



**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**

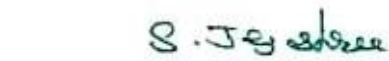
Day Order	1	2	3	LUNCH BREAK	4	5	
I		I- Micro- Plant	III- Micro- Virology			III- Micro- Lab in Bac&Vir	
II	III- Micro- Lab in Bac&Vir					III- Micro- Lab in Bac&Vir	
III	III- Micro- Virology	III- Micro- Virology					
IV		I-Micro- Allied Lab				III- Micro- Virology	III- Micro- Virology
V	I- Micro- Plant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

  
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Work Plan

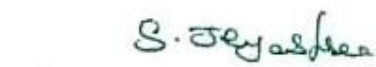
Class: I B.Sc Microbiology & CLT  
Semester: I Semester

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	<b>Algae</b> General Characters, structure and life history of Cyanophyceae ( <i>Oscillatoria</i> ) and Rhodophyceae ( <i>Polysiphonia</i> ). <b>Fungi</b> 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	<b>Bryophyta</b> General Characters, structure and life history of Moss ( <i>Polytrichum</i> ) <b>Plant Pathology</b> 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	<b>Pteridophyta</b> General Characters, structure and Life history of <i>Selaginella</i>	05	04	P. Parkavi
4.	IV	<b>Gymnosperms</b> General Characters, structure and Life history of <i>Pinus</i>	04	04	S. Shaluga
5.	V	<b>Anatomy</b> 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	<b>Algae</b> 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		<b>Algae</b> General Characters, structure and life history of Rhodophyceae( <i>Polysiphonia</i> ).	PowerPoint Presentation	
11/09/2020 (D5)	4	I		<b>Algae</b> General Characters, structure and life history of Cyanophyceae ( <i>Oscillatoria</i> )	PowerPoint Presentation	
14/09/2020 (D1)	2	I		<b>Fungi</b> General Characters, Structure and Life history of Basidiomycetes( <i>Puccinia</i> ).	PowerPoint Presentation	
18/09/2020 (D5)	1	I		<b>Fungi</b> 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.	<b>Bryophyta</b> 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	<b>Bryophyta</b> 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.	<b>Plant Pathology</b> Virus Diseases – Bunchy top of Banana.	PowerPoint Presentation	
09/10/2020 (D5)	4	II		<b>Plant Pathology</b> 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	<b>Pteridophyta</b> General Characters of <i>Selaginella</i>	PowerPoint Presentation
19/10/2020 (D1)	2	III	<b>Pteridophyta</b> structure of <i>Selaginella</i>		PowerPoint Presentation	
23/10/2020 (D5)	1	III	<b>Pteridophyta</b> Life history of <i>Selaginella</i>		PowerPoint Presentation	
23/10/2020 (D5)	4	III	<b>Pteridophyta</b> 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	<b>Gymnosperms</b> General Characters of <i>Pinus</i>	PowerPoint Presentation	★ Students will able to understand and identify gymnosperm plants
09/11/2020 (D1)	2	IV		<b>Gymnosperms</b> structure of <i>Pinus</i>	PowerPoint Presentation	
16/11/2020 (D1)	2	IV		<b>Gymnosperms</b> Life history of <i>Pinus</i>	PowerPoint Presentation	
20/11/2020 (D5)	1	IV		<b>Gymnosperms</b> 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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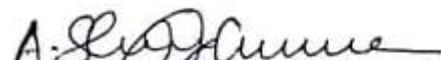
  
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### Work Plan

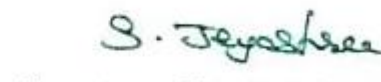
**Class: III B.Sc., Microbiology & CLT**  
**Semester: V**

**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 <sub>4</sub> 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.	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			
				★ To know the differences that exists between viruses in gene level.			



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"> <li>★ To understand how the virus is able to infect a host, including the steps involved in the infectious cycle</li> <li>★ To know the attachment, entry, replication, and exit of virus from the cell.</li> </ul>	Lytic and lysogenic cycle of T <sub>4</sub> phage	PowerPoint Presentation	★ Exploring the knowledge about life cycle of phages.
26.08.2020 (D3)	II			Lytic and lysogenic cycle of T <sub>4</sub> phage	PowerPoint Presentation	
27.08.2020 (D4)	IV			Lytic and lysogenic cycle of T <sub>4</sub> 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"> <li>★ To enable student learn the cultivation of virus in laboratory methods.</li> </ul>	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		

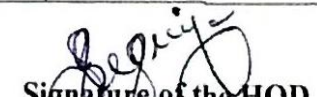
01.10.2020 (D4)	IV			Electron microscopy	PowerPoint Presentation	
01.10.2020 (D4)	V			Electron microscopy	PowerPoint Presentation	
05.10.2020 to 08.10.2020	Internal Assessment I					
09.10.2020 (D5)	III			Revision	Discussion	
12.10.2020 (D1)	III			Atomic force microscopy &Haemagglutination	PowerPoint 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					

  
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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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