

HANDS ON TRAINING ON SEED QUALITY TESTING



ST ALOYSIUS COLLEGE (AUTONOMOUS)

CERTIFICATE COURSE- BOTANY

HANDS ON TRAINING ON SEED QUALITY TESTING

(10 HOURS THEORY + 15 HOURS PRACTICAL DEMONSTRATION + 3 HOURS ASSIGNMENTS + 2 HOURS FINAL ASSESSMENT) - 30HOURS

THEORY

UNIT1: BRIEF OUTLINE OF SEED TECHNOLOGY 2 hrs

Introduction, definition and importance of Seed Technology. Seed morphology, Differences between seed and grain, characters of good quality seed.

UNIT 2: SEED PRODUCTION 2 hrs

Principles of Seed Production, Traditional seed production- Cultural practices, Crop rotation, certified seed production- Nucleus seed, breeders seed, certified seed

UNIT 3: SEED DORMANCY 2 hrs

Seed Dormancy- definition, Causes and Breaking of seed dormancy. Brief note on Recalcitrant seeds and orthodox seeds.

UNIT 4: SEED PROCESSING AND MARKETING 4 hrs

Seed Processing- A brief note on seed drying, seed cleaning and upgrading, seed storage, seed treatment
Seed Marketing- Basic concepts, supply & demand, marketing strategies

PRACTICALS

**UNIT 5: SEED QUALITY TESTING 15
hrs**

An outline of seed pathology, seed borne diseases and its economic significance. Seed borne fungi, Bacteria, viruses and nematodes.

Salient features of Seed Health Testing, ISTA

Hands on training on Seed Health Testing –Seed sampling, purity analysis, seed viability, seed germination and vigour, seed moisture determination, methods to detect seed borne diseases.

Assignments – 3 hours

Test Your knowledge - 2 hours

References

Agarwal RL. 1997. Seed Technology. 2nd Ed. Oxford & IBH.

Neerghard P 1977 Seed Pathology Vol 1 , Mac Millan