

Cat. No: Pbn.3205

Marks: 80

Title: Principles of Seed Technology(1+1)

Time: 3 hours

I. Define the following:

(10 x 1=10)

1. Sampling intensity.
2. Equilibrium Moisture Content.
3. Off types.
4. Extant variety.

Fill in the blanks:

5. _____ is the removal of undersized/underweight seeds from seed lot.
6. The amount of _____ in the seeds is the most important factor influencing seed viability during storage.
7. The seed testing laboratory at _____ has been notified as Central Seed Testing Laboratory.
8. _____ is known as dipping the seeds in chemicals, soaps and fungicides to kill pathogen.

Multiple Choice:

9. The designated disease of tomato is
a) Anthracnose b) Soft rot c) Phomopsis blight d) Early blight
10. The total duration of protection of field crops under PPV&FRA -2001
a) 9 years b) 12 years c) 15 years d) 18 years

II Write short notes on Any TEN

(10 x 3=30)

1. Classes of improved seeds
2. Physiological maturity.
3. Patent and patent requirements.
4. ISTA.
5. Synchronization in hybrid rice.
6. Types of seed treatment.
7. Electrophoresis method of varietal identification.
8. Characters of quality seed.
9. Fundamental concepts of seed certification.
10. Basic seed cleaning.
11. Problems affecting marketing.
12. Principles of organizing Seed Certification Agency.

III Explain Any SIX of the following

(6 x 5=30)

1. Describe the principle of forced air seed drying. Explain the properties of air and its effect on seed.
2. Briefly explain seed treatment, its benefits and the conditions under which seeds must be treated.
3. Describe the important safeguards for maintaining genetic purity during seed production.
4. Briefly describe the various forms of protection of intellectual properties and discuss the benefits and disadvantages of IPR regime.

5. Describe in brief the foundation and certified seed production in Brinjal.
6. Give a brief account of various statutory bodies and agencies established in India under Seed Act, 1966 and explain the functions of Central Seeds Committee.
7. What are the general principles of storage? Describe various types of storages.
8. Describe the various contaminants to be observed during field inspection along with examples.

IV Write essay on ANY ONE

(1 x 10=10)

1. What is seed certification? Mention its objectives and Outline the procedure of seed certification with brief explanation of each step.
2. Give a brief account of India's seed policy. Explain key features of Seed Bill (2004) and compare the same with Seeds Act (1966).
