

## GOVERNMENT DEGREE COLLEGE LUXETTIPET

# CERTIFICATE COURSE BASICS IN GARDENING TECHNOLOGY



PLANT PROPAGATION

**DEPARTMENT OF BOTANY** 

## GOVERNMENT DEGREE COLLEGE,LUXETTIPET PERMISSION LETTER

Date: 2-08-2019

To The Principal Government Degree College Luxettipet

Respected Sir,

Sub: Request for grant of permission to conduct Certificate Course on Basic Gardening Techniques by Department of Botany.

As per the subject cited above I,P.Savitha,Asst. Professor of Botany is intended to conduct a certificate course of 30hrs on Basic Gardening Techniques.Main objective of the course is to enhance the applicative and practical skills in the students which may also help in self employment generation. Schedule for the start date of the certificate course is 17.08.2019. Hence I kindly request you to grant me permission in this regard.

Thanking You

Yours Sincerely

P.Savitha Asst.Prof.of Botany

Permitted
T.K.jL

### GOVERNMENT DEGREE COLLEGE, LUXETTIPET NOTICE

Date: 5.08.2019

All the B.Sc B.Z.C I,II & IIIYr students are hereby informed that interested candidates may register their names for certificate course on Gardening techniques by Botany Department on or before 8.082019. Commencement of course will be from 17.08.2019..Duration of course is 30hrs. Timings of the course will be from 9.00AM to 10.00AM. After completion of the course exam will be conducted and certificates will be awarded. If any queries regarding the course you can contact P. Savitha, Asst. Prof. of Botany.

Department of Botany

Principal

# GOVERNMENT DEGREE COLLEGE, LUXETTIPET BASIC GARDENING TECHNIQUES PLANT PROPAGATION

SYLLABUS FOR CERTIFICATE COURSE

CONTENT	Duration:30hrs
INTRODUCTION	1hr
What is Seed? ,Definition and Importance of Plant propagation.	
Types of Propagation	2hr
Sexual Propagation, Merits of Sexual Propagation, Demerits of Sexual Propagat	
Asexual Propagation, Merits of asexual Propagation, Demerits of asexual Propa	
Plant propagation by cutting	3hr
Definition of Cutting, stem cutting and procedure. Hardwood cutting and procedure semi Hardwood cutting and procedure soft wood cutting and procedure and	dure,
herbaceous cutting and procedure	
Practica	2hr
<u>Leaf cutting</u>	1hr
Definition, selection of cutting Practical	
Practical	
Plant propagation by layering	2hr
Definition of Layering, types of layering, Simple layering, Compound layering,	
Trench layering, Mound layering, Air layering.	
Practical	2hr
Plant propagation by Grafting	4hr
Definition of grafting, advantages of grafting, disadvantages of grafting, Rootstocharacteristics of rootstock, raising of root, Scion, Definition, characteristics of selection of scion, methods of grafting. Scion attached methods, 1. Sliced approachance grafting, Scion detached methods 1. Veneer grafting, 2. Side grafting 3	scion, ch grafting .Wedge
or cleft grafting 4.Stone or epicotyl grafting 4.Whip or splice grafting, 5.Bark a	grafting 2hr

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Grafting 3hr for special purposes Bridge grafting, definition, selection of material, procedure Top working, definition, selection of material, procedure and precautions to be taken. Practical 1hr **Propagation by Budding** 2hr Definition of budding, types of budding, t-budding, patch budding, ring budding, flute budding, forkert budding, chip budding. Practical Tissue culture 1hr Definition, procedure and importance Practical Plant propagation by specialised organs. 2hrs Bulb, Corm, Tuber, Rhizome, Runner, Sucker, Tuberous root. Practical Maintenance of Greenhouse and Polyhouse 2hr Exam on theory and practical 2hrs

Reference: NCERT TEXTBOOK

## GOVERNMENT DEGREE COLLEGE, LUXETTIPET CERTIFICATE COURSE ON BASIC GARDENING TECHNIQUES PLANT PROPAGATION

#### **OBJECTIVES OF THE COURSE**

This is the basic course in gardening techniques .As it is based on applicative methods and involved with practical knowledge, the outcomes of the course will be very useful in generating self employment and also helps in agricultural practices, where most of the students parents are from agricultural background.

#### OUTCOMES OF THE COURSE

- · Development of applicative skills
- Knowledge on growing plants
- Knowledge of asexually and sexually growing plants.
- Attaining practical knowledge for developing a garden.

#### ATTAINMENT OF COURSE OUTCOMES

After the completion of course an exam on objective type questions with 40 marks of theory question paper and one practical exam for 10 marks. Students scoring 40% and above will be given certificates and grades are mentioned for merit students.

### Grading for the Course

Theory + Practical	90-100%	A+Grade
Theory + Practical	80-90%	- A Grade
Theory + Practical	70-80%	-B Grade
Theory + Practical	60-70%	-C Grade
Theory + Practical	50-60%	-D Grade
Theory + Practical	40-50%	-E Grade

Department of Botany

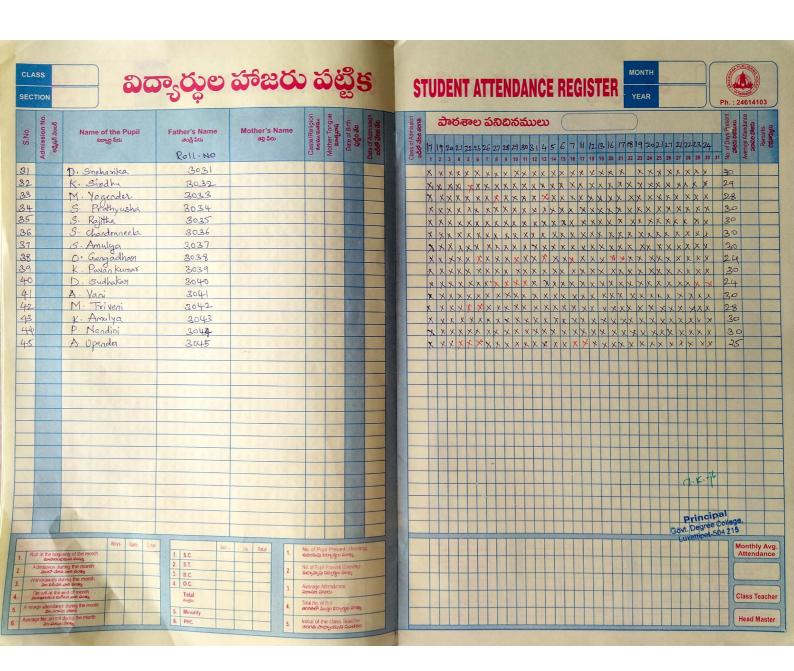
# GOVERNMENT DEGREE COLLEGE,LUXETTIPET STUDENTS REGISTRATION CERTIFICATE COURSE DEPARTMENT OF BOTANY

SI.No	Name of the student	Hall Ticket number	Course and Year	Signature of the students
1.	D. Madhukar	3001	B.Sc B.Z.C IIIYr	D. Medhukan
2.	G. Ganesh	3002	B.Sc B.Z.C IIIYr	G. ganesh
3.	M.Rajitha	3003	B.Sc B.Z.C IIIYr	Rapitha
4.	M. Anusha	3004	B.Sc B.Z.C IIIYr	M. Arusta
5.	M.Sandhya	3005	B.Sc B.Z.C IIIYr	@andy
6	P. Rakesh	3006	B.Sc B.Z.C IIIYr	Rakesh P
7	P. Sravya Sri	3007	B.Sc B.Z.C IIIYr	p. svavya svi
8	R.Umamaheswari	3008	B.Sc B.Z.C IIYr	Umamahesh
9	J. Varalakshmi	3009	B.Sc B.Z.C IIYr	Janalanme: I
10	A. Rajeshwari	3010	B.Sc B.Z.C IIYr	Rage the ase St Sumither &
11	B. Sushmitha	3011	B.Sc B.Z.C IIYr	Qumittan. B
12	E. Krishnaveni	3012	B.Sc B.Z.C IIYr	
13	G. Anjali	3013	B.Sc B.Z.C IIYr	Gr. Anjali
14	K. Mamatha	3014	B.Sc B.Z.C IIYr	15 Mamatha
15	M. Sandhya Rani	3015	B.Sc B.Z.C IIYr	Bardzeni
16	R. Sneha	3016	B.Sc B.Z.C IIYr	Sneha
17	T. Yellavva	3017	B.Sc B.Z.C IYr	Meuada
18	A.Sunitha	3018	B.Sc.B.Z.C IYr	A. Suntha
19	K. Mounika	3019	B.Sc B.Z.C IYr	K.Mounika
20	M.Thirumala	3020	B.Sc.B.Z.C IYr	Thirumala
21	K. Sony	3021	B.Sc.B.Z.C IYr	Duny. k
22	S. Anusha	3022	B.Sc.B.Z.C IYr	S. Amoto

45	A. Opender	3043	B.36.B.2.0111	Cpanas
44.	P. Nandini A. Upender	3044	B.Sc.B.Z.C IYr	P. Mandini Operales
43	K. Amulya	3043	B.Sc.B.Z.C IYr	k. Amilya
42	M. Triveni	3042	B.Sc.B.Z.C IYr	Morris
41	A. Vani	3041	B.Sc.B.Z.C IYr	Vani. A
40	D. Sudhakar	3040	B.Sc.B.Z.C IYr	D. Sudhakae
39.	K. Pavan Kumar	3039	B.Sc B.Z.C IYr	k, Pavan ku
38	O. Gangadhar	3038	B.Sc.B.Z.C IYr	O. Gangadha
37	S.Amulya	3037	B.Sc.B.Z.C IYr	S. Amuly
36	S. Chandraneela	3036	B.Sc.B.Z.C IYr	S-chandra neels
35	S. Rajitha	3035	B.Sc.B.Z.C IYr	S. Rajilha
34	S. Prathyusha	3034	B.Sc.B.Z.C IYr	S. prathywh
33	M. Yogendar	3033	B.Sc.B.Z.C IYr	W. Yogendar
32	K. Sindhu	3032	B.Sc.B.Z.C IYr	Solher.
31	D.Sneharika	3031	B.Sc.B.Z.C IYr	D. Snehavika
30	K. Supriya	3030	B.Sc.B.Z.C IYr	L supriya
29	K. Ramadevi	3029	B.Sc.B.Z.C IYr	K. Ramagevi
28	M. Ramya	3028	B.Sc.B.Z.C IYr	M. Ramya
27	G. Bhavana	3027	B.Sc.B.Z.C IYr	G. Bhavana
26	E. Sreeja	3026	B.Sc.B.Z.C IYr	E. Sreefa
25	Ch. Sahitya	3025	B.Sc.B.Z.C IYr	ch-sality
24	B. Divya	3024	B.Sc.B.Z.C IYr	B. Divya.
23	O. Vamshi	3023	B.Sc.B.Z.C IYr	O. vanshi







### GOVERNMENT DEGREE COLLEGE, LUXETTIPET **EXAMINATION**

BASIC GARDENING TECHNIQUES, CERTIFICATE COURSE

(4-8)	le
50	

Max	imum	mark	ks:50

Roll No: 3025

Time:2hrs		D	Date: 26 0	0.2019
A. Fill in the blanks  1.Multiplication or reproduce	ction of plants is called	Propagation		10 × 2 marks
2. Plants that do not produc	ce seeds are propagated	d by <u>Aserual</u>	reproduction	~
3. Growing of tissues in co	ntrolled conditions is kno	own as Tiss	reproduction ne culture	
4. The process of reproduc	tion of plants by seeds i	s called <u>Sexu</u>	al pro	opagation.
5. Plants propagated by	Seeds live long	ger	ap (b)	
6. In Simple	layering, a partial tong	ue-like cut is giv	en on a branc	ch.
7. Rooted plant on which s	cion is grafted is called	Root stock		
8. The art of inserting a sci	on bud into rootstock is	known as	Budding.	unificate acts
9 T-budding is also known	as Sheild	budding.		
10. Dahlia and caladium ar	e propagated by <u>u</u>	bers	as nyona osi la (di	
B. Multiple Choice Quest	ions			10×2 marks
1. Bryophyllum is propagat				
(a) root cutting	(b) stem cutting			1
(c) leaf cutting	(d) seeds			[ c ]
Jasminum is propagated	by			
(a) root	(b) stem			1
(c) leaf	(d) seed			161
3. Asexually propagated plants				
(a) are true-to-type	(b) bears late fruit			/
(c) live longer	(d) have large canopy			[a]

# GOVERNMENT DEGREE COLLEGE,LUXETTIPET EXAMINATION BASIC GARDENING TECHNIQUES,CERTIFICATE COURSE



Date: 26.10, 2019

Maximum marks:50

Time:2hrs

Roll No : 3021

A. Fill in the blanks     1.Multiplication or reproduction		10 × 2 marks	
2. Plants that do not produce	seeds are propagated by Asexual reprodu	udion	
3. Growing of tissues in contr	seeds are propagated by Asexual reproductive rolled conditions is known as Tissue Cultur	e/	
4. The process of reproduction	on of plants by seeds is called <u>Sexual</u> pro	pagation.	
5. Plants propagated by	seeds live longer		
6. In Simple 1	avering, a partial tongue-like cut is given on a branc	ch_	
7. Rooted plant on which scio	on is grafted is called Root stock		
8. The art of inserting a scion	bud into rootstock is known as <u>Budding</u> .	or wind quit	
9 T-budding is also known as			
10. Dahlia and caladium are	propagated by <u>tubes</u> .		
		10×2 marks	
0 1	gradient de de la company		
<ol><li>Jasminum is propagated b</li><li>(a) root</li></ol>	by (b) stem	1	
	(d) seed	161	
3. Asexually propagated plants .			
	(b) bears late fruit		
(c) live longer	(d) have large canopy	[a]	

# GOVERNMENT DEGREE COLLEGE, LUXETTIPET GRADING SECURED CERTIFICATE COURSE ON GARDENING TECHNIQUES DEPARTMENT OF BOTANY

SI.No	Name of the student	Hall Ticket number	Course and Year	Grades
1.	D. Madhukar	3001	B.Sc.B.Z.C IIIYr	А
2.	G. Ganesh	3002	B.Sc.B.Z.C IIIYr	A
3.	M.Rajitha	3003	B.Sc.B.Z.C IIIYr	AB
4.	M. Anusha	3004	B.Sc.B.Z.C IIIYr	A+
5.	M.Sandhya	3005	B.Sc.B.Z.C IIIYr	A+
6	P. Rakesh	3006	B.Sc.B.Z.C IIIYr	А
7	P. Sravya Sri	3007	B.Sc.B.Z.C IIIYr	A
8	R.Umamaheswari	3008	B.Sc.B.Z.C IIYr	А
9	J. Varalakshmi	3009	B.Sc.B.Z.C IIYr	A+
10	A. Rajeshwari	3010	B.Sc.B.Z.C IIYr	AB
11	B. Sushmitha	3011	B.Sc.B.Z.C IIYr	A
12	E. Krishnaveni	3012	B.Sc.B.Z.C IIYr	A
13	G. Anjali	3013	B.Sc.B.Z.C IIYr	A+
14	K. Mamatha	3014	B.Sc.B.Z.C IIYr	A+
15	M. Sandhya Rani	3015	B.Sc.B.Z.C IIYr	A+
16	R. Sneha	3016	B.Sc.B.Z.C IIYr	A
17	T. Yellavva	3017	B.Sc.B.Z.C IYr	A+
18	A.Sunitha	3018	B.Sc.B.Z.C IYr	A+
19	K. Mounika	3019	B.Sc B.Z.C IYr	А
20	M.Thirumala	3020	B.Sc.B.Z.C IYr	А
21	K. Sony	3021	B.Sc.B.Z.C IYr	А
22	S. Anusha	3022	B.Sc.B.Z.C IYr	A+

23	O. Vamshi	3023	B.Sc.B.Z.C IYr	В
24	B. Divya	3024	B.Sc.B.Z.C IYr	В
25	Ch. Sahitya	3025	B.Sc.B.Z.C IYr	A+
26	E. Sreeja	3026	B.Sc.B.Z.C IYr	A+
27	G. Bhavana	3027	B.Sc.B.Z.C IYr	A+
28	M. Ramya	3028	B.Sc.B.Z.C IYr	A
29	K. Ramadevi	3029	B.Sc.B.Z.C IYr	A
30	K. Supriya	3030	B.Sc.B.Z.C IYr	AB
31	D.Sneharika	3031	B.Sc.B.Z.C IYr	А
32	K. Sindhu	3032	B.Sc.B.Z.C IYr	А
33	M. Yogendar	3033	B.Sc.B.Z.C IYr	А
34	S. Prathyusha	3034	B.Sc.B.Z.C IYr	Α
35	S. Rajitha	3035	B.Sc.B.Z.C IYr	А
36	S. Chandraneela	3036	B.Sc.B.Z.C IYr	А
37	S.Amulya	3037	B.Sc.B.Z.C IYr	A+
38	O. Gangadhar	3038	B.Sc.B.Z.C IYr	A
39.	K. Pavan Kumar	3039	B.Sc B.Z.C IYr	A
40	D. Sudhakar	3040	B.Sc.B.Z.C IYr	A
41	A. Vani	3041	B.Sc.B.Z.C IYr	A+
42	M. Triveni	3042	B.Sc.B.Z.C IYr	А
43	K. Amulya	3043	B.Sc.B.Z.C IYr	A+
44.	P. Nandini	3044	B.Sc.B.Z.C IYr	A+
45	A. Upender	3045	B.Sc.B.Z.C IYr	AB
- pro				

Department of Botany

J.K.j. Principal



# GOVERNMENT DEGREE COLLEGE, LUXETTIPET CERTIFICATE

### GARDENING TECHNIQUES CERTIFICATE COURSE

This is to certify thatCh. Sahitya
This is to certify that
Of B.Sc B.Z.C has completed her/his certificate course in Basic Gardening
Techniques for the academic year 2019-20
course.

DEPARTMENT

RESOURCE PERSON

PRINCIPAL

Principal
Govt. Degree Comp.
Luxettipet-504 215



# GOVERNMENT DEGREE COLLEGE,LUXETTIPET CERTIFICATE

### GARDENING TECHNIQUES CERTIFICATE COURSE

	that — J. Varalaxmi	
Of B.Sc B.Z.C — Tyr—Techniques for the acade course.	that ———————————————————————————————————	course in Basic Gardening uredA+grade in the
^		
DEPARTMENT	RESOURCE PERSON	PRINCIPAL

## GOVERNMENT DEGREE COLLEGE, LUXETTIPET FEEDBACK REPORT

Date: 25.10.2019

Name of the student	q. Vani
Course and Academic year	BZC Ist year
Name of the programme	contificate cocoise on goodes
Questionnaire fo	r the programme
1.Are you satisfied by the programme	Yes
2.What did you learn from the Programme	Goodening techniques
3.ls it useful to improve your skills	Yes
Can you apply this in generating self employment	Yes
4.Any suggestions by you regarding the programme	-

G. Vang SIGNATURE OF THE STUDENT

PROGRAMME COORDINATOR

PRINCIPAL

Principal
Govt. Degree
Luxettipet-Fi

## GOVERNMENT DEGREE COLLEGE,LUXETTIPET FEEDBACK REPORT

Date: 25-10-2019

Name of the student	ch. sahithya
Course and Academic year	BZC-1st year
Name of the programme	certificate Course on gardening techniques
Questionnaire for the programme	
1.Are you satisfied by the programme	Yes
2.What did you learn from the Programme	I learns to grow different types of granden plants
3.ls it useful to improve your skills	Yes
Can you apply this in generating self employment	yes
4.Any suggestions by you regarding the programme	

ch. Sahithya SIGNATURE OF THE STUDENT

PROGRAMME COORDINATOR

PRINCIPAL

# GOVERNMENT DEGREE COLLEGE, LUXETTIPET SUMMARY REPORT CERTIFICATE COURSE ON GARDENING TECHNIQUES DEPARTMENT OF BOTANY

### **OBJECTIVES OF THE COURSE**

To develop skills in gardening techniques which can be used in applicative mode which can generate self employment and also may fetch jobs in horticulture fields.

### **ENROLLMENT**

45 Students have been registered in the course.

### STUDENTS PROGRESS

Course has been completed with 30hrs of classes which include theory and practicals. Students have taken their exam where the paper included 10 fill in the blanks carrying 20 marks, 10 multiple choice questions carrying 20 marks and 10marks for practicals, out of 45 students 41 students have taken their exam and all the students have passed.

#### COURSE OUTCOMES

With this course students have learnt skills in gardening techniques like grafting, budding, layering, maintaining greenhouse and polyhouse etc. This knowledge is very important which is helpful in developing gardens, nursery and in horticultural practices, which may fetch jobs and also useful in self employment generation.

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