# ST.JOSEPH'S COLLEGE FOR WOMEN (AUTONOMOUS), VISAKHAPATNAMV SEMESTERBIOTECHNOLOGYBTH 5753 (2)TECHNIQUES IN NURSERY DEVELOPMENTMax. Marks: 50(Skill enhancement course (Elective)

W.e.f 20AH Batch

## PRACTICAL SYLLABUS – IIIA

#### **OBJCECTIVE:** To enable the students to

- > To enable the students to learn the techniques of Nursery and its management
- Acquire the techniques, managerial methods and weed & pest management in Nursery

#### **COURSE OUTCOMES: Students will**

- **CO1:** Be able to list out different types of nurseries and beds
- **CO2:** Indentify the nursery tools, implements and containers.
- **CO3:** Develop skill on potting media preparation and plant production
- **CO4:** Learn the technique of establishing cutting, layering, grafting etc.

#### **PRACTICAL COURSE:**

- 1. Demonstration of different types of nurseries
- 2. Handling of nursery tools, equipment and types of containers
- 3. Laying of nursery bed with soil and compost
- 4. Seed collection, treatment and rising of seedlings on nurserybed
- 5. Handling of grafting and layering techniques in the nursery
- 6. Watering, weeding and management of nursery
- 7. Maintaining of the seedlings / cuttings in the nursery

#### REFERENCES

- 1. Ratha Krishnan, M., et al. (2014) Plant Nursery
- 2. Management: Principles and Practices, Central Arid Zone Research Institute– ICMR, Jodhpur, Rajasthan.
- 3. Vikas Kumar, Anjali Tiwari, Practical manual of Nursery management, Agri biotech Press, New Delhi.
- 4. Tarai Ranjan Kumar, (2020) Plant propagation and nursery management, New India Publishers.
- 5. P.K.Ray, (2020) Essentials of plant nursery management.
- 6. P.K.Ray, (2012) How to start and operate a Plant Nursery.

## I. Co-curricular activities:

## a) Mandatory: (Training of students by teacher on field related skills:15hrs)

- 1. For teachers: Training of students by teacher in laboratory and field for a total of 15hrs on nursery types and infrastructure of a nursery. Pre sowing treatment and seed sowing methods. Plucking, transplantation, layering and grafting methods
- **2.** For students; Visit to local nursery farm, observing the crop growth raised in nurseries. Submission of field work report of 10 pages in the prescribed format.
- 3. Maximum marks for field work report: 05
- **4.** Suggested format for field work report: Title page, student details, content page, introduction, work done, findings, conclusion and acknowledgements.
- 5. Unit test(IE)

#### b) Suggested co-curricular activities:

- **1.** Visit to local nurseries
- 2. Learning techniques of basic tools and instruments handling related to fieldwork
- 3. Sowing of seeds by adopting different methods, grafting and layeringtechniques
- 4. Training of students by related subject experts
- 5. Attending special lectures, group discussions and seminars on related topics
- 6. Preparation of videos on nursery media preparation and application

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