

COER University
END SEMESTER EXAMINATION, EVEN SEM 2022-23

Time : 3 hours
Program Name : B.Sc. (Hons.) Agriculture
Course Name : Principles of Seed Technology

Total Marks : 100
Semester : IV
Course Code : BSAG406

Note: All questions are compulsory. No student is allowed to leave the examination hall before the completion of the time.

Q. No 1	Attempt Any Five Parts. Each Question Carries 5 Marks.	CO	BL
(a)	What do you mean by seed technology and discuss the importance of seed technology?	CO 1	1
(b)	Discuss the role of Seed technology in securing food supply.	CO 1	1,2
(c)	What is the definition of seed quality, and what are the different factors that influence seed quality? Evaluate the role of each factor in determining seed quality.	CO 1	1
(d)	Differentiate between genetic purity and physical purity of seeds.	CO 1	1,2
(e)	Define Nucleus seed, Certified seed, Breeder seed and Foundation seed.	CO 1	1
(f)	Explain the terms Seed Marketing and Seed Certification.	CO 1	1,2

Q. No 2	Attempt Any Five Parts. Each Question Carries 5 Marks.	CO	BL
(a)	Describe the minimum Seed Certification Standard for rice crop in foundation and certified seed?	CO 2	2
(b)	Describe the seed production technologies in maize crops.	CO 2	2,6
(c)	What is the seed production technologies in bajra crops?	CO 2	1
(d)	Evaluate the role of environmental factors in determining seed quality.	CO 2	2,6
(e)	Express the Maintenance of genetic purity during seed production Suggestions made by Horne and Suggestions made by Hartmann and Kester.	CO 2	2
(f)	Discuss the steps involved in seed certification for different classes of seed.	CO 2	2,6

Q. No 3	Attempt Any Five Parts. Each Question Carries 5 Marks.	CO	BL
(a)	What are the duties and responsibilities of seed certification officers?	CO 3	1
(b)	Explain the main features of the New Seeds Act, 2002.	CO 3	3
(c)	Explain Seed legislation in India, what are the types of seed legislation. Discuss in detail.	CO 3	4
(d)	Explain Seed drying and different methods of seed drying in detail.	CO 3	3
(e)	What is GMOs and LMOs. Explain Detection methods for GMOs/LMOs?	CO 3	1
(f)	Discuss the various benefits of using certified seed.	CO 3	3

Q. No 4	Attempt Any Five Parts. Each Question Carries 5 Marks.	CO	BL
(a)	What is the Role of WTO and OECD in seed marketing?	CO 4	1
(b)	Describe seeds cleaning and various methods of seed cleaning.	CO 4	4
(c)	Discuss the Varietal identification through Grow Out Test and Electrophoresis Molecular and biochemical test.	CO 4	2
(d)	Discuss some of the key challenges associated with seed marketing.	CO 4	4
(e)	Describe Transgene contamination in non-GM crops.	CO 4	2
(f)	Analyze the term seed packing and explain its methods in detail.	CO 4	4

-----End of Paper-----