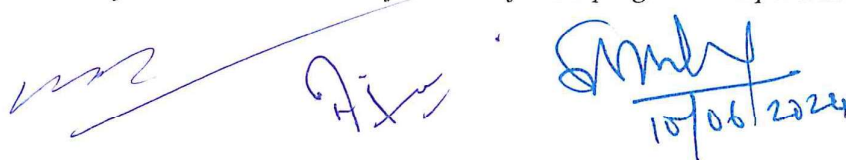


FOUR YEAR UNDERGRADUATE PROGRAM (2024-28)
DEPARTMENT OF FORESTRY & WILDLIFE
COURSE CURRICULUM
SKILL ENHANCEMENT COURSE (1+1 = 2 Credit)

PART-A: Introduction			
Program: Bachelor in Life Science (Diploma/Degree/Honors/Honors with Research)		Semester- IV	Session: 2024-2025
1	Course Code	FOSEC-2	
2	Course Title	Hi-Tech Plant Nursery Technology	
3	Course Type	Skill Enhancement Course (SEC)	
4	Pre-requisite (if any)	As per Programme requirement	
5	Course Learning Outcome (CLO)	The graduates/postgraduates. students able to demonstrate the acquisition of: <ul style="list-style-type: none"> • Acquire skills of nursery establishment plan and Hi-Tech plant nursery. • Able to enhance skill proficiency in developing quality planting materials. 	
6	Credit Value	1+1=2 C	(Credit = 15 Hours- learning & Observation and 30 hrs for Practical/ field work)
7	Total Marks	Maximum Marks: 50	Minimum passing Marks: 20

PART- B: Content of the Course		
Total No. of Teaching- learning Periods - 15 Periods (15 Hours) & Lab. Or Field learning/Training 30 Periods (30 Hours)		
Unit	Topics (Course Contents)	No. of Period
Theory Contents	Introduction, Significance of nursery; Types, criteria for nursery sites, area and nursery bed; Seed sowing: Methods, seed quantity, sowing time, Pre & post care and management. Importance and Techniques of soil working and transplanting; nursery tools; plant containers; potting media; timing-out and culling, weeding and their controlled measures. Improvement of nursery soil: Green manuring; Organic compost/manure; Farm yard manure (FYM); Bio-fertilizers; Mycorrhiza and fertilizer application. Plant propagation: Seed collection: seed handling and storage. Macro-propagation and micro-propagation techniques. Hi-tech- Green house & Mist chamber establishment and importance. Growth	15



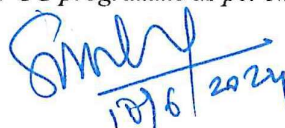


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 10/06/2024

	hormones and their uses.	
Lab/ Field Contents	<ol style="list-style-type: none"> 1. Site Selection: Assess and choose suitable nursery sites. 2. Seed collection, seed handling and storage. 3. Sowing Techniques: Practice of different seed sowing methods. 4. Nursery bed preparation method and technique. 5. Seedling Care: seedling management skills. 6. Propagation: Gain hands-on experience in propagation methods & techniques. 7. Preparation of nursery inventory and planting record-keeping. 8. Practice of transplanting seedlings and plantation Establishment. 9. Identification and control of nursery pests and diseases. 10. Equipment handling training: Make acquainted with nursery tools and equipment. 11. Visit to Hi-tech nursery to get experience in technological advancement in quality seedling production. 	30
Keywords- Nursery, FYM, Green Manure, Mycorrhiza, green House & Mist Chamber etc		

PART- C
Learning Resources: Text Book, Reference Book, Others
Text Books Recommended-
<ol style="list-style-type: none"> 1. Khanna, L.S. (1989). Principles and Practice of Silviculture. Khanna Bandhu, New Delhi, 473p. 2. Luna, R.K. (1988). Plantation Forestry in India. International Book Distributors, Dehradun. p 476. 3. Negi, S.S. (1990). A Handbook of Forestry, International Book Distributors, Dehradun, 690p. 4. Kumar, V. (1995). Nursery and Plantation practices in Forestry. Scientific Publishers Jodhpur. 5. Ram Prakash, Chaudhari, D.C. and Negi, S.S. (1998). Plantation and nursery techniques of forest trees. International book Distributors, Dehradun. 452p 6. Agrawal, R.L. (1986). Seed Technology. Oxford - IBH Publishing Co. New Delhi 7. ISTA. (1993). International Rules for Seed Testing Rules. International Seed Testing Association, Zurich, Switzerland. 8. Chaturvedi, A.N. (1994). Technology of forest nurseries, Khanna Bandhu, Dehradun. 9. Duryea, M. L. and Landis, T.D. (1984). Forest nursery manual: Production of bare root seedlings. Martinus Nijhoff. The Hague. 385 p. 10. Jackson, M.B. (1980). New root formation in plant and cuttings, Martinus Nijhoff Publishers, The Netherlands.

11. Panwar, P. and Bharadwaj, S. D. (2005). Handbook of Practical forestry, AGROBIOS, Jodhapur. 191 p.

Online Resources-

PART -D: Assessment and Evaluation

Suggested Continuous Evaluation Methods:

Maximum Marks : 50 Marks

Continuous Internal Assessment (CIA) : 15 Marks

End Semester Exam (ESE) : 35 Marks

Continuous Internal Assessment (CIA): (By Course Teacher)	Internal Test / Quiz-(2) : 10 / 10	Better marks out of the two Test / Quiz + obtained marks in Assignment shall be considered against 15 Marks
	Assignment/Seminar + Attendance - 05 Total Marks - 15	
End Semester Exam(ESE):	Laboratory / Field Skill Performance: On spot Assessment A. Performed the Task based on lab. work - 20 Marks B. Spotting based on tools & technology (written) – 10 Marks C. Viva-voce (based on principle/technology) - 05 Marks	Managed by Course teacher as per lab. status

Signature of Convener & Members (CBoS)

