

SRI A.S.N.M. GOVERNMENT COLLEGE (A), PALAKOLLU

(Affiliated to Adikavi Nannaya University, Rajahmundry)
(Accredited with NAAC "B" Grade with 2.61 CGPA points)

DEPARTMENT OF HORTICULTURE

MEMBERS OF BOARD OF STUDIES -2021-22

Chair person

: Dr.P.PRASANNA KUMARI
Lecturer in-charge of the Department

P.P. Kumari

Member

: Dr.Y.VIJAYAKUMAR
Lecturer in Botany

University Nominee

: Dr.R.VENKATESH
Lecturer in Botany,
GDC,MUVVA, K.G.Dt.

Subject Expert

: Sri N.NAGESWAR RAO,
Lecturer in Botany,
V.K.V Government Degree College,
Kothapeta, E.G.Dt.

Subject Expert

: Dr.K.Mallikarjuna
Lecturer in Botany,
GOVT.DEFREE College
KOVUR, W.G.Dt

K.M.

Industrialist/Academician/Business man: Mr.B.RagavendraSwamy
GREENLAND NURSERY,
Palakol, W.G.Dt.

Alumni Member

: Smt. P.Suneetha
Lecturer in Botany,
Government Degree College,
ROZOLE, E.G.Dt.

P. Suneetha

Student Representative

: T.KARTIK

III CBZ , *T. Karthika*

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DEPARTMENT OF HORTICULTURE

BOARD OF STUDIES -2021-22

After thorough discussion the following resolutions are made

RESOLUTIONS

Resolution No. 1 : Resolved to approve the syllabi for the 1ST and 2nd semester course of the HORTICULTURE, In papers I&II for adoption and implementation under Revised Choice Based Credit System (RCBCS) w.e.f. the academic year 2021-22 onwards.

Resolution No. 2 : Resolved to approve structure of the question paper, model question papers for HORTICULTURE course of papers I&II with maximum marks 75 of 1ST and 2nd semester end theory examination and abstract of question paper for internal assessment test with maximum marks 25 for adoption and implementation under Revised Choice Based Credit System (RCBCS) w.e.f. the academic year 2021-22 onwards.

Resolution No. 3: It is Unanimously resolved to approve the syllabi, model question papers and break up of practical marks 50 of 1ST and 2nd semester end practical examinations in HORTICULTURE, Course(S) of papers I and II for adoption and implementation under Revised Choice Based Credit System (RCBCS) w.e.f. the academic year 2021-22 onwards.

1. Written -30M
2. Record / Field work -10/05
3. Viva Voice -05

Resolution No. 4 : It is Unanimously resolved to approve the break-up of marks of the Internal assessment test 25 marks in 1ST and 2nd semester in HORTICULTURE course(s), paper I and II as given below from the academic year 2021-22 for adoption and implementation under Revised CBCS . Written examination – 15 Marks, Assignment / Seminar / Multiple Choice questions-5, Extra Curricular Activities – 5 Marks.

Resolution No. 5 : It is unanimously resolved to approve the qualifying marks in HORTICULTURE course(s), papers I and II of I and II Semesters end examinations. Theory examination 40 marks including mid exam marks and practical examination 20 marks.

Resolution No. 6: It is resolved to conduct odd semester practical examinations with internal faculty members with subject teacher and another teacher in the department and even semester practical examination to be conducted involving external examiner.

Resolution No.7 : Resolved to approve the following list of paper setters and examiners for HORTICULTURE course(s).

Resolution No. 8: Resolved to approve the list of recommended text books and reference books which are listed at the end of the syllabi of papers III and IV&V in HORTICULTURE Course(s).

Resolution No.9: Resolved to conduct Guest Lectures and Student Seminars /Study Projects for 1ST and 2nd Semester students for the Academic Year 2021-22.

Resolution No.10: Resolved to approve the measures to discussed to be conduct online classes(Whenever physical appearance of students is not possible) through , Google suit, in all courses of HORTICULTURE for students of B.Sc programme during the academic year 2021-22 as

improbable and unpredictable situation occurred due to prevailing Carona virus disease(Covid-19) Pandemic

Resolution No.11: Resolved to enter into MOUs with reputed Institutions, Organizations, Laboratories, Industries based upon the need of the curriculum, to facilitate faculty exchange programmes etc.,

Resolution No.12: Resolved to procure advanced equipment for laboratories to grade up and procure latest editions of text books, reference books, Journals, e-journals for library to make it more resourceful for both students and faculty members

Signatures of the Committee Members:-

1. P.P. Kumari

2. 

3.

4.

5. K. Murugan

6. P. S. S. S.

7. T. Karthikeyan

SRI A S N M GOVERNMENT COLLEGE, PALAKOL, W.G. DT

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Department of HORTICULTURE

Members of the Board of Studies of HORTICULTURE met on 26-07-2019 at 10 A.M. In the Department of HORTICULTURE

Members Present

Board of studies chair person	: Dr.P.PRASANNA KUMARI	<i>P. P. Kumari</i>
Member of the Department	: DR. Y. Vijayakumar	<i>Y. Vijayakumar</i>
University Representative	: Dr.R.VENKATESH	
Subject Experts	: 1) Dr. K .Mallikarjun	<i>K. Mallikarjun</i>
	2) Sri N.NAGESWAR RAO	
Industrialist/Businessmen	: Sri. Mr.B.RagavendraSwamy	
Alumni	: Smt. P.Suneetha	<i>P. Suneetha</i>
Student Representative	: T.KARTIK	<i>T. Kartik</i>

AGENDA

- Subject No. 1:** To approve the syllabi for the 1ST and 2nd semester course of the HORTICULTURE, In papers I&II for adoption and implementation under Revised Choice Based Credit System (RCBCS) w.e.f. the academic year 2021-22 onwards
- Subject No. 2:** To approve structure of the question paper, model question papers for HORTICULTURE course of papers I&II with maximum marks 75 of 1ST and 2nd semester end theory examination and abstract of question paper for internal assessment test with maximum marks 25 for adoption and implementation under Revised Choice Based Credit System (RCBCS) w.e.f. the academic year 2021-22 onwards
- Subject No. 3:** To approve the syllabi, model question papers and break up of practical marks 50 of 1ST and 2nd semester end practical examinations in B.Sc Courses, of Papers I & II for adoption and implementation under revised Choice Based credit system (RCBCS).w.e.f. the academic year 2021-2022 onwards.
- Subject No. 4:** To approve the break-up of the Internal assessment test marks 25 in 1ST and 2nd semester B.Sc(HORTICULTURE) course of papers I & II for adoption and Implementation under Revised Choice Based Credit system.
- Subject No.5:** To approve the qualifying marks in B.Sc HORTICULTURE Course for papers I & II of 1ST and 2nd semester end theory examination and practical examination for

adoption and implementation under revised CBCS.

Resolution No. 6: To approve to conduct odd semester practical examinations with internal faculty members with subject teacher and another teacher in the department and even semester practical examination to be conducted involving external examiner.

Subject No.7: To approve the list of paper setters and examiners in HORTICULTURE for B.Sc courses.

Subject No. 8: To approve the list of recommended text books and reference books which are listed at the end of syllabi of papers I & II in HORTICULTURE for B.Sc course.

Subject No. 9: To conduct Guest Lectures and Student Seminars /Study Projects for I & II Semester students for the Academic Year 2021-22.

Resolution No.10: To approve the measures to discuss to be conduct online classes(Whenever physical appearance of students is not possible) through , Google suit, in all courses of HORTICULTURE for students of B.Sc programme during the academic year 2021-22 as improbable and unpredictable situation occurred due to prevailing Carona virus disease(Covid-19) Pandemic.

Resolution No.11: To procure latest editions of text books, reference books ,journals , e- journals for department library and central library to upgrade laboratories by purchasing advanced equipments in need with practical curriculum to be ingenious for both students and faculty members


Subject No. 12: Any other with the permission of the chairperson.

1) P.P. Kumar

2) 

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5) K. M. 

6) P. 

7) T. Karthikeyan

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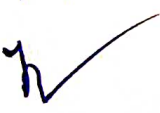
DEPARTMENT OF HORTICULTURE

Dr.P.PRASANNA KUMARI, In charge of the Department HORTICULTURE requests the Academic Council to consider and approve the changes in the syllabi recommended by the Board of Studies for the Academic year 2021-22. The BOS meeting was held on 23-11-2021.

The resolutions were seconded by Dr Y.Vijayakumar members of the Board of Studies.

The academic council is also requested to accord permission to appoint examiners for theory/practical for the academic year 2021-22.

Members presented

1. P.P. Kumari.
2. 
- 3.
- 4.
5. K. Murthy
6. P. S. H.
7. T. R. Kumar

Chairman
Board of Studies.

SRI A.S.N.M. GOVERNMENT COLLEGE (A), PALAKOLLU

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DEPARTMENT OF HORTICULTURE

LIST OF EXAMINERS & PAPER SETTERS


1	Dr.BhupathiRayulu	Lecturer in HORTICULTURE	Government Degree College, kovur, W.G.Dt. Cell:9705377344
2	Dr.A.SrinivasaRao	Lecturer in HORTICULTURE	Government Arts College rajhamundry- E.G.Dt Cell: 9985076306
3	N.Nageswar Rao	Lecturer in HORTICULTURE	V.K.V.Govt Degree college, Kothapeta Cell: 9492122277
4	AN.SUDHER BABU	Lecturer in HORTICULTURE	DRG Government Degree College, TADEPALLI GUDEM, W.G.Dt. Cell: 9640308447
5	Sri. P.SrinivasaRao	Lecturer in HORTICULTURE	S.C.I.M Govt Degree & P.G College,Tanuku, W.G.Dt. Cell: 9441083787
6	Smt. P.Sri Lakshmi	Lecturer in HORTICULTURE	S.V.K.P. & Dr.K.S.Raju A&S College, Penugonda, W.G.Dt. Cell: 9492164689
7	Smt D.SANDYA RANI	Lecturer in HORTICULTURE	D.N.RCollege (A) BHIMAVARAM, W.G.Dt. Cell: 9704645858
8	Dr.P.Prayaga Murthy	HOD in HORTICULTURE	Govt Degree College Yeleswaram, E.G.Dt Cell: 9885852068
9	Dr.K.MallikarjunaRao	Lecturer in HORTICULTURE	Government Degree College kovur, W.G.Dt. Cell: 8985570508
10	B.BUJJI BABU	Lecturer in HORTICULTURE	Government Arts College rajhamundry- E.G.Dt Cell:9948807896

Signatures of the BOS Committee Members:-

1. P. P. Kumari.


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2. 

5. K. M. 

3.

6. P. 

7. T. 

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DEPARTMENT OF HORTICULTURE

BLUE PRINT MODEL FOR INTERNAL EXAMINATIONS: 2021-22

S.NO	TYPE OF QUESTION	QUESTIONS TO BE GIVEN			TO BE ANSWERED		
		NO OF QUESTIONS	MARKS	TOTAL MARKS	NO OF QUESTIONS	MARKS	TOTAL MARKS
1	ESSAY QUESTIONS	1	10	10	1	10	10
2	SHORT QUESTIONS	1	5	5	1	5	5
	TOTAL			15			15

Percentage of choice = 0

Assignments = 5 marks
Attendance / Extracurricular activities = 5 marks


Total = 25 marks

Signatures of the BOS Committee Members:-

1. P.P. Kumari

4.

2. 

5. K. M. 

3.

6. P. 

7. T. Karthikeyan

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DEPARTMENT OF HORTICULTURE

BLUE PRINT MODEL FOR EXTERNAL EXAMINATIONS: 2021-22

	Short Questions			Essay Questions		
	NO OF QUESTIONS	MARKS ALLOTTED	TOTAL MARKS	NO OF QUESTIONS	MARKS ALLOTTED	TOTAL MARKS
UNIT -I	01	5	5	02	10	20
UNIT-II	02	5	10	02	10	20
UNIT-III	02	5	10	02	10	20
UNIT-IV	02	5	10	02	10	20
UNIT-V	01	5	5	02	10	20

Section –A: Out of 8 Questions 5 has to be answered.

Section –B: Internal Choice (either / or) and 1 Question in each unit, 5 Questions has to be answered.

1. Essay Questions : 5 x 10 = 50

2. Short Questions : 5 x 5 = 25

Total : 75 Marks

Signatures of the BOS Committee Members:-

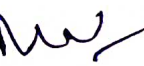
1. P. P. Kumari

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7. T. Karthi

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5. K. M. 

6. P. 

REVISION OF HORTICULTURE COURSES W.E.F.2020-21

Semester	Course	Title of the Course	Hrs./ Week	Credits	CCE	E.E.	Total
FIRST YEAR							
Sem.-I	1	Fundamentals of Horticulture and Soil Science	4	4	25	75	100
		Practical - 1	2	1	-	50	50
Sem.-II	2	Plant Propagation and Nursery Management	4	4	25	75	100
		Practical - 2	2	1	-	50	50
Apprentice/On Job Training for 02 months							
SECOND YEAR							
Sem.-III	3	Basics of Vegetable Science	4	4	25	75	100
		Practical - 3	2	1	-	50	50
Sem.-IV	4	Basics of Fruit Science	4	4	25	75	100
		Practical - 4	2	1	-	50	50
	5	Pests and diseases of horticulture plants and their management	4	4	25	75	100
		Practical - 5	2	1	-	50	50
Apprentice/On Job Training for 02 months							
THIRD YEAR							
Sem. -5	6	Domain related Skill Enhancement Courses (02). Three (3) pairs of courses (each pair has 2 related courses) will be offered, student has to choose a pair of courses.	4	4	25	75	100
			2	1	-	50	50
	7		4	4	25	75	100
			2	1	-	50	50
Sem.-6	8	Apprentice/On Job Training for 06 months	-	-	-	-	-

P.P. Kumari

K. M.



P. S.

SRI A.S.N.M.GOVERNMENT COLLEGE (A) PALAKOL

I B.Sc - (CBCS) BOTANY SYLLABUS

PAPER-I; SEMESTER- I

(W.e.f. 2021-22 Admitted Batch)

Paper-I: Fundamental of Horticulture and Soil Science

Total hours of teaching 60 hrs @ 4 hrs per

B Sc	Semester: I	Credits: 04
Course: 1	Fundamentals of Horticulture and Soil Science	Hrs/Wk:04

Learning Outcomes: On successful completion of this course, the students will be able to:

- Understand the scope and potential of horticulture products in India and Andhra Pradesh.
- Classify the horticulture plants based on soil and climate.
- Illustrate different systems of planting in an orchard and predict the number of plants in a given land.
- Demonstrate the methods and types of training and pruning.
- Explain the basics of soil science and justify the role of soil as a medium for plant growth
- Explain about integrated nutrient management and demonstrate the skills of soil testing.

Unit I : Introduction to Horticulture

12 Hrs.

1. Horticulture: Definition, importance of horticulture in terms of economy, production, employment generation, environmental protection and human resource development.
2. Divisions of horticulture with suitable examples and their importance.
3. Area, production of Horticultural crops in A.P. and India.
4. Fruit and vegetable zones of India and Andhra Pradesh.
5. Export scenario and scope for Horticulture in India.

Unit II: Classification Horticulture Crops

12 Hrs.

1. Classification of horticultural crops based on soil and climatic requirements.
2. Vegetable crop gardens – Nutrition and kitchen garden – tracer garden – vegetable forcing – market garden – roof garden.
3. Gardens in floriculture – flower gardens – soil and mixed gardens; land scape Horticulture.

Unit III: Characteristics of Orchards

12 Hrs.

1. Orchard: Definition, different systems of planting orchards – square, rectangular Quincunx, hexagonal and contour.
2. Calculation of planting densities in different systems of planting.
3. Different types and methods of pruning.

P. P. Kumari



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P. P. Kumari

4. Training: Definition, principles and objectives; merits and demerits of open and close centered, and modified leader systems.

Unit IV: Physico-chemical characteristics of Soil

12 Hrs.

1. Soil: Definition, minerals and weathering to form soils; factors of soil formation.
2. Soil taxonomy; soil color, texture and structure; other physical properties and stability.
3. Soil colloids and charges; ion adsorption and exchange; soil temperature and soil air.
4. Soil pH and acidity; soil alkalinity and salinity.

Unit V: Soil as a living matter


12 Hrs.

1. Soil organic matter – composition and decomposability.
2. Humus – fractionation of organic matter.
3. Soil biology: Soil microorganisms and fauna –beneficial and harmful roles.
4. Integrated nutrient management and soil tests.

Text books:

- Prasad and Kumar , 2014.: Principles of Horticulture 2nd Edition Agribios India
- Kumar, N., 1990 Introduction to Horticulture. Rajyalakshmi Publications, Nagarkoil, Tamilnadu
- Jithendra Singh, 2002. Basic Horticulture. Kalyani Publishers, Hyderabad
- Kausalkumar Misra and Rajesh Kumar, 2014 Fundamentals of Horticulture, Biotech books
- Brady Nyle C and Ray R Well 2014 Nature and Properties of Soil, Pearson Educational Inc , New Delhi
- Indian society of Soil Science IARI, New Delhi

1) P. P. Kumari

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5) K. M. W.

6) P. J. H.

7) T. K. K.

SRI A.S.N.M.GOVERNMENT COLLEGE (A) PALAKOL

I B.Sc - (CBCS) BOTANY SYLLABUS

PAPER-I; SEMESTER- I

(W.e.f. 2021-22 Admitted Batch)

Paper-I: Fundamental of Horticulture and Soil Science

Total hours of teaching 60 hrs @ 4 hrs per

B Sc	Semester: I	Credits: 01
Course: 1(L)	Fundamentals of Horticulture and Soil Science Lab	Hrs/Wk:02

Course Outcomes: On successful completion of this course, the students shall be able to :

- Make a layout of an orchard in a given area.
- Use various tools and implements to raise nursery and cultivate a horticulture crop.
- Prepare fertilizer mixtures and PGRs for plants.

1. Study of features of orchard planning and layout orchard.
2. Study of tools and implements in Horticulture.
3. Identification of various Horticulture crops.
4. Lay out of nutrition garden.
5. Preparation of nursery beds to sow vegetable seeds.
6. Digging of pits for fruit plants.
7. Layout of different Planting systems.
8. Study of different methods of training.
9. Study of different methods of pruning.
10. Preparation of fertilizer mixtures and field application.
11. Preparation and application of growth regulators.
12. Layout of different irrigation systems.
13. Identification and management of nutritional disorders in important fruit, vegetable and flower crops.

1) P.P. Kumari

4) K. [Signature]

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SRI A.S.N.M.GOVERNMENT COLLEGE (A) PALAKOL

I B.Sc - (CBCS) Model Question Paper for Practical Examination

PAPER-I; SEMESTER- I

(W.e.f. 2021-22 Admitted Batch)

Max. Time: 3 Hrs.

Paper-I: Fundamental of Horticulture and Soil Science

Max. Marks: 50

1. Identify the horticulture tool/equipment and write its uses. 6 M
2. Draw the layout of a kitchen garden. 6 M
3. An irrigation method followed for horticulture crops with a neat sketch. 6 M
4. A) A planting system followed in an orchard with a neat diagram. 6 M
B) A farmer wants to raise a mango orchard in one hectare of land with a spacing of 8×8 m and now calculate the number of plants he can be adopted if he chose the quincunx system of planting. 4 M
- C) A farmer wants to raise oil palm in one hectare of land with a spacing of 7.5×7.5 m and now calculate the number of plants he can be adopted if he chose the hexagonal system of planting. 4 M
5. Demonstration of a training method. 4 M
6. Record + viva voice 10 + 4 = 14 M

Suggested co-curricular activities for Horticulture Core Course – 1 in Semester- I:

A. Measurable:

a. Student seminars:

1. Importance, scope and statistics of horticulture in India and Andhra Pradesh.
2. Branches of horticulture with suitable examples.
3. Climatic zones of horticulture in India and Andhra Pradesh.
4. Classification of horticultural crops based on soil and climate.
5. Vegetable gardens.
6. Ornamental gardens.
7. Systems of planting in an orchard.
8. Types and methods of pruning in horticultural crops.
9. Training methods in horticultural crops.
10. Soil taxonomy.
11. Weathering process.
12. Integrated nutrient management.

b. Student Study Projects:

1. A report on kitchen gardens in his/her residential area
2. A report on methods of planting systems for horticultural crops his/her residential area.
3. Observations and preparation of soil colour charts for his/her native district.
4. Collection and nutrient analysis of soil samples of a locality.
5. A report on acidity, alkalinity and salinity of soil samples in his/her native district.
6. A report on soil fauna of a locality.
7. Determination of pH, EC and Organic carbon of soil sample from a locality.
8. Collection and identification of weeds in local horticulture crop fields.
9. Isolation and enumeration of soil microorganisms of a horticulture crop field.
10. Isolation of N₂ fixing and phosphate solubilizing microorganisms of a horticulture crop field.
11. Collection and documentation of data on nutritional disorders of horticultural crops in a locality.
12. Study of different tools and implements being used in horticulture farms by local farmers.

c. Assignments: Written assignment at home / during '0' hour at college; preparation of charts with drawings, making models etc., on topics included in syllabus.

B. General :

1. Group Discussion (GD)/ Quiz/ Just A Minute (JAM) on different modules in syllabus of the course.
2. Visit to Horticulture University/Research station.

1) P.P. Kumare

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5) K. M. V.

6) P. S. H.

7) T. K. S.

SRI A.S.N.M.GOVERNMENT COLLEGE (A) PALAKOL

I B.Sc - (CBCS) HORTICULTURE SYLLABUS

PAPER-I; SEMESTER- II

(W.e.f. 2021-22 Admitted Batch)

Paper-II: Plant Propagation and Nursery Management

Total hours of teaching 60 hrs @ 4 hrs per

B Sc	Semester: II	Credits: 04
Course: 2	Plant Propagation and Nursery Management	Hrs/Wk:04

Learning Outcomes: On successful completion of this course, the students will be able to:

- Explain sexual and asexual propagation methods of plants.
- Demonstrate skills on vegetative propagation of plants.
- Demonstrate the techniques on raising of different types of nursery beds
- Justify the role of various propagation structures used to raise horticulture plants.
- Understand the regulation to establish plant nursery and quality parameters to be maintained.
- Implement different routine/regular activities in a nursery.
- Understand the economics of a plant nursery and can maintain necessary records.

Unit -1: Sexual propagation

12 Hrs.

1. Sexual propagation – advantages and disadvantages.
2. Seed germination, process of seed germination; factors affecting seed germination;
3. Pre-germination treatments and viability tests; sowing methods of seeds.
4. Polyembryony in propagation of *Opuntia*, trifoliate orange, mango and *Citrus*.

Unit -2: Asexual propagation

12 Hrs.

1. Asexual propagation – advantages and disadvantages.
2. Using bulbs, corms, tubers and rhizomes to raise nursery.
3. Stolons, runners and offsets in raising nursery.
4. Apomixis : Definition; role of apomictics in propagation of apple, mangosteen and *Citrus*.

Unit- 3 : Vegetative propagation techniques

12 Hrs.

1. Cuttings: Definition, propagation by root, leaf and stem cuttings.
2. Layering: Definition, techniques of simple, serpentine, mound, trench and air layering.

3. Grafting: Definition; approach and detached scion (Veneer, whip, cleft, side and bark) grafting techniques.

4. Budding: Definition; techniques of T- , patch and chip budding.

Unit – 4: Basic requirements of a nursery

12 Hrs.

1. Plant nursery: Definition, importance; Basic facilities for a nursery; layout and components of a good nursery.
2. Nursery beds – types, their merits and demerits; precautions to be taken during preparation.
3. Brief account of growing media; nursery tools and implements.
4. Containers for plant nursery.
5. Brief account of plant propagation structures.

Unit -5: Nursery management

12 Hrs.


1. Bureau of Indian Standards (BIS-2008) related to nursery; guidelines for nursery raising.
2. Nursery accreditation and Certification.
3. Seasonal activities and routine operations in a nursery; watering, weeding and control of pests and diseases.
4. Common possible errors in nursery activities.
5. Economics of nursery development and record maintenance; online nursery information and sales systems.

1) P.P. Kumari

2) 

5) K.M.W.

3)

6) P. 

4)

7) T. Kuthare

SRI A.S.N.M.GOVERNMENT COLLEGE (A) PALAKOL

I B.Sc - (CBCS) Practical syllabus of Horticulture Core Course -2/ Semester – II

PAPER-I; SEMESTER- II

(W.e.f. 2021-22 Admitted Batch)

Paper-II: Plant Propagation and Nursery Management

Total hours of teaching 60 hrs @ 4 hrs per

B Sc	Semester: II	Credits: 01
Course: 2(L)	Plant Propagation and Nursery Management Lab	Hrs/Wk:02

Course outcomes: On successful completion of this course, the students shall be able to :

- Practice a suitable propagation method for a given horticulture plant species.
 - Perform skills to remove dormancy in seeds and other propagules of horticulture plants.
 - Prepare media to raise nursery and to cultivate various horticulture plants.
 - Demonstrate skill of various vegetative propagation technics used in Horticulture
1. Observations on causes for dormancy in seeds and vegetative propagules.
 2. Methods of breaking dormancy in seeds, tubers, vegetative buds and other vegetative propagules.
 3. Media for propagation of plants in nursery beds, pots and Mist chamber.
 4. Preparation of nursery beds and sowing of seeds 5
- Raising of root stock.
6. Preparation of plant material for potting.
 7. Hardening of plants in the nursery.
 8. Practicing different types of vegetative propagation techniques - cutting, layering grafting and budding.
 9. Preparation of plant growth regulators for seed germination and vegetative propagation.

1) P.P. Kumar

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5) K. Mur

6) P. S. S.

7) T. Kathir

SRI A.S.N.M.GOVERNMENT COLLEGE (A) PALAKOL

I B.Sc - (CBCS) Model Question Paper for Practical Examination

PAPER-I; SEMESTER- II

(W.e.f. 2021-22 Admitted Batch)Max..

Paper-II: Plant Propagation and Nursery Management

Time: 3 Hrs

Max. Marks: 50

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| 1. Demonstrate methods to break seed dormancy. | 8 M |
| 2. Demonstrate a method of vegetative propagation. | 8 M |
| 3. Demonstrate routine practices in a nursery | 8 M |
| 4. Identify the tool/ equipment used in horticulture | 3 × 4 = 12M |
| 5. Record + viva voice | 10 + 4 = 14 M |

books :

- **Sadhu . M .K. 1996.** Plant propagation, New Age International Publishers, New Delhi
- **Sarma. R. R. 2002** Propagation of Horticultural crops : Principles and practices Kalyani Publishers, New Delhi
- **Hartman, H.T. and D.E. Kester 1976** Plant propagation. Principles and Practices, Prentice Hall of India Pvt. Limited, Mumbai
- **Ratha Krishnan, P. 2014.** Plant Nursery Management: Principles and Practices. Central Arid Zone Research Institute (ICAR), Jodhpur

Suggested co-curricular activities for Horticulture Core Course – 2 in Semester- II :

A. Measurable :

a. Student seminars :

1. Asexual and sexual methods for propagation of horticulture plants.
2. Various methods of cuttings for propagation of horticulture plants.
3. Various methods of layering for propagation of horticulture plants.
4. Various methods of grafting for propagation of horticulture plants.
5. Various methods of budding for propagation of horticulture plants.
6. Raising and management of nursery.
7. Plant propagation structures - care and maintenance.
8. Role of apomicts for propagation of horticulture plants.
9. Nursery certification procedure.
10. Pest and disease Management in a nursery.

b. Student Study Projects:

1. Propagation of some horticulture plants through cuttings.
2. Propagation of some horticulture plants through layering
3. Propagation of some horticulture plants through grafting
4. Propagation of some horticulture plants through budding
5. Collection of data on disease symptoms in a local nursery.
6. A report on economics of different media used in nursery.
7. A report on different plant growing containers in their local area.
8. Preparation of different models of Propagation structures.
9. A report on cost of establishing various plant propagation structures.
10. A report on propagation methods practiced by locals farmers.

c. Assignments: Written assignment at home / during 'O' hour at college; preparation of charts with drawings, making models etc., on topics included in syllabus.


B. General :

1. Group Discussion (GD)/ Quiz/ Just A Minute (JAM) on different modules in syllabus of the course.
2. Visit to a nursery in a Horticulture University/Research station or Commercial nursery.

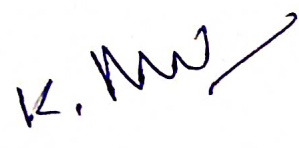
P.P. Kulkarni

2) 

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6) P. 

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5) K. 

7) T. 