

Total No. of Questions: 6

Total No. of Printed Pages:3

Enrollment No.....



Faculty of Agriculture
End Sem Examination Dec 2024
AG3CO34

Principles of Integrated Pest & Disease Management

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

Duration: 3 Hrs.

Maximum Marks: 50

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. Assume suitable data if necessary. Notations and symbols have their usual meaning.

		[2]		[3]
v.	The average population of insect over a long period of time unaffected by temporary interventions of pest control.	1	1 2 3 1	ii. Summarize the horizontal resistance and vertical resistance.
	(a) Economic Threshold Levels			iii. Illustrate the host plant resistance? Explain the mechanism of host plant resistance.
	(b) Damaging Boundary			OR iv. Describe the biological control and explain briefly all its points.
	(c) General Equilibrium Position			
	(d) Economic Injury Levels			
vi.	Father of HPR _____. (a) Kogan (b) Rachel Carson (c) R.H. Painter (d) Frisbie and Adkisson	1	1 1 3 11	Q.4 i. Summarize the safe use of pesticides.
vii.	Which trap is helps to trap ground beetles? (a) Bait trap (b) Fishmeal trap (c) Probe trap (d) Pitfall trap	1	1 1 4 4	ii. Interpret the different classes of quarantine.
viii.	As an intercrop in Groundnut with bajra will reduce the level of incidence of _____. (a) "Helicoverpa armigera" (b) Stem borer (c) Shoot and root borer (d) Thrips	1	1 1 4 1	OR iii. Describe the physical methods of insect control and explain briefly all its points.
ix.	Provides information on pest level over large area is called _____. (a) Fixed plot survey (b) Absolute sampling (c) Roving survey (d) Relative sampling	1	1 1 5 3	Q.5 i. Enlist any five pests accidentally introduced into India with their native place and year.
x.	Grease banding around mango tree trunk is necessary to control- (a) Mango stem borer (b) Mango mealy bug (c) Mango hopper (d) Mango fruit fly	1	1 2 5 1	ii. Briefly describe the Phytosanitary certificate, DIPA, and types of insect's survey.
				iii. Illustrate the ecological management of crop environment.
				OR iv. Describe the legislative/legal control and explain briefly all its points.
Q.2	i. What do you understand by the principles of IPM? ii. Interpret the various categories of diseases. iii. Define IPDM and explain the basic principles of integrated pest management.	1 2 5	1 1 1 4 2 1 2 4 2 1 1 4	Q.6 i. Attempt any two: Enlist general principals of plant disease management and describe eradication and exclusion techniques.
OR	iv. Describe the cultural control method and explain briefly all its points.	5	1 1 2 4	ii. Describe biological methods of plant disease managements with their appropriate examples.
Q.3	i. Briefly describe the ETL and EIL.	1	1 1 2 4	iii. Illustrate the requirements of implementation of IPM and discuss the IPDM model based on any crop with their diseases.

Marking Scheme

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Q.1 i) d. Smith and Pedigo ii) a. Epidemic iii) d. Regular pest iv) d. All of these v) c. General Equilibrium Position vi) c. R.H. Painter vii) d. Pitfall trap viii) c. Shoot and root borer ix) a. fixed plot survey x) b. Mango mealy bug	1 1 1 1 1 1 1 1 1 1 1	Q.4 i. 2 marks for 4 steps to summarize safe use of pesticides. .5 for each steps. ii. Explain at least 3 classes 2 marks for each classes OR iii. 1 marks each for all points.	2 6 6
Q.2 i. 1 marks on Definition. ii. 1 marks on each categories iii. 2.5 on Definition 2.5 principles in details	1 2 5	Q.5 i. 1 marks for native place with insect name and another 1 marks on their year. ii. 1 marks on Phytosanitary certificate, DIPA and another one marks for types of insects survey involves. iii. 1 mark for each steps OR iv. Describe the Legislative/legal control 2 marks another 2 on summarize their relatives points.	2 2 4 4
OR iv. 1 marks on definition rest of 4 on their methods and types	5	Q.6 Attempt any two: i. 2 marks for general principles of plant disease managements another 2 on describe eradication and exclusions. ii. 1 marks for each steps iii. 2 marks on each steps	4 4 4
Q.3 i. .5 for ETL .5 for EIL ii. 1.5 for Horizontal resistance and 1.5 for Vertical resistance. iii. 2 marks for define host plant resistance another 2 for explain their mechanisms OR iv. 2 marks for their definition of biological control another 2 for their procedure steps involve in it.	1 3 4 4		