



Dr.UmayalRamanathan College for Women

Accredited with B+ Grade by NAAC

Affiliated to Alagappa University

(Run by Dr.Alagappa Chettiar Educational Trust)

Karaikudi – 630 003

Faculty Work Planner & Work Diary
Academic Year 2020 - 21
Odd Semester

Name of the Faculty: Dr. A. Shinyguruce

Department: Microbiology & CLT

Part I –Time Table & Subject List

Time Table

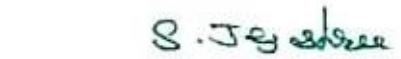
Day Order	1	2	3	LUNCH BREAK	4	5	
I		I- Micro- Plant	III- Micro- Virology			III- Micro- Lab in Bac&Vir	
II	III- Micro- Lab in Bac&Vir					III- Micro- Lab in Bac&Vir	
III	III- Micro- Virology	III- Micro- Virology					
IV		I-Micro- Allied Lab				III- Micro- Virology	III- Micro- Virology
V	I- Micro- Plant		III- Micro- Virology			I- Micro- Plant	
VI						II-Micro- SBS- CES	

Allocated Subjects

S. No.	Class	Subject	Subject Code	No. of Hours
01	I B.Sc Microbiology & CLT	Plant Diversity, Plant pathology and Anatomy Thallophyta	7BBOA1	03
02	III B.Sc Microbiology & CLT	Virology	7BMC5C1	05
03	III B.Sc Microbiology & CLT	Lab in Clinical Bacteriology & Virology	7BMC5P1	06


Signature of the Staff


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Work Plan

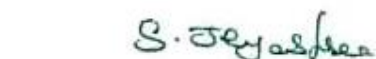
Class: I B.Sc Microbiology & CLT
Semester: I Semester

Subject Name: Plant Diversity, Plant pathology and Anatomy Thallophyta
Subject Code: 7BBOA1

S. No.	UNIT	Content	Hours Needed	Hours Taken	Signature of the Student Representative
1.	I	Algae General Characters, structure and life history of Cyanophyceae (<i>Oscillatoria</i>) and Rhodophyceae (<i>Polysiphonia</i>). Fungi General Characters, Structure and Life history of Basidiomycetes (<i>Puccinia</i>). General Features, Structure and Life history of Lichens (<i>Usnea</i>).	10	07	M. Indira
2.	II	Bryophyta General Characters, structure and life history of Moss (<i>Polytrichum</i>) Plant Pathology Study of the Plant Diseases with reference to causes, symptoms, dissemination, Control and preventive measures. 1. Virus Diseases – Bunchy top of Banana. 2. Bacterial Disease – Citrus Canker.	05	04	S. Sneha
3.	III	Pteridophyta General Characters, structure and Life history of <i>Selaginella</i>	05	04	P. Parkavi
4.	IV	Gymnosperms General Characters, structure and Life history of <i>Pinus</i>	04	04	S. Shaluga
5.	V	Anatomy 1. Tissues – Simple and permanent tissues. 2. Normal secondary thickening in dicot and monocot stem.	04	05	S. Sundari


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Work Diary

Class: I B.Sc Microbiology & CLT
Semester:1Semester

Subject Name:Plant Diversity, Plant pathology and Anatomy Thallophyta
Subject Code: 7BBOA1

Date	Hr	Unit	Objective	Topic	Aids Used	Outcome
07/09/2020 (D1)	2	I	★ To make the students to understand the diversity among Algae, Fungi & Lichens ★ To know the morphology, characters & life history of Algae, Fungi & Lichens	Algae General Characters, structure and life history of Rhodophyceae(<i>Polysiphonia</i>).	PowerPoint Presentation	★ Students will be able to differentiate Algae, Fungi & Lichens based on their general characters and morphology
11/09/2020 (D5)	1	I		Algae General Characters, structure and life history of Rhodophyceae(<i>Polysiphonia</i>).	PowerPoint Presentation	
11/09/2020 (D5)	4	I		Algae General Characters, structure and life history of Cyanophyceae (<i>Oscillatoria</i>)	PowerPoint Presentation	
14/09/2020 (D1)	2	I		Fungi General Characters, Structure and Life history of Basidiomycetes(<i>Puccinia</i>).	PowerPoint Presentation	
18/09/2020 (D5)	1	I		Fungi General Characters, Structure and Life history of Basidiomycetes(<i>Puccinia</i>).	PowerPoint Presentation	
18/09/2020 (D5)	4	I		General Features, Structure and Life history of Lichens (<i>Usnea</i>).	PowerPoint Presentation	
21/09/2020 (D1)	2	I		General Features, Structure and Life history of Lichens (<i>Usnea</i>).	PowerPoint Presentation	
25/09/2020 (D5)	1	I		Class Test		

25/09/2020 (D5)	4	I		Class Test		
28/09/2020 (D1)	2	II	★ To understand the morphological diversity of Bryophytes.	Bryophyta General Characters, structure and life history of Moss(<i>Polytrichum</i>)	PowerPoint Presentation	★ Students will be able to identify bryophyte plants.
05/10/2020 (D1)	2	II	★ To understand the economic importance of the Bryophytes	Bryophyta General Characters, structure and life history of Moss(<i>Polytrichum</i>)	PowerPoint Presentation	★ Know the impacts of plant diseases.
09/10/2020 (D5)	1	II	★ To know the prevention and control measures of plant diseases and its effect on economy of crops.	Plant Pathology Virus Diseases – Bunchy top of Banana.	PowerPoint Presentation	
09/10/2020 (D5)	4	II		Plant Pathology Bacterial Disease – Citrus Canker.	PowerPoint Presentation	
12/10/2020 (D1)	2	II		Revision		
16/10/2020 (D5)	1	II		Class Test		
16/10/2020 (D5)	4	III		★ Understand plant communities and ecological adaptations in plants ★ Know the general features of Pteridophyta	Pteridophyta General Characters of <i>Selaginella</i>	PowerPoint Presentation
19/10/2020 (D1)	2	III	Pteridophyta structure of <i>Selaginella</i>		PowerPoint Presentation	
23/10/2020 (D5)	1	III	Pteridophyta Life history of <i>Selaginella</i>		PowerPoint Presentation	
23/10/2020 (D5)	4	III	Pteridophyta Life history of <i>Selaginella</i>		PowerPoint Presentation	
02/11/2020 (D1)	2	III	Revision			
06/11/2020 (D5)	1	III	Class Test			

06/11/2020 (D5)	4	IV	★ To Know the general features of Gymnosperms	Gymnosperms General Characters of <i>Pinus</i>	PowerPoint Presentation	★ Students will able to understand and identify gymnosperm plants
09/11/2020 (D1)	2	IV		Gymnosperms structure of <i>Pinus</i>	PowerPoint Presentation	
16/11/2020 (D1)	2	IV		Gymnosperms Life history of <i>Pinus</i>	PowerPoint Presentation	
20/11/2020 (D5)	1	IV		Gymnosperms Life history of <i>Pinus</i>	PowerPoint Presentation	
20/11/2020 (D5)	4	IV		Revision		
23/11/2020 (D1)	2	IV		Class Test		
27/11/2020 (D5)	1			II Internal Assessment		
30/11/2020 (D1)	2	V	★ Understand the plant morphology and basic taxonomy. ★ Know the concept of methodology in taxonomy	Tissues – Simple tissues.	PowerPoint Presentation	★ Occurred knowledge about different types of tissues.
04/12/2020 (D5)	1	V		Tissues –permanent tissues.	PowerPoint Presentation	
04/12/2020 (D5)	4	V		Normal secondary thickening in dicot stem.	PowerPoint Presentation	
07/12/2020 (D1)	2	V		Normal secondary thickening in dicot stem.	PowerPoint Presentation	
11/12/2020 (D5)	1	V		Normal secondary thickening in monocot stem.	PowerPoint Presentation	
11/12/2020 (D5)	4	V		Revision		
14/12/2020 (D1)	2	V		Revision		


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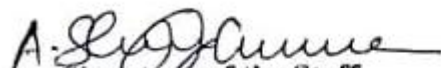

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Work Plan

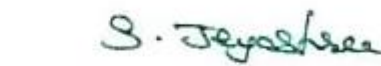
Class: III B.Sc., Microbiology & CLT
Semester: V

Subject Name: Virology
Subject Code: 7BMC5C2

S. No.	UNIT	Content	Hours Needed	Hours Taken	Signature of the Student Representative
01	I	Viral architecture: Capsid, viral genome and envelope. Structure of TMV, T4, Influenza virus, HIV and Viral classification.	15	17	Thulasi. M
02	II	Life cycle of virus: Lytic and lysogenic cycle of T ₄ phage and Lambda phage. Life cycle of TMV and CMV.	10	12	As. Sneha.
03	III	Cultivation of viruses: Cell culture techniques, embryonated egg, laboratory animals, CPE, inclusion bodies.	15	16	N. Shifra fathima.
04	IV	Visualization and enumeration of virus particles: A) Measurement of infectious units: Plaque assay, Fluorescent focus assay, Infectious center assay, Transformation assay, Endpoint dilution assay. B) Measurement of virus particles and their components: Electron microscopy, Atomic force microscopy, Haemagglutination. C) Measurement of viral enzyme activity.	15	14	T. Vishvasriya.
05	V	Viral diseases: causative agent, symptoms, pathogenesis, treatment and prevention of Polio, rabies, yellow fever, mumps, influenza, measles, encephalitis, hepatitis and AIDS. Role of viruses in cancer, Prions and viroids.	12	12	P. Kanitha


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Work Diary

Class: III B.Sc., Microbiology & CLT
Semester: V

Subject Name: Virology
Subject Code: 7BMC5C2

Date	Hr	Unit	Objective	Topic	Aids Used	Outcome
03.08.2020 (D1)	III	I	★ To enable the students to have the understanding on the basics structure of a virus. ★ To know the differences that exists between viruses in gene level.	viral Capsid	PowerPoint Presentation	★ Learn the basic viral structures ★ Known the classification of the major classes of human viral pathogens.
05.08.2020 (D3)	I			viral Capsid	PowerPoint Presentation	
05.08.2020 (D3)	II			Class test		
06.08.2020 (D4)	IV			viral genome	PowerPoint Presentation	
06.08.2020 (D4)	V			viral genome	PowerPoint Presentation	
07.08.2020 (D5)	III			viral envelope	PowerPoint Presentation	
10.08.2020 (D1)	III			viral envelope	PowerPoint Presentation	
12.08.2020 (D3)	I			Viral architecture	Mind map preparation	
12.08.2020 (D3)	II			Class test		
13.08.2020 (D4)	IV			Structure of TMV	PowerPoint Presentation	
13.08.2020 (D4)	V			Structure of T4	PowerPoint Presentation	
17.08.2020 (D1)	III			Class test		
19.08.2020 (D3)	I			Structure of Influenza virus	PowerPoint Presentation	
19.08.2020 (D3)	II			Structure of HIV	PowerPoint Presentation	
20.08.2020 (D4)	IV			Viral classification	PowerPoint Presentation	

20.08.2020 (D4)	V			Viral classification	PowerPoint Presentation	
24.08.2020 (D1)	III			Unit 1 Revision		
26.08.2020 (D3)	I	II	<ul style="list-style-type: none"> ★ To understand how the virus is able to infect a host, including the steps involved in the infectious cycle ★ To know the attachment, entry, replication, and exit of virus from the cell. 	Lytic and lysogenic cycle of T ₄ phage	PowerPoint Presentation	★ Exploring the knowledge about life cycle of phages.
26.08.2020 (D3)	II			Lytic and lysogenic cycle of T ₄ phage	PowerPoint Presentation	
27.08.2020 (D4)	IV			Lytic and lysogenic cycle of T ₄ phage	Mind map creation	
27.08.2020 (D4)	V			Discussion		
28.08.2020 (D5)	III			Lytic and lysogenic cycle of Lambda phage	PowerPoint Presentation	
31.08.2020 (D1)	III			Lytic and lysogenic cycle of Lambda phage	PowerPoint Presentation	
02.09.2020 (D3)	I			Lytic and lysogenic cycle of Lambda phage	Mind map creation	
02.09.2020 (D3)	II			Revision	Discussion	
03.09.2020 (D4)	IV				Life cycle of TMV	
03.09.2020 (D4)	V		Life cycle of CMV	PowerPoint Presentation		
04.09.2020 (D5)	III		Class test			
07.09.2020 (D1)	III		Unit 2 Revision	Discussion		
09.09.2020 (D3)	I	III	<ul style="list-style-type: none"> ★ To enable student learn the cultivation of virus in laboratory methods. 	Cell culture techniques	PowerPoint Presentation	★ Learning the knowledge about how viruses are cultivated and quantified
09.09.2020 (D3)	II			Cell culture techniques	PowerPoint Presentation	
10.09.2020 (D4)	IV			Cell culture techniques	PowerPoint Presentation	
10.09.2020 (D4)	V			Cell culture techniques	Schematic diagram preparation	

11.09.2020 (D5)	III			Revision	Discussion	
14.09.2020 (D1)	III			Class test		
16.09.2020 (D3)	I			embryonated egg	PowerPoint Presentation	
16.09.2020 (D3)	II			embryonated egg	Mind map preparation	
17.09.2020 (D4)	IV			Revision	Discussion	
17.09.2020 (D4)	V			laboratory animals	PowerPoint Presentation	
18.09.2020 (D5)	III			laboratory animals	Mind map preparation	
21.09.2020 (D1)	III			Revision		
23.09.2020 (D3)	I			CPE & inclusion bodies	PowerPoint Presentation	
23.09.2020 (D3)	II			Class test		
24.09.2020 (D4)	IV			Unit 3 Revision	Discussion	
24.09.2020 (D4)	V			Revision		
25.09.2020 (D5)	III	IV	★ To be able to learn about the viral particle measurement.	Plaque assay & Fluorescent focus assay	PowerPoint Presentation	★ Acquiring knowledge about Visualization and enumeration of virus particles.
28.09.2020 (D1)	III			Infectious center assay, Transformation assay	PowerPoint Presentation	
30.09.2020 (D3)	I		★ To know about the viral enzyme activities	Endpoint dilution assay	PowerPoint Presentation	★ Understand the viral enzyme activity.
30.09.2020 (D3)	II			Class test		

01.10.2020 (D4)	IV			Electron microscopy	PowerPoint Presentation	
01.10.2020 (D4)	V			Electron microscopy	PowerPoint Presentation	
05.10.2020 to 08.10.2020	Internal Assessment I					
09.10.2020 (D5)	III			Revision	Discussion	
12.10.2020 (D1)	III			Atomic force microscopy &Haemagglutination	PowerPoint Presentation	
14.10.2020 (D3)	I			Class test		
14.10.2020 (D3)	II			Revision	Discussion	
15.10.2020 (D4)	IV			Measurement of viral enzyme activity	PowerPoint Presentation	
15.10.2020 (D4)	V			Measurement of viral enzyme activity	PowerPoint Presentation	
16.10.2020 (D5)	III			Revision	Discussion	
19.10.2020 (D1)	III			Revision	Discussion	
20.10.2020 to 23.10.2020	Unit based examination - I					
27.10.2020 (D1)	III	V	★ To impart the knowledge regarding the diagnostics clinical aspects and related implications of human viral	causative agent, symptoms, pathogenesis, treatment and prevention of Polio	PowerPoint Presentation & Mind map preparation	★ Learn and acquire knowledge about viral diseases, pathogens, and the treatment for various viral infections
29.10.2020 (D3)	I			causative agent, symptoms, pathogenesis, treatment and prevention of Polio	PowerPoint Presentation & Mind map preparation	

29.10.2020 (D3)	II		disease and newer emerging viral infections including the viral mutant forms for emerging.	causative agent, symptoms, pathogenesis, treatment and prevention of rabbies	PowerPoint Presentation & Mind map preparation	
02.11.2020 & 03.11.2020	Internal Assessment II					
04.11.2020 (D3)	I			Class test		
04.11.2020 (D3)	II			causative agent, symptoms, pathogenesis, treatment and prevention of yellow fever	PowerPoint Presentation & Mind map preparation	
05.11.2020 (D4)	IV			causative agent, symptoms, pathogenesis, treatment and prevention of mumps & measles	PowerPoint Presentation & Mind map preparation	
05.11.2020 (D4)	V			causative agent, symptoms, pathogenesis, treatment and prevention of influenza	PowerPoint Presentation & Mind map preparation	
06.11.2020 (D5)	III			causative agent, symptoms, pathogenesis, treatment and prevention of encephalitis	PowerPoint Presentation & Mind map preparation	
09.11.2020 (D1)	III			causative agent, symptoms, pathogenesis, treatment and prevention of hepatitis	PowerPoint Presentation & Mind map preparation	
11.11.2020 (D3)	I			causative agent, symptoms, pathogenesis, treatment and prevention of AIDS	PowerPoint Presentation & Mind map preparation	
11.11.2020 (D3)	II			Role of viruses in cancer, Prions and viroids	PowerPoint Presentation & Mind map	

12.11.2020 (D4)	IV			Class test		
12.11.2020 (D4)	V			Revision	Class discussion	
16.11.2020 to 19.11.2020	Unit based examination - II					
20.11.2020 (D5)	III			Revision	Class discussion	
23.11.2020 (D1)	III					
25.11.2020 (D3)	I					
25.11.2020 (D3)	II					
26.11.2020 (D4)	IV					
26.11.2020 (D4)	V					
27.11.2020 (D5)	III					
30.11.2020 (D1)	III					
02.12.2020 (D3)	I					
02.12.2020 (D3)	II					
03.12.2020 (D4)	IV					
03.12.2020 (D4)	V					
04.12.2020 (D5)	III					
07.12.2020 (D1)	III					

09.12.2020 (D3)	I					
09.12.2020 (D3)	II					
10.12.2020 to 12.12.2020	Unit based examination -III					
14.12.2020 (D1)	III			Revision	Class discussion	
16.12.2020 (D3)	I					
16.12.2020 (D3)	II					
17.12.2020 (D4)	IV					
17.12.2020 (D4)	V					

A. S. Kumar
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Work Plan


Class: III B.Sc., Microbiology & CLT
Semester: V

Subject Name: Lab in Clinical Bacteriology & Virology
Subject Code: 7BMC5P1

Exp. No.	Content	Hours Needed	Hours Taken	Signature of the Student Representative
01.	Isolation and identification of normal flora of skin.	06	06	R. Abirami
02.	Preparation of blood agar and demonstration of hemolysis.	06	06	Sonmija. S.
03.	Antibiotic sensitivity tests.	06	06	M. prasanna devi
04.	Assessment of minimum inhibitory concentration.	06	06	K. Vishalini
05.	Isolation and Identification of <i>E. coli</i>	06	06	P. Ishwarya
06.	Isolation and Identification of <i>Pseudomonas</i>	06	06	Varsha K
07.	Isolation and Identification of <i>Vibrio</i>	06	06	Muthumari. M
08.	Demonstration a) Cultivation of virus in chick embryo method. b) Cultivation of virus in cell culture. c) Plaque assay	06	06	Kayathuri. M


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Karaikudi – 630 003

Faculty Work Planner & Work Diary

Academic Year 2020 - 21

Even Semester

Name of the Faculty: Mrs.J.Jeba Mercy

Department: Biotechnology

Part I – Time Table & Subject List

Time Table

Day Order	9:00-9:30 am	1	2	3	LUNCH BREAK	4	5
I	I -PE	III					III
II	I -PE	III		II LAB			II LAB
III	I -PE						
IV	I -PE	III					
V	I -PE	II LAB					
VI	I -PE	III		II- yoga			II LAB

Allocated Subjects

S. No.	Class	Subject	Subject Code	No. of Hours
1.	I	Professional English	7PE2BL	6
2.	II	Lab In Genetics	7BBT4P1	4
3.	II	Manavalakalai Yoga	7BMY4	1
4.	III	Plant Animal Biotechnology	7BBT6C2	5


Signature of the Faculty member


Signature of the HOD

Work Plan

Class: III B.Sc Biotechnology
Semester: VI

Subject Name: Plant and Animal Biotechnology
Subject Code: 7BBT6C2

S. No.	UNIT	Content	Hours Needed	Hours Taken	Signature of the Student Representative
1.	I	Plant tissue culture: Types of cultures – Callus, Cell suspension, Micropropagation, and Anther culture. Plant regeneration: Somatic embryogenesis and organogenesis. Different types of culture media (MS & LS). Microsporangium & Megaporangium development in plants	15	14	<i>Aurora Maryam A</i>
2.	II	Culture media: serum media & serum free media – biology of cultured cells – cell growth kinetics – primary culture – subculture.	12	10	<i>Soheela . P</i>
3.	III	Gene transfer techniques in plants: Methods of transformation – Direct (microinjection and microlaser & Biolistics) and Indirect – selectable markers, reporter genes and promoters used in plant expression vectors. Types of Ti-plasmid vectors	15	13	<i>Jasleen S</i>
4.	IV	Spermatogenesis & Oogenesis in mammals. Gene transfer techniques in animals – Transfection – liposuction – electroporation, microinjection.	15	14	<i>S. Pranjitha</i>
5.	V	Organogeny: Development of brain, eye, and ear in frog. Placentation in mammals	15	17	<i>Daleen p</i>

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Work Diary

Class:III B.Sc Biotechnology
Semester:VI

Subject Name: Plant & Animal Biotechnology
Subject Code: 7BBT6C2

Date	Hr	Unit & Topic	Objective	Contents	Aids Used	Outcome
21/12/2020 (D1)	1,5	Unit –I Plant tissue culture	To obtain the basic knowledge in plant tissue culture and Plant regeneration methods.	Introduction to tissue culture	https://www.youtube.com/watch?v=xuwV3ywCxW8	Obtain the basic knowledge in plant tissue culture and Plant regeneration methods. Understand the development mechanism of Microsporangium & Mega sporangium in plants
22/12/2020 (D2)	1			Types of cultures	Power Point presentation & interaction.	
24/12/2020 (D4)	1			Callus culture		
26/12/2020 (D6)	1			Anther culture		
28/12/2020 (D1)	1,5		To Understand the development mechanism of Microsporangium & Mega sporangium in plants	Cell suspension culture	Used modules from net sources	
29/12/2020 (D2)	1			Micropropagation culture		
31/12/2020 (D4)	1			Somatic Embryogenesis	Power Point presentation with mind map.	
02/01/2021 (D6)	1			Different types of culture media	Small-group discussion, Illustration and interaction	
04/01/2021 (D1)	1,5			Plant regeneration	Assessment	
05/01/2021 (D2)	1			Microsporangium	Video method of interaction.	

07/01/2021 (D4)	1			Megaporangium		
09/01/2021 (D6)	1	Unit –II Culture media	To learn the types of Culture media used in plant tissue culture. To understand cell culture, cell growth kinetics, primary culture, & subculture.	Introduction to Culture media	Small-group discussion, Illustration and interaction	Recognized the types of Culture media, and cell growth kinetics.
11/01/2021 (D1)	1,5			serum media		
12/01/2021 (D2)	1			serum free media		
18/01/2021 (D1)	1,5			cell growth kinetics		
19/01/2021 (D2)	1			biology of cultured cells	Power Point presentation & interaction with mind map.	
21/01/2021 (D4)	1			primary culture & subculture		
23/01/2021 (D6)	1			Culture media	Assessment	
25/01/2021 (D1)	1,5			Unit –III Gene transfer techniques in plants	To know, gene transfer techniques in plants. To learn, the various methods of transformation.	
30/01/2021 (D6)	1	Methods of transformation	Power point presentation & interaction with mind map.			
01/02/2021 (D1)	1,5	Introduction to direct & indirect				
02/02/2021 (D2)	1	To understand the plant expression vectors.	Direct - microinjection	Used modules from net sources		
04/02/2021 (D4)	1		Microlaser & Biolistics	Used modules from net sources		

06/02/2021 (D6)	1			Gene transfer techniques in plants	Assessment		
08/02/2021 (D1)	1,5			Indirect- selectable markers	Power Point presentation & interaction.		
09/02/2021 (D2)	1			reporter genes and promoters			
11/02/2021 (D4)	1			Types of Ti-plasmid vectors	https://www.youtube.com/watch?v=yesNHd9h8k0		
13/02/2021 (D6)	1	Unit -IV Spermatogenesis & Oogenesis in mammals.	To understand the basics of Spermatogenesis & Oogenesis in mammals	Introduction to Spermatogenesis and its mechanism in mammals	Used modules from net sources	Achieve basic mechanism of Spermatogenesis & Oogenesis in mammals.	
15/02/2021 (D1)	1,5		I-INTERNAL	-	-		
16/02/2021 (D2)	1				Introduction to Spermatogenesis in mammals	Power Point presentation & interaction.	Understand Gene transfer techniques in animals.
18/02/2021 (D4)	1		To understand - Spermatogenesis & Oogenesis in mammals.	Spermatogenesis mechanism in mammals.			
20/02/2021 (D6)	1			To learn- Gene transfer techniques in animals.	Spermatogenesis and its mechanism in mammals	Assessment	
22/02/2021 (D1)	1,5				Oogenesis - mechanism in mammals	Used modules from net sources	
23/02/2021 (D2)	1				Introduction to Gene transfer techniques.	https://www.youtube.com/watch?v=EyXEMVUMYoI	

25/02/2021 (D4)	1			Transfection		
27/02/2021 (D6)	1			Transfection	Assessment	
01/03/2021 (D1)	1,5			electroporation	Power point presentation.	
02/03/2021 (D2)	1			Gene transfer techniques	Assessment	
04/03/2021 (D4)	1			microinjection	Power point presentation.	
06/03/2021 (D6)	1			Introduction to Organogeny.	Small-group discussion, Illustration and interaction	Understand the structure, location, development, and function brain, eye, and ear in frog.
08/03/2021 (D1)	1,5		II-INTERNAL	-	-	
09/03/2021 (D2)	1	Unit -V Organogeny	To understand the development of various organs in frog, and placentation in mammals.	Development of brain in frog	Power Point presentation & interaction.	
11/03/2021 (D4)	1			Development of brain in frog - continuation.		
13/03/2021 (D6)	1			Development of brain in frog	Assessment	
15/03/2021 (D1)	1,5			Development of eye in frog.	Used modules from net sources	
16/03/2021 (D2)	1			Development of ear in frog		
18/03/2021 (D4)	1			Development of ear in frog - continuation.		

20/03/2021 (D6)	1			Seminar – Unit 1	Group Discussion, seminar and Interaction	
22/03/2021 (D1)	1,5			Placentation in mammals	Power Point presentation and discussion.	
23/03/2021 (D2)	1			Placentation in mammals- continuation.		
25/03/2021 (D4)	1			Seminar – Unit 1I	Group Discussion, seminar, mind map and Interaction	
27/03/2021 (D6)	1			Seminar – Unit 1II		
29/03/2021 (D1)	1,5			Seminar – Unit 1V		
30/03/2021 (D2)	1			Seminar – Unit V		

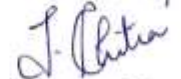
Work Plan

Class: II Biotechnology
Semester: IV

Subject Name: Lab in Genetics
Subject Code: 7BBT4P1

S. No.	UNIT	Content	Hours Needed	Hours Taken	Signature of the Student Representative
1.	I	Problem sets in Mendelian inheritance a) single point crosses & b) two point crosses.	20	18	M. Gayathri
2.	II	Mitosis in onion root	3	1	S. Bismutha
3.	III	Meiosis in flower buds of <i>Hibiscus Rosasinensis</i>	3	1	L. vigneshwari
4.	IV	Life cycle of <i>Drosophila melanogaster</i>	3	1	D. Jaganmohan
5.	V	Culture techniques and handling of flies	3	1	D. Kohita
6.	VI	Polygenic inheritance with reference to Finger Print	3	1	S. Kiruthiga
7.	VII	Determination of Phenomenon of segregation – Artificial – Probability	3	1	H. Smith
8.	VIII	Determination of independent assortment – Artificial – Probability	3	1	M. Swatha
9.	IX	Antibiotic sensitivity test in bacteria	3	1	N. M. P. P.
10.	X	Barr body identification in cells of buccal smear	3	1	A. S. Day


Signature of the Faculty member


Signature of the HOD

Work Diary

Class:II B.Sc Biotechnology
Semester:IV

Subject Name: Lab in Genetics
Subject Code: 7BBT4P1

Date	Hr	Unit & Topic	Objective	Contents	Aids Used	Outcome
22/12/2020 (D2)	3,5	Problem sets in Mendelian inheritance a) Single point crosses & b) two point crosses.	To perform -Problem sets in Mendelian inheritance a) Single point crosses & b) two point crosses.		Chalk & talk	Learn to solve Problem sets in Mendelian inheritance a) Single point crosses & b) two point crosses.
26/12/2020 (D6)	4					
29/12/2020 (D2)	3,5					
02/01/2021 (D6)	4					
05/01/2021 (D2)	3,5	Microscope Incubator	To identify and learn working of Microscope & Incubator	Identification of Parts, construction, Working, advantage, & disadvantage.	Seminar	Understand the working condition of Microscope & Incubator
08/01/2021 (D5)	1	Autoclave	To learn the functioning of Autoclave			learned the functions of Autoclave
09/01/2021 (D6)	4	Hot air oven	To identify the parts and operational conditions of Hot air oven			Identified the parts and operational conditions of Hot air oven

12/01/2021 (D2)	3,5	Mitosis in onion root	To perform Mitosis in onion root	Various stages	Hands on training	Perform the Mitosis in onion root tip experiment
19/01/2021 (D2)	3,5					
22/01/2021 (D5)	1	Shaker	To learn the functions of Shaker	Identification of Parts, construction, Working, advantage, & disadvantage.	Video method of interaction	Learned the functions of Shaker
23/01/2021 (D6)	4	Colony counter	To identify & working of Colony counter			To identify & working of Colony counter
29/01/2021 (D5)	1	Male Drosophila	To identify -Male Drosophila	Difference between male and female drosophila	Performed in lab	To identify -Male Drosophila
30/01/2021 (D6)	4	Female Drosophila	To identify - Female Drosophila			To identify - Female Drosophila
02/02/2021 (D2)	3,5	Meiosis in flower buds of Hibiscus Rosa sinensis	To perform Meiosis in flower buds of Hibiscus Rosa sinensis & identify various stages.	Various stages	Performed in lab	To perform Meiosis in flower buds of Hibiscus Rosa sinensis & identify various stages.
05/02/2021 (D5)	1					
06/02/2021 (D6)	4					
09/02/2021 (D2)	3,5	Life cycle of Drosophila melanogaster	To understand the Life cycle of Drosophila melanogaster	Culturing and identification of male & female Drosophila, media preparation, and identification of		To understand the Life cycle of Drosophila melanogaster
12/02/2021 (D5)	1					
13/02/2021 (D6)	4					

16/02/2021 (D2)	3,5	Culture techniques and handling of flies	To perform Culturing techniques and handling of flies	mutant drosophila.	Link	To perform Culturing techniques and handling of flies
19/02/2021 (D5)	1					
20/02/2021 (D6)	4	Sex comb in Male Drosophila	To know and identify the Sex comb in Male Drosophila	Details about male Sex comb of Male Drosophila	https://www.youtube.com/watch?v=ew3MHM5OG60 Hands on training	To know and identify the Sex comb in Male Drosophila
23/02/2021 (D2)	3,5	Polygenic inheritance with reference to Finger Print	To achieve Polygenic inheritance with reference to Finger Print	Expression of polygenic traits	Hands on training	To achieve Polygenic inheritance with reference to Finger Print
26/02/2021 (D5)	1					
27/02/2021 (D6)	4	<i>Escherichia coli</i>	To identify and learn about <i>Escherichia coli</i>	Morphology, identification, & gram positive & negative differentiation.	Online - group discussion	To identify and learn about <i>Escherichia coli</i>
02/03/2021 (D2)	3,5	Determination of Phenomenon of segregation – Artificial – Probability	To Determine the Phenomenon of segregation – Artificial – Probability	Performed with beads	https://www.youtube.com/watch?v=VjmQewAjPok	To Determine the Phenomenon of segregation – Artificial – Probability
05/03/2021 (D5)	1					
06/03/2021 (D6)	4	Polytene chromosome	To understand about Polytene chromosome	Interphase chromosome in salivary glands	Video method of interaction	To understand about Polytene chromosome

09/03/2021 (D2)	3,5	Determination of independent assortment – Artificial – Probability	To Determine independent assortment – Artificial – Probability	Performed with beads	https://www.youtube.com/watch?v=VjmQewAjPok	To Determine independent assortment – Artificial – Probability
12/03/2021 (D5)	1					
13/03/2021 (D6)	4	Criss cross inheritance	To learn about Criss cross inheritance	The transmission of a gene from mother to son or father to daughter.	Small-group discussion, Illustration and interaction	To learn about Criss cross inheritance
16/03/2021 (D2)	3,5	Antibiotic sensitivity test in bacteria	To perform-Antibiotic sensitivity test in bacteria	Antibiotic sensitivity and resistance among given bacteria	https://www.youtube.com/watch?v=Np87w5kCL-4	To perform-Antibiotic sensitivity test in bacteria
19/03/2021 (D5)	1					
20/03/2021 (D6)	4	Barr body identification in cells of buccal smear	To identify Barr body in cells of buccal smear	Genetic testing & female identification	https://www.youtube.com/watch?v=hLt884HV8bE	To identify Barr body in cells of buccal smear
23/03/2021 (D2)	3,5					
26/03/2021 (D5)	1	Mitosis stages	To learn-Mitosis stages	Prophase, prometaphase, metaphase, anaphase, and telophase.	Seminar and assignment.	To perform-Mitosis stages
27/03/2021 (D6)	4					
30/03/2021 (D2)	3,5	Meiosis stages	To learn-Meiosis stages	Meiosis I & Meiosis II		To perform-Meiosis stages


Signature of the Faculty member


Signature of the HOD