
(c) Bipolaris oryzae
(d) Puccinia graminis tritici

ii. Organism which derive the material they need for growth from living plants are called as **1**
(a) Pathogen (b) Parasite
(c) Pathogenicity (d) All of these

iii. Binomial Nomenclature system is given by **1**
(a) Carolus Linnaeus
(b) Aristotle
(c) Antonie van Leeuwenhoek
(d) None of these

iv. Fungus belong to kingdom - **1**
(a) Ascomycotan (b) Deuteromycotina
(c) Basidiomycotina (d) Fungi (mycotin)

v. Mollicutes are generally Known as_____. **1**
(a) Virus (b) Bacteria (c) Fungi (d) Viroid

vi. Virus is Made-up of_____. **1**
(a) DNA (b) RNA
(c) Both (a) and (b) (d) None of these

vii. Dispersal of fungi through_____. **1**
(a) Air (b) Soil (c) Water (d) All of these

viii. Défense mechanism in plant are: **1**
(a) Plant body (b) Antibody
(c) Plant toxin secretion (d) All of these

ix. Coffee rust arrived in year_____. **1**
(a) 1942 (b) 1845 (c) 1886 (d) 1940

x. Which of the following reservoir of pathogen found in infected host? **1**
(a) Seed (b) Alternate host
(c) Soil (d) None of these

Q.2 i. Define Pathogenesis with example. **2**
ii. Describe the important factors of disease triangle. **3**
iii. Write the characteristics of fungi with suitable example. **5**
OR iv. Define the following Fungus, Bacteria, Phytoplasma, spiroplasma, virus. **5**

Q.3 i. Define Nomenclature. **2**
ii. Describe the binomial system of Nomenclature and mention its important rules. **8**
OR iii. Describe sexual and asexual reproduction of fungus. **8**

Q.4 i. What is parasitism? Give any two suitable examples. **3**
ii. Write the difference between bacteria and mollicute with suitable example. **7**
OR iii. Write the important characteristics of nematodes with example. **7**

Q.5 i. Define disease development and mention its important factor. **4**
ii. Mention the history of plant pathology with special reference to Indian work. **6**
OR iii. Write the role of enzyme, toxins and growth regulators in disease development. **6**

Q.6 Attempt any two:
i. Give the classification of fungicide **5**
ii. Write the principles and methods of plants disease management. **5**
iii. Describe the Phanerogamic plants with suitable example. **5**

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Marking Scheme

AG3CO05 Fundamentals of Plant Pathology

Q.1	i.	Bengal famine is caused by (c) Bipolaris oryzae		**1**
	ii.	Organism which derive the material they need for growth from living plants are called as (b) Parasite		**1**
	iii.	Binomial Nomenclature system is given by (a) Carolus Linnaeus		**1**
	iv.	Fungus belong to kingdom - (d) Fungi (mycotin)		**1**
	v.	Mollicutes are generally Known as_____. (b) Bacteria		**1**
	vi.	Virus is Made-up of_____. (c) Both (a) and (b)		**1**
	vii.	Dispersal of fungi through_____. (d) All of these		**1**
	viii.	Défense mechanism in plant are: (d) All of these		**1**
	ix.	Coffee rust arrived in year_____. (c) 1886		**1**
	x.	Which of the following reservoir of pathogen found in infected host? (d) None of these		**1**
Q.2	i.	Definition Pathogenesis Example.	1 mark 1 mark	**2**
	ii.	Factors of disease triangle. Description Diagram	 2 marks 1 mark	**3**
	iii.	Characteristics of fungi Example.	4 marks 1 mark	**5**
OR	iv.	Define the following Fungus, Bacteria, Phytoplasma, spiroplasma, virus 1 mark for each point	 (1 mark *5)	**5**
Q.3	i.	Define Nomenclature. Scientist name Definition	 1 mark 1 mark	**2**
	ii.	Binomial system of Nomenclature Description Its important rules.	 4 marks 4 marks	**8**
OR	iii.	Describe sexual and asexual reproduction of fungus. Sexual reproduction Asexual reproduction	 4 marks 4 marks	**8**
Q.4	i.	Parasitism definition Any two examples.	1 mark 2 marks	**3**
	ii.	Difference b/w bacteria and mollicute Example.	5 marks 2 marks	**7**
OR	iii.	Characteristics of nematodes Example.	5 marks 2 marks	**7**
Q.5	i.	Define disease development Its important factor.	2 marks 2 marks	**4**
	ii.	History of plant pathology Reference to Indian work.	2 marks 4 marks	**6**
OR	iii.	Role of enzyme Role of toxins Growth regulators in disease development.	2 marks 2 marks 2 marks	**6**
Q.6		Attempt any two:		
	i.	Classification of fungicide		**5**
	ii.	Principles of plants disease management Methods of plants disease management.	2 marks 3 marks	**5**
	iii.	Phanerogamic plants Example.	2 marks 3 marks	**5**

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