

Course Name: Fundamentals of Seed Technology
Course Code: PLS 473
Credits = 02

Learning outcomes:

After completion of the course, the students will be able:

- To understand the seed development process and different ways of its processing
- To examine the various methods of Seed testing
- To explain the concept of hybrid seed production

UNIT-1

Overview of seed Technology: types of seeds and their characteristics. Development of seed and morphology, Difference between monocot and dicot seed, Seed Dormancy, methods of breaking dormancy

UNIT-2

Seed germination: pattern and basic requirement for germination, normal and abnormal seedlings, germination inhibitors, Evaluation of seed related traits

UNIT-3

Seed processing: Methods of seed conditioning, Methods used for seed treatment, Principles of seed storage: various methods for seed storage, factors affecting seed storage, Seed viability, Methods of testing of seed viability

UNIT-4

Overview of seed certification, Function of seed certification agency, Seed Legislation and Act in India, Basic concept of seed pathology and seed entomology.

UNIT-5

Principles and methods of seed production, Importance of seed marketing, Concept of hybrid seed and its production

Reference Books:

1. Agrawal, P. K., (2010). Principles of Seed Technology. Indian Council of Agricultural Research, New Delhi.
2. Agrawal, R.L. (2015). Seed Technology. Oxford & Ibh Publishing Co Pvt Ltd.
3. Basra, A. (2006). Handbook of Seed Science and Technology. CRC Press.
4. Khare, D. and Bhale, M. S. (2014). Seed Technology 2nd Revision. Jain Book