

SEAL

R/A/DO/E EXAM.

2021

400574

AGRICULTURE SCIENCE

PAPER—II

Time : 3 hours ]

[ Full Marks : 100

**Notes :** (i) Answer the questions as directed.

(ii) The figures in the right-hand margin indicate full marks for the questions.

(iii) Answer *any five* questions.

1. (a) Define IDM. Describe the principles of IDM.

2+8=10

(b) Differentiate between the following :

2×5=10

(i) Inoculum potential and Disease potential

(ii) Incubation period and Latent period

(iii) Enzymes and Toxins

(iv) Endemic and Pandemic

(v) Gene pyramiding and Gene deployment

2. Write the diagnostic symptoms and control measures of the following diseases :

4×5=20

(a) Citrus greening

(b) Bacterial leaf blight of rice

(c) Anthracnose of guava

(d) Lethal yellowing of coconut

(e) Northern leaf blight of maize

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3. Write the mark of identification and management of the following insect pests : 4×5=20
- (a) Rice hispa
  - (b) Cabbage butterfly
  - (c) Pulse beetle
  - (d) Fruit fly
  - (e) Banana pseudostem weevil
4. (a) Elaborate the different methods of pest control with special reference to IPM. 10
- (b) How are pesticides classified? Write their physical, chemical and biological properties. 4+6=10
5. (a) Define extension education. What is the role of extension education in agriculture and rural development? 1+4=5
- (b) Write the importance of audio-visual aids in extension programme planning and evaluation. 5
- (c) Write briefly about the different types of audio-visual aids. 10
6. (a) Elaborate the classification of plant virus. 10
- (b) Describe the symptoms of nematode diseases of rice and vegetables. Write in detail the management of nematode diseases of vegetable crops. 5+5=10
7. (a) Enlist different insect pests of citrus. How can you manage these insect pests within IPM framework? 5+5=10
- (b) Discuss about the stored grain pest with reference to their species and management. Write the suitable control measure against rodent. 6+4=10

8. (a) What is law of diminishing returns? Elaborate the factors that affect the law of diminishing returns. 2+8=10
- (b) Write the basic concepts of Economics and Agricultural Economics. Write the importance of Agricultural Economics. 5+5=10
9. (a) What do you mean by farm mechanization? Describe the role of farm mechanization in reducing dredger of work for farm woman. 6
- (b) Write the economic benefits and limitations of agriculture mechanization. 6
- (c) Describe the different systems of soil and water conservation. 8
10. (a) What is post-harvest technology? What is primary and secondary processing? Explain in brief about various food preservation techniques. 10
- (b) Briefly describe the indigenous practices for eco-friendly storage of food grains and seeds. 10