Affiliated to Adikavi Nannaya University Jagannaickpur, Kakinada.

DEPARTMENT OF BOTANY & HORTICULTURE



CERTIFICATE COURSE

on

"MODERN GARDENING TECHNIQUES"

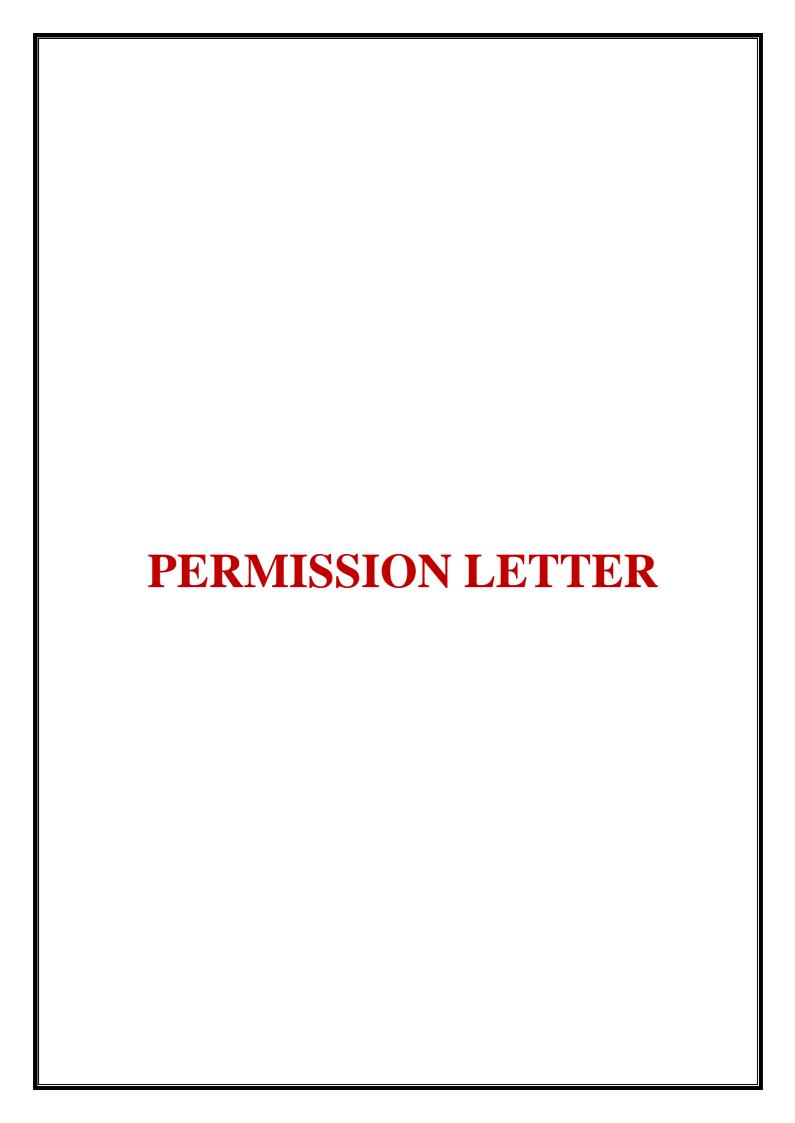
2024-2025

Affiliated to Adikavi Nannaya University Jagannaickpur, Kakinada.

DEPARTMENT OF BOTANY & HORTICULTURE

Activity Register 2024-2025

Date	27-01-2025 to 24-03-2025
Conducted through (DRC/JKC/ELF/NCC/NSS/Department etc.,)	Department of Botany & Horticulture
Nature of Activity (seminar/workshop/exten Lecture etc)	Certificate Course
Title of the Activity	Modern Gardening Techniques
Name of the Department/ Committee	Department of Botany & Horticulture
Details of Resourc persons (Name, Designation etc.,)	K.N.V.S.N.Eswari Lecturer in Botany Dr.M.Sulakshana Lecturer in Botany N.Pushpa Lecturer in Botany
No. of students participated	23
Brief Report on the activity	To get the students acquainted with Gardening Techniques .
Name of the Lecturers who planned & conducted the activity	K.N.V.S.N.Eswari Lecturer in Botany Dr.M.Sulakshana Lecturer in Botany N.Pushpa Lecturer in Botany
Signature of the Department In-charge/ Convener of the Committee	Department of sotany Incharge in Botany FD. Govl. Degree College for Worne KAKNADA
Signature of the Principal	A.S.D.GOVT.DEGE COLLEGE (W.
Remarks	



Kakinada,

Date: 20-01-2025.

From
K.N.V.S.N.ESWARI
Lecturer Incharge
Department of Botany
A.S.D. Government Degree College(W),(A)
Kakinada.

To The Principal, A.S.D. Government Degree College (W) (A), Kakinada.

Respected Madam,

Sub: Department of Botany - Request for Permission to initiate a Certificate Course in Modern Gardening Techniques for I year U.G students Reg.

The Department of Botany is going to offer a Certificate Course in "Modern Gardening Techniques" for I year U.G students for the year 2024-25. In this regard, I request you to kindly give us permission to launch the course for the year 2024-25. A copy of the syllabus is enclosed herewith for your kind perusal.

Thanking you Madam

Yours Faithfully,

Department of wotany
Incharge in Botany

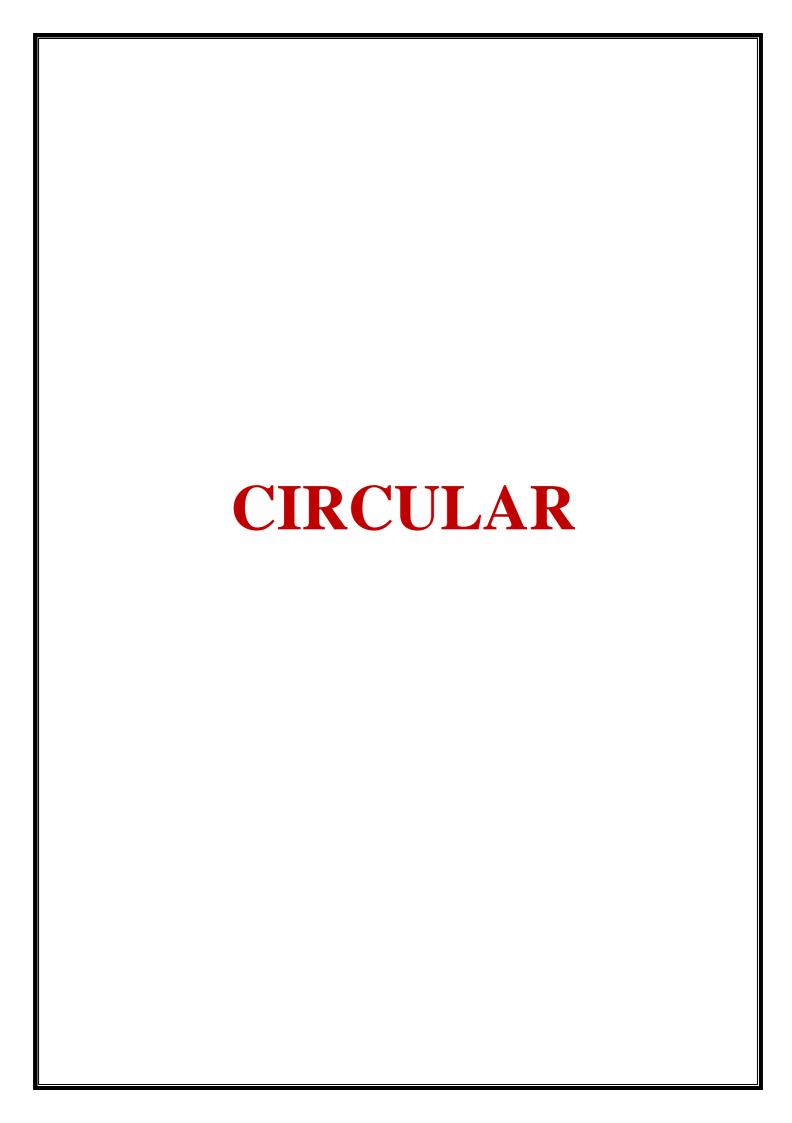
F.D. Govi. Degree College for Work

MAKNADA

Copy to

1. Controller of Examinations

2.IQAC Coordinator



Affiliated to Adikavi Nannaya University Jagannaickpur, Kakinada.

DEPARTMENT OF BOTANY & HORTICULTURE

CIRCULAR



Date: 21-01-2025

The Department of Botany & Horticulture wishes to organize the Certificate Course on "Modern Gardening Techniques" with the duration from **27-01-2025 to 24-03-2025** for I B.Sc.(Botany -Honours) students to enhance their **Propagation Skills.**

Note:

• Interested students can give their names to Ms.N.Pushpa, Lecturer in Botany, Department of on or before 24-01-2025.

• Timings: 3.00 PM to 4.00 PM

In-charge of the Department

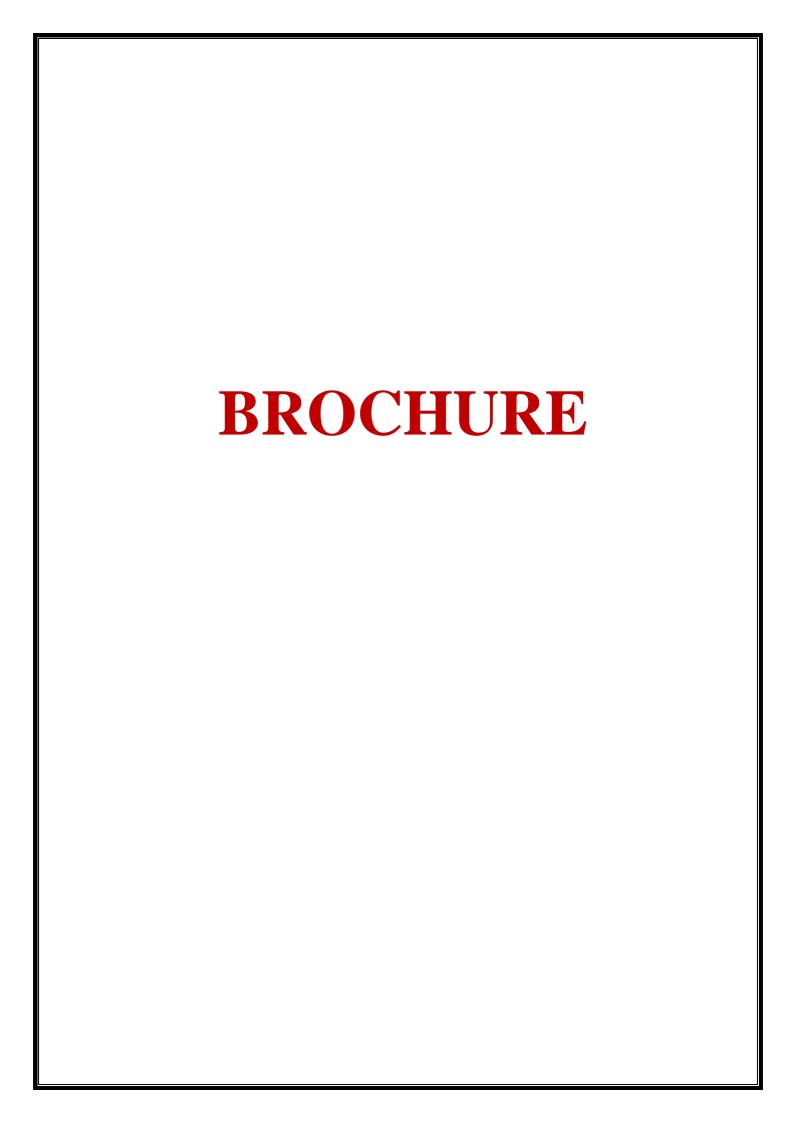
Department of votany
Incharge in Sotany
Incharge in Sotany

ARNADA

A.S.D.GOVT.DEGREE COLLEGE (M. AUTONOMOUS

V. NO O PRINCIPAL

Principal



(Re-Accredited by NAAC with 'B')

KAKINADA 533002, EASTGODAVARI, ANDHRA PRADESH

DEPARTMENT OF BOTANY & HORTICULTURE

NOTICE

Department of Botany and Horticulture offering Certificate Course on

MODERN GARDENING TECHNIQUES

Objectives:

- 1. Maximize Yield and Efficiency
- 2. Sustainability
- 3. Pest and Disease Management
- 4. Water Conservation
- 5. Improved Crop Quality



Students Intake -23



Course Starts on 27.1.2025

Interested students can enroll their names in the Department of Botany & Horticulture

Affiliated to Adikavi Nannaya University

Jagannaickpur, Kakinada.

DEPARTMENT OF Botany & Horticulture

Certificate Course

on

" Modern Gardening Techniques "

Duration : 45 Hours

Teaching Hours : **45** Hours

Students Intake : 23

Eligibility : I year U.G students

Course Objectives: Objectives of Modern Gardening Techniques

6. Maximize Yield and Efficiency

o Increase productivity per unit area.

7. Sustainability

o Use eco-friendly practices like organic fertilizers and integrated pest management.

8. Pest and Disease Management

o Reduce crop loss by using modern pest control techniques..

9. Water Conservation

o Improve soil moisture retention.

10. Improved Crop Quality

o Enhance the nutritional value, taste, and appearance of plants.

Course Outcomes: Modern Gardening Techniques

1. Higher Crop Yields

o More produce from smaller or the same amount of land.

2. Reduced Resource Waste

o Lower water and fertilizer consumption.

3. Better Plant Health and Quality

o Healthier and more nutritious fruits, vegetables, and flowers.

4. Lower Environmental Impact

o Reduced use of harmful pesticides.

5. Economic Benefits

o Higher income from better quality and quantity of produce.

Evaluation Process:

Assessment of candidates will be done through theoretical examination after completion of each module. All successful candidates willbe awarded with certificates

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Certificate Course on Modern Gardening Techniques Syllabus 2024-25

Department of Botany & Horticulture

UNIT: I Propagation techniques

- Cuttings: Definition, propagation by root, leaf and stem cuttings.
- Layering: Definition, techniques of simple, serpentine, mound, trench and air layering.
- Grafting : Definition; different types of grafting techniques.
- Budding: Definition; techniques of T-, inverted, patch and chip budding.

Unit: II Gardening Techniques

- Terrariums & Miniature Gardens
- Gardening in tubs/urns,
- Bottle Garden
- Vertical garden
- Types of containers for indoor plants
- Preparation of hanging baskets

Unit : III Hydroponics and Bonsai

- Hydroponics : Commercial Aspects and Recent Advancements
- Hydroponics: Techniques and Media.
- Culture of Bonsai
- Art of Making Bonsai
- Potting, Repotting, Depotting

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KAKINADA 533002 EASTGODAVARI, ANDHRA PRADESH I Year B.Sc Degree examinations at II Semester End Certificate course- Modern Gardening Techniques Model Paper

Time :2 hrs Max marks:40M

SECTION-A

Answer Any TEN of the following questions

10x2 = 20M

- 1. Explain Softwood cutting (L2)
- 2. What is Tongue Grafting (L1)
- 3. Explain Chip Budding (L2)
- 4. What is Trench Layering (L1)
- 5. What are the types of containers (L1)
- 6. Define Terrariums (L1)
- 7. Discuss Bottle Garden concept (L6)
- 8. What are the Plants suitable for Vertical Gardening (L1)
- 9. Explain Hydroponics media preparation (L5)
- 10. What are the Recent advancements in Hydroponics (L1)
- 11. Explain Potting and Repotting (L5)
- 12. What are Bonsai Plants (L1)

SECTION-B

Answer any FOUR of the following Questions

4x5 = 20M

- 13. Define Cutting? Explain different propagation techniques (L1 & L5)
- 14. Define Grafting? Explain different Grafting Techniques (L1 & L5)
- 15. Write about the Miniature Gardening (L6)
- 16. Explain the process of preparation of Hanging Baskets (L5)
- 17. Describe about the Hydroponics Technique (L2)
- 18. Explain the Art of making Bonsai (L5)

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I Year B.Sc Degree examinations at II Semester End Certificate course- Modern Gardening Techniques 2024-2025

BLUE PRINT FOR QUESTION PAPER SETTER

UNIT	Title of the paper	SAQ	VSAQ	Marks allotted to the Module
UNIT I	Propagation Techniques	2	4	18
UNIT II	Gardening Techniques	2	4	18
UNIT III	Hydrophonics and Bonsai	2	4	18
	Total marks allotted to all question including choice			54

Note: Question paper setters are requested to adhere strictly to the above blue print while preparing the said paper

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I Year B.Sc Degree Examinations at II Semester End Certificate course - Modern Gardening Techniques 2024-2025

WEIGHTAGE OF THE COURSE CONTENT

S.No	Unit	Sec-A Questions 2 marks	Sec-B Questions 5 marks	Marks Allotted
1	Unit – I	4	2	18
2	Unit – II	4	2	18
3	Unit – III	4	2	18
Total Marks				54

Note: Semester end Theory examination to be conducted for 50 marks.

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I Year B.Sc Degree Examinations at II Semester End Certificate

course - Modern Gardening Techniques 2024-2025

Certificate course enrolled students

S.No	H. T No.	ame of the Student
1	2138053	RAYUDU APARNA
2	2138019	BALASADI NAGESWARI
3	2138020	KOMMANABOYINA UDAYASURYA
4	2138057	MUCHIKA SHAILAJA
5	2138035	BATHULA LAVANYA SRI
6	2138046	DADALA LAKSHMI
7	2138011	GORAM PADMA
8	2138006	GANTHA LALITHA SIVA NAGA DURGA
9	2138026	TEEGALA DIVYA
10	2138047	PIRADHI LALITHA MAHESWARI
11	2138045	YARRA KUMARI
12	2138049	KURA SARASWATHI
13	2138024	KALADI KAMESWARI
14	2138033	PALIVELA PADMASRI
15	2138017	INDURTHI SAILAJA
16	2138037	KONA ASLESHA

17	2138008	MAKIREDDY VASANTHA
18	2138025	MADIVI ANUSHA
19	2138039	BATHULA RAMYA SRI
20	2138056	KONA VENKATA JYOTHI
21	2138051	MALLADI DEVI SRI
22	2138013	CHITTUMURI MADHU
23	2138032	PYLA LALITHA

In-Charge of the Department





A.S.D GOVT DEGREE COLLEGE FOR WOMEN (A), KAKINADA

CERTIFICATE COURSE on MODERN GARDENING TECHNIQUES CERTIFICATE

This is to certify that Ms.Rayudu Aparna of IB.Sc Botany Honours has completed 45 Day Certificate Course on "Modern Gardening Techniques" organized by the Department of Botany, A.S.D.Government Degree College for Women(A),Kakinada from 27 Jan 2025 to 24 Mar 2025

Head of the Department

Principal

V. NO.