



**VeluManoharan Arts and Science College for Women**  
**(An Educational Initiative Under VeluManoharan Health and Educational Trust)**  
**Marappalam, Devipattinam ECR Road, Peravoor Post, Ramanathapuram 623504**  
**Affiliated to Alagappa University, Karaikudi - 630 003.**

**ANNUAL REPORT 2023-2024**  
**Department of Microbiology**

**Prepared by**  
**Ms K Kanakatharshini**  
**Ms S Nithya Kalyani**

**About the Department**

- The department endeavors to specialize its student in distinct areas of Microbiology. The Department of Microbiology is devoted in providing the quality education, through both theory and practical sessions.
- Our department encompasses qualified faculties experienced in a broad range of fields, including microbial physiology, molecular microbiology, genetics, genomics, Biochemistry and biotechnology.
- The department has a regularly updated library covering various topics in Microbiology which serves as an additional rich learning resource for the students.
- The department is well equipped with lab for UG & PG students which are necessary to enhance the student's practical knowledge.
- The department conducts a variety of programs to develop employable as well as soft skills of student such as subject-based competitions (poster-making, model making, debates, seminar presentations and essay writing), guest lectures by scientists, etc.
- Prizes are awarded to students who excel in academics as well as in co-curricular activities. Educational visits to research institutes and industries are conducted. The students are also encouraged to undertake internships at research institutes and biomedical laboratories.

**Vision**

The Department of Microbiology endeavors to be in the frontline of the field of microbiology empowering women as among the best for Microbiology education, scientific research and to satisfy the increasing demand in the country for microbiologists.

**Mission**

- To provide excellent education and training to women students and developing the very best in them through the stimulus of scholarly progression and academic improvement.

- To educate talents and stimulate all round personality development by imparting an essence of self-confidence in our students.
- To prepare them to become responsible contributing citizens, who can excel in leadership positions around the globe and can work for the advancement of the society.
- To offer learning environment that excites suitable and accessible knowledge on recent and changing needs in Microbiology to enable them to pursue a career of their choice.
- To equip the students with higher education and promote innovative research skills that advances the frontiers of knowledge in all the field of microbiology.

### **Career opportunities**

- Assistant Professors in Universities and Colleges (Government, aided and Affiliated Colleges).
- Microbiologists, Quality assurance managers, Product Development managers Directors, Assistant directors, consultants etc.
- Medical Microbiology (Diagnostic Labs and Hospitals)
- Industrial Microbiology
  - Plant or Animal Biotechnology (Animal farming industry, fishery industry)
  - Food and Dairy Microbiology, (Food Industry)
  - Immunology, Clinical Virology (vaccine and anti-viral development)
  - Sanitation Microbiology/Environmental Microbiology(Waste water industry)
  - Biochemistry, Pharmaceutical Microbiology (Pharma Industry)
  - Genetic Engineering, Molecular Biology or Bioinformatics (Drug development, and new product development).

### **Action Plan (2023-2024)**

- Spoken English and communication skills
- Seminar
- Workshop
- Department Association
- Industrial Visit

### **Academic year: 2023-2024**

Course	Year	Class Strength	Total Strength
B.Sc., Microbiology	I Year	74	177
	II Year	68	
	III Year	35	

Course	Year	Class Strength	Total Strength
M.Sc., Microbiology	I Year	30	30

#### Teaching Staff Profile:

S.No	Name of the Staff	Qualification	Designation	Year of working
1.	Dr A Kanchana	M.Phil., MBA., Ph.D., IABMS	Head & Principal	2019 onwards
2.	Mrs H Noorul Samsoon Maharifa	M.Sc.,M.Phil.,(PhD)	Assistant Professor	2022 onwards
3.	Ms. R Mohana Priya	MSc (Microbiology), DCA., BA(Hindi)	Assistant Professor	2020 onwards
4.	Ms. S Nithya kalyani	Msc Micrbiology	Assistant Professor	2023 onwards
5.	Ms. K Kanakatharshini	Msc Micrbiology	Assistant Professor	2023 onwards
6.	Ms A Gunappriya	Msc Micrbiology	Assistant Professor	2023 onwards
7.	Ms. N Pavithra	Msc Micrbiology	Assistant Professor	2023 onwards
8.	Ms Pugazhendhi	Msc Micrbiology	Assistant Professor	2023 onwards

#### Non -Teaching Staff Profile:

S.No	Name of the Staff	Qualification	Designation	Year of working
1.	Mrs Aarthi	B.Sc Nursing	Lab Assistant	2023 onwards

**FACILITIES**  
**Microbiology Lab (UG & PG) Stock Report**  
**2023-20224**

S.No	Instruments	No.s
1.	Weigh Balance	1
2.	Water bath	5
3.	pH Meter	1
4.	Colony counter	2
5.	Centrifuge	4
6.	Hot plate	1
7.	Gel electrophoresis tank	3
8.	Colorimeter	3
9.	Vortex	1
10.	Incubator	3
11.	Autoclave	2
12.	Refrigerator	2
13.	Incubator Shaker	2

14.	Laminar Air Flow Chamber	1
15.	Normal Microscope Light Microscope	3 4
16.	Magnetic stirrer	2
17.	ELISA instrument	1
18.	1.Microprocessor single beam Spectrophotometer	1
19.	2.Microprocessor single beam UV-VIS Spectrophotometer	1
20.	Acer system &Printer	1
21.	Keyboard	1
22.	Mouse	1
23.	Tube distillation Adaptor	1
24.	PCR	1
25.	BB Apparatus	1
26.	Stethoscope	1

S.No	Electronic and Non Electronic Devices	No.s
1	Spirit lamp	2
2	Water faucet	3
3	Bunsen Burner	4

4	Bench top with Cupboard Corner top with cupboards	27 5
5	Stools	40
6	Cylinder	2
7	Tube Lights	6
8	Fans	8
9	Gas Stove	1
10.	Test tube stand	31
12.	Cotton swab	2
13.	pH strip	5
14.	Spatula	10
15.	Tooth pick	5
16.	Cotton bundle	5
21.	Disposable gloves	1 pack

S.No	Glasswares	Quantity
	Beaker 50 ml 200 ml 500 ml	1 1 1
1.	Biuret strand Biuret	5 5
2.	Conical Flask 150 ml 250 ml 500 ml 1000 ml	13 28 15 5
3.	Colorimeter Test Tube	15

4.	Cylinder Lighter	2 1
5.	Dropper	10
6.	Heamocytometer	5
7.	Measuring Jar 10 ml 100 ml	5 1
8.	Micro pipette 200-1000µl 100-1000µl 2-20µl 10-100µl 0.1-2.5µl 1000 µl 200µl	1 2 1 1 1 6 1
9.	Micro Centrifuge Tube 2 ml 2 – 200 µl 15 ml	200 40 66
10.	Microscopic cover slip	33
11.	Micro tip 1 ml 10µl	53 95
12.	Petri Dish	151
13.	Test tube	48
14.	Test tube holder	15
15.	Blood grouping Tiles	6
16.	Spatula	6
17.	Forceps	1
18.	Surgical holder	1

19.	L-rod	10
20.	Whatman filter paper	51
21.	Inoculation loop	29
22.	Class rod	5
23.	Cavity slide	7
24.	Normal slide	110
25.	Tray	2
26.	Litmus paper Red Blue	200 100
27.	Sprit lamb	2
28.	Dropper bottle	7
29.	Neubauer chamber	31
30.	Hydrometer	4
31.	Haemometer	18
32.	Syringe -5 ml	28
33.	Blood diluting pipettes WBC RBC	23 22
34.	Watch glass	23
35.	Reagent bottle	10
36.	96 well plate	12
37.	Blood Lancets	500
38.	Disposal dropper	41
39.	Salco boiling flask (250ml)	2
40.	ESR strand	40 80



	ESR Pipette	
41.	Nylon flocked swab	25

S.No	Chemicals(UG Lab)	Quantity
1.	Acetic Acid glacial	30ml
2.	Acetyls Chloride	500ml
3.	Ammonium Oxalate	480g
4.	Ammonium Thiocynate	500g
5.	Amyl Alcohol	500ml
6.	Anthrone	25g
7.	Agar Agar	30g
8.	Albumin Bovine Powder	2gm
9.	L-Ascorbic Acid	100gm
10.	Brilliant Green Bile Broth	580gm
11.	Blood Agar Base	100g
12.	Blood Agar Base (Infusion Agar)	50gm
13.	Barritt's Reagent A	100ml
14.	Barritts Reagent B	100ml
15.	Biuret Reagent	460ml
16.	Barfoed's Reagent	145ml
17.	Bials	250ml
18.	Benedict's Reagent	260 ml
19.	Calcium Carbonate	980gm
20.	Calcium Chlorite	200gm

21.	<b>Cellulose Powder</b>	<b>500gm</b>
22.	<b>Chocolate Agar Base</b>	<b>580gm</b>
23.	<b>Cooke Rose Bengal Agar Base</b>	<b>100gm</b>
24.	<b>Cupric Sulphate</b>	<b>1000gm</b>
25.	<b>Chloroform</b>	<b>20 ml</b>
26.	<b>Crystal violet</b>	<b>5gm</b>
27.	<b>Crystal violet</b>	<b>20ml</b>
28.	<b>Congo red Powder</b>	<b>20gm</b>
29.	<b>Cetrimide Agar Base , Harmonized</b>	<b>80gm</b>
30.	<b>Di- Sodium Hydrogen Orthophosphate</b>	<b>500gm</b>
31.	<b>Di-Sodium Hydrogen Orthophosphate Anhydrous</b>	<b>500gm</b>
32.	<b>Diphenyl Amine</b>	<b>250gm</b>
33.	<b>N,N Dimethyl Acetamide</b>	<b>500ml</b>
34.	<b>3,5 Dinitro Salicylic Acid</b>	<b>25gm</b>
35.	<b>D-Fructose</b>	<b>95gm</b>
36.	<b>D- Glucose Anhydrates</b>	<b>400gm</b>
37.	<b>EDTA-Disodium salt</b>	<b>50gm</b>
38.	<b>EMB Agar</b>	<b>10gm</b>
39.	<b>Ferric Chloride Anhydrous</b>	<b>940gm</b>
40.	<b>Formaldehyde Solution</b>	<b>600 ml</b>
41.	<b>Fluid Lactose Medium</b>	<b>480gm</b>
42.	<b>Glycerol</b>	<b>500ml</b>
43.	<b>Hemoglobin Powder</b>	<b>60gm</b>

44.	<b>Hydrogen Peroxide</b>	<b>250ml</b>
45.	<b>Acetic Acid glacial</b>	<b>20ml</b>
46.	<b>Hydrochloric Acid</b>	<b>50ml</b>
47	<b>Iodine Solution</b>	<b>80gm</b>
48	<b>Iodine Resublimed</b>	<b>500ml</b>
49	<b>Iso propyl Alcohol</b>	<b>4gm</b>
50	<b>Indane Trione Hydrate</b>	<b>80ml</b>
51	<b>Kovac's Indole</b>	<b>40gm</b>
52	<b>Lactose Broth</b>	<b>2.5 Liter</b>
53	<b>Leishmans Stain Solution</b>	<b>490ml</b>
54	<b>Lacto phenol Cotton blue</b>	<b>400gm</b>
55	<b>Luria Bertani Broth</b>	<b>150gm</b>
56	<b>Lactobacillus MRS Agar</b>	<b>80gm</b>
57	<b>Mueller Hinton Agar</b>	<b>10gm</b>
58	<b>Methylene blue</b>	<b>20gm</b>
59	<b>Macconkey Agar</b>	<b>230gm</b>
60	<b>Maltose Monohydrate</b>	<b>10gm</b>
61	<b>Monohydrate</b>	<b>70gm</b>
62	<b>Mannitol Salt Agar Base</b>	<b>100gm</b>
63	<b>Mercuric Chloride</b>	<b>960gm</b>
64	<b>MR-VP Medium</b>	<b>90ml</b>
65	<b>Millon's Reagent</b>	<b>30ml</b>
66	<b>Methyl red solution</b>	<b>20ml</b>
67	<b>Malachite Green</b>	<b>140gm</b>
68	<b>Nutrient Broth</b>	<b>460ml</b>

69	<b>Ninhydrin Solution</b>	<b>20gm</b>
70	<b>Nutrient agar</b>	<b>250gm</b>
71	<b>Oxalic Acid Dehydrate</b>	<b>10gm</b>
72	<b>Orcinol Monohydrate</b>	<b>40gm</b>
73	<b>Phosphate Buffer</b>	<b>200gm</b>
74	<b>Potassium Dichromate</b>	<b>50gm</b>
75	<b>Potato Dextrose Agar</b>	<b>80gm</b>
76	<b>Potato Dextrose Broth</b>	<b>20ml</b>
77	<b>Phenolphthalein solution</b>	<b>350gm</b>
78	<b>Potassium Permanganate</b>	<b>250gm</b>
79	<b>Potassium Sodium tartrate</b>	<b>980gm</b>
80 81	<b>Potassium Hydroxide Pellets</b>	<b>480gm</b>
82	<b>Potassium chloride</b>	<b>500gm</b>
83	<b>Potassium Dihydrogen Orthophosphate</b>	<b>380gm</b>
84	<b>Potassium Bisulphate</b>	<b>300gm</b>
85	<b>Rose Bengal Agar</b>	<b>400gm</b>
86	<b>Sodium Chloride</b>	<b>200gm</b>
87	<b>Sodium Alginate</b>	<b>250gm</b>
88	<b>Sodium Potassium Tartrate</b>	<b>70gm</b>
89	<b>SIM medium</b>	<b>300gm</b>
90	<b>Starch Soluble</b>	<b>900gm</b>
91	<b>Sodium Hydroxide Pellet</b>	<b>500gm</b>
92	<b>Sucrose</b>	<b>400gm</b>
93	<b>Sodium Thio sulphate</b>	<b>30gm</b>

94	<b>Simmonsitrage Agar</b>	<b>500gm</b>
95	<b>Sodium Acetate Anhydrates</b>	<b>40gm</b>
96	<b>Starch Agar</b>	<b>230gm</b>
97	<b>Sodium Lauryl Sulphate</b>	<b>500gm</b>
98	<b>Sodium Sulphate Anhydrates</b>	<b>400gm</b>
99	<b>Sodium Citrate Tribasic Dehydrate</b>	<b>500ml</b>
100	<b>Sulphuric Acid</b>	<b>80ml</b>
101	<b>Seliwanoffs Reagent</b>	<b>150ml</b>
102	<b>Sabouraud Dextrose Agar</b>	<b>100gm</b>
103	<b>Streptomycin sulphate</b>	<b>7gm</b>
104	<b>Try Sodium Citrate</b>	<b>500gm</b>
105	<b>Tryptone Broth</b>	<b>50gm</b>
106	<b>Tris Buffer</b>	<b>50gm</b>
107	<b>Tris Hydrochloride</b>	<b>40gm</b>
108	<b>Tributylin Agar Base / Tributyrin</b>	<b>80gm</b>
109	<b>Tryptic Soya Agar</b>	<b>400gm</b>
110	<b>Trichloro acetic Acid</b>	<b>80gm</b>
111	<b>Triple sugar iron agar</b>	<b>50gm</b>
112	<b>Urea Agar</b>	<b>50gm</b>
113	<b>Urea Broth Base</b>	<b>80gm</b>
114	<b>Yeast Mannitol agar</b>	<b>150gm</b>

S.No	Chemicals (PG Lab)	Quantity
1.	Ammonium Sulphate	900gm
2.	Agarose Special low	300gm
3.	Albumin Bovine Fraction V Powder	5gm
4.	Ammonium Borate	250gm
5.	Ammonium Oxalate	500gm
6.	Acrylamide	500gm
7.	Ammonium Carbonate	490gm
8.	Agar Agar	487gm
9.	Agarose Special ,low EEO	300gm
10.	Bromophenol Blue	50gm
11.	Blood Agar Base	120gm
12.	Benedict's Reagent	500ml
13.	Brain Heart Infusion Broth	100gm
14.	BIAL s Reagent	125ml
15.	Barrits Reagent A	50ml
16.	Barrits Reagent B	115ml
17.	Barfoeds Reagent	125ml
18.	Citric Acid	500gm
19.	Crystal violet	50gm
20.	Crystal violet Oxalated	105ml
21.	Cholesterol	50gm
22.	Creatinine	25gm
23.	Coomassie Brilliant Blue G	50gm

24.	Carbol Fuchsin Dilute	230ml
25.	D-Glucose Anhydrous	500gm
26.	Diphenyl amine	250gm
27.	Di-Potassium hydrogen orthophosphate	500gm
28.	Di- Sodium hydrogen Orthophosphate	500gm
29.	Drabkins solution	1 L
30.	DE.IONISED WATER	4.5 liter
31.	Decolourising solution	65ml
32.	Eosin yellow stain solution	125ml
33.	EDTA – Disodium salt	500gm
34.	EMB Agar	100gm
35.	Ehrlich's Reagent	125ml
36.	Ethanol	1000 ml
37.	Ferric chloride Anhydrous	500gm
38.	Glycerol	1000ml
39.	Glycine	250gm
40.	Giemsa's Stain Solution	100ml
41.	Hydrochloric Acid Solution	200ml
42.	Hydrochloric acid	500ml
43.	Hydrogen peroxide	500ml
44.	Laemmli Buffer	50ml
45.	Lactobacillus MRS Agar	100gm
46.	Luria Bertani Broth Miller	500gm
47.	Luria Bertani Agar Miller	500gm

48	Kovacs Indole Reagent	125ml
49	Malachite green	5gm
50	Methylene Blue	50ml
51	Methyl Red solution	125ml
52	Mannitol salt Agar Base	100gm
53	Macconkey Agar	198gm
54	Mannitol Soft Agar Base	130gm
55	Minimal Broth	100gm
56	MR-VP medium	497gm
57	Methyl Cellulose	500gm
58	2-Mercupto ethanol	200ml
59	Nigrosine	50gm
60	1N Sodium Hydroxide Solution	200ml
61	Nutrient Gelatin	400gm
62	Nutrient Broth	295gm
63	Nutrient Agar	180gm
64	n- Butyl Alcohol	500ml
65	Orcinol Monohydrate	20gm
66	Oxidase Discs	50 disc
67	Picric Acid Saturated solution	125ml
68	Phenol red sucrose Broth	200gm
69	Phenyl ethyl Alcohol Agar	200gm
70	Phenol Red Dextrose Broth	170gm
71	Phenol Red Lactose Agar	200gm
72	Polyethylene glycol-p-tert-Octyl	100ml



	phenyl ether	
73	Phosphate Buffered Saline	500ml
74	Phenol Red Sucrose Broth	170gm
75	Peptone Bacteriological	220gm
76	Phenol Red Lactose Broth	90gm
77	Potassium Chloride	500gm
78	Polyacrylamide Neutral	250gm
79	Potato Dextrose agar	100gm
80 81	Petroleum Jelly White	500gm
82	R.B.C Diluting Fluid	125ml
83	SM agar	600gm
84	Sodium Thio Sulphate	500gm
85	Sodium Chloride	500gm
86	Sodium Hydroxide Pellets	500gm
87	Starch Agar	140gm
88	Sodium Nitrate	500gm
89	Sodium Azide	100gm
90	Soyabean Casein Digest medium	70gm
91	Sim Medium	398gm
92	Safranine	50gm
93	Seliwenoff Reagent	125ml
94	Thio semi carbazide	50gm
95	Tributyryn Agar Base w/o Tributyrin	370gm

96	Triple Sugar Iron Agar	200gm
97	Tryptic Soya Agar	500gm
98	Thioglycollate Broth	200gm
99	Tryptone Broth	200gm
100	Tri-Sodium Citrate	100ml
101	Thio urea	500gm
102	Tryptone	500gm
103	Uric Acid	250gm
104	W.B.C Diluting Fluid	25gm
105	YPD Broth	125ml
106	Zinc Sulphate	500gm

S.No	KIT (UG & PG Lab)	Quantity
1.	<b>Medox – Bio Competent Cell Preparation Teaching Kit</b>	<b>1</b>
2.	<b>Medox – Bio Yeast Genomic DNA Extraction Teaching Kit</b>	<b>3</b>
3.	<b>Reagent Combi pack for routine Blood Grouping &amp; Typing</b>	<b>1</b>
4.	<b>Blood grouping kit</b>	<b>7</b>
5.	<b>RHELAX - RF</b>	<b>1</b>
6.	<b>Gram Staining Kit</b>	<b>1</b>
7.	<b>RHELAX - CRP</b>	<b>1</b>
8.	<b>RHELAX - ASO</b>	<b>1</b>
9.	<b>Widal Test kit</b>	<b>1</b>
10.	<b>Medox – Bio Isolation &amp;</b>	<b>3</b>

	<b>Characterization of Petite Mutants</b>	
11.	<b>Medox – Conjugation Kit</b>	<b>2</b>
12.	<b>Medox – Plant RNA isolation Teaching Kit</b>	<b>2</b>
13.	<b>Medox – AMES Teaching Kit</b>	<b>2</b>
14.	<b>Medox – Yeast Genomic DNA Extraction Teaching Kit</b>	<b>2</b>
15.	<b>Medox – Transduction Kit</b>	<b>1</b>
16.	<b>Agarose Gel Electrophoresis Kit</b>	<b>2</b>
17.	<b>DNase</b>	<b>1</b>
18.	<b>Competent cell. Preparation Teaching Kit</b>	<b>1</b>
19.	<b>Hiv kit</b>	<b>14</b>
20.	<b>Pregnancy kit</b>	<b>2</b>
21.	<b>Malaria</b>	<b>4</b>
22.	<b>HCV kit</b>	<b>12</b>
23.	<b>Syphilis</b>	<b>1</b>
24.	<b>HBsAG</b>	<b>11</b>
25.	<b>C Reactive Protein</b>	<b>1</b>
26.	<b>Rhematoid Factors</b>	<b>1</b>
27.	<b>Anti Streptomycin O</b>	<b>1</b>

<b>S.No</b>	<b>Chemicals (DMLT)</b>	<b>Quantity</b>
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1.	Ammonium Molybdate	97gm
2.	Acetic Acid Glacial	995ml
3.	Ammonium Sulphate	497gm
4.	Ammonia Buffer Solution	495ml
5.	Ammonia Solution	980ml
6.	Albumin Bovine Fraction V powder	10gm
7.	Barium Chloride	500gm
8.	Biuret Reagent	125ml
9.	Benedict's Reagent	480ml
10.	Barritts Reagent A	125ml
11.	Barritts Reagent B	125 ml
12.	Bromocresol Green solution	125ml
13.	Bromothymol Blue Solution	125ml
14.	Chloroform	500ml
15.	Calcium Carbonate	480gm
16.	Creatinine	20gm
17.	Cholesterol	3gm
18.	Carbol fusion Dilute	125ml
19.	Carbol Fusion strong	125ml
20.	Diazo Reagent A	2ml
21.	2,4 Dinitro phenyl Hydrazine	22gm
22.	Diazo Reagent B	10ml
23.	Drabkins Solution	1L
24.	Dimethyl Sulphoxide	500ml

25.	Eosinophil diluting fluid	115ml
26.	Eosin yellow stain solution	125ml
27.	Ehrlichs Reagent	50ml
28.	EDTA	80gm
29.	Fouchets Reagent	180ml
30.	Hydrogen Peroxide	250ml
31.	Hydrochloric Acid	1000ml
32.	Haematoxylin Solution	125 ml
33.	Kovac's Indole Reagent	125ml
34.	Lactic Acid	500ml
35.	Leishman's staining solution	100ml
36.	Magnesium chloride	496gm
37.	Magnesium Sulphate	500ml
38.	Methyl Red Solution	125 ml
39.	Methanol pure	500ml
40.	Mercuric chloride	100gm
41.	Methylene Blue Aqueous	125ml
42.	Nitric Acid	530ml
43.	O-Tolidine Reagent	100ml
44.	Platelet diluting fluid	125ml
45.	Petroleum Ether 60- 80°	498ml
46.	Phenol	500gm
47.	Phenol Reagent	75ml
48.	Picric Acid Saturated Aqueous Solution	40ml

49	Phosphotungstic Acid	5gm
50	Paraffin wax 58-60°C	5kg
51	R.B.C Diluting fluid	125ml
52	Sodium Hydroxide Solution	500ml
53	Sulphur Power	495gm
54	Sodium Nitroprusside	50gm
55	Sodium Chloride NaCl	496gm
56	Sprit	595ml
57	Sodium Sulphate Anhydrous	498gm
58	Sodium Nitrate	498gm
59	Sodium phosphate Dibasic Na <sub>2</sub> HPO <sub>4</sub>	498gm
60	Sodium Carbonate Anhydrous	500gm
61	Sulphanilic Acid	95gm
62	Sodium Tungstate	97gm
63	Sulphuric Acid	20ml
64	Sodium Thiosulphate(Hypo)	500gm
65	Thiourea	500gm
66	Thiosemicarbazide	20gm
67	Trichloro acetic acid solution	120ml
68	Uric acid	3gm
69	W.B.C Diluting fluid	120ml
70	Xylene (Sulphur free)	500ml

S.No	KIT (DMLT)	Quantity
1.	Malaria Antigen Test PV/PF	50


2.	Syphilis Rapid test	48
3.	Hapatitis B virus surface Antigen (HBsAg) Test	50
4.	Kala azar Rapid test kit	1
5.	VDRL Kit	1
6.	RadialImmunodiffusion	1
7.	RPR Kit	2
8.	GOD POD kit	1
9.	Calcium Chloride kit	1
10.	Bilirubin Kit	1
11.	Urea Berthelot	1
12.	Chloride kit	1

**Library Book list 2023 - 2024**

S.No	Title of the Book Booklist	Author Name	Publisher and Edition	Count
1.	Fundamentals of Microbiology	Jeffrey C. Pommerville	-	1
2.	Text Book of microbiology	Ananthanarayanan and Panicker's	Universities Press , Tenth Edition	1
3.	Text Book of microbiology	R.C.Dubey D.K Maheshwari	S Chand Publishing	3
4.	Microbiology	Michael J Pelczar,JR.E.C.S Chan,Noel R Kreig	MC Graw Hill Education, Indian Edition	3

5.	Molecular Biology	David Friedfielder	Second Edition, Narosha Publishing Home	1
6.	Microbiology	James G Cappucino		1
7.	Molecular structure & Spectroscopy	Aruldass G	Second Edition, PHI Learning	1
8.	Microbiology (Alcam's)	-	-	1
9.	Food Microbiology	William C Frazier	Fourth Edition & Tata McGraw-Hill Publishing Company Limited	1
10.	Biotechnology	U Satyarayanan	-	1
11.	Biochemistry	U Satyarayanan & U Chakrapani	Elsiever1	

### STAFF PROFILE 2022 - 2023

	<p><b>Name:</b> Mrs H Noorul Samsoon Maharifa., M.Sc., MPhil., DMLT., (PhD)</p> <p><b>Designation:</b> Assistant Professor Head, Department of Microbiology, Department of Microbiology</p>
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She has Msc., MPhil qualification with Nine Years and Eight months of teaching and Research experience. Her teaching and research interests include on Molecular Biology and Microbial Genetics Theory and practical, Bioinformatics, Genomics and Proteomics, Recombinant DNA Technology, Nanobiotechnology, Research Methodology, Medical Microbiology, and Marine Biotechnology. She has published 4 original research papers in Scopus/WoS-indexed journals and 4 original research papers in UGC care list journals. She has submitted 2 Gene sequences in NCBI Genbank. She completed 1 Student research project funded by TNSCST and 1 project as a coordinator on rural upliftment “Application of Science and Technology for Rural Areas – ASTRA” funded by TNSCST. Self-motivating, principled mentor has a passion for learning contemporary technology to stimulate teaching-learning and research among peers and students.



**Name:** Ms R Mohana Priya., M.Sc., DCA, BA (Hindi)

**Designation:** Assistant Professor, Department of Microbiology

She is MSc qualified with two years of experience. Her field of research interest is medical microbiology and environmental microbiology. She has attended and presented papers in State and national-level Seminars, Workshops, and conferences. She is familiar with microbiological techniques. She also published an article in the Journal of Sustainable Humanosphere, Kyoto University, Japan. She is more interested in research and explores the tiny world of microbes.

Ms.Nithya Kalyani M, Msc,  
Assistant professor,  
Department of Microbiology.

She has Msc, qualification with Nine months of experience in teaching and research in Microbiology. She completed medical coding certificate course in achievers spot, Chennai and Journalism under



**Ms. K. Kanakatharshini., MSc Biotechnology**  
**Assistant Professor**  
**Department of Microbiology**

She has MSc Biotechnology qualification with one year nine months of teaching experience and two years six months experience as a Microbiologist in Quality control department in Sri Sadguru Sai Minerals, Coimbatore, Tamil Nadu. Her teaching and research interest includes on Molecular Biology, rDNA technology, Nanotechnology, Immunology, Genomics and Proteomics, Mushroom cultivation, Bifertilizer production. She got Summer Research Fellowship- 2018 by Indian Academy of Sciences, Bangalore and completed a Project “Potential interaction of molecular chaperon DnaK with cell division and genome segregation proteins of *Deinococcus radiodurans*” at Bhabha Atomic Research Centre (BARC) Mumbai. She has participated and presented papers in National level and International level Conferences

Mrs. GUNAPRIYA A, Msc., D.El.Ed.,  
Assistant professor,  
Department of Microbiology.

She has M.Sc., D.El.Ed., qualification with eight months of experience in teaching and research as an assistant professor of microbiology, 3 years of teaching experience in a school as a biology teacher and four months of experience as a microbiologist in Protonic pvt. ltd. At Chennai, the head office located at Haryana. She has completed 6 months of medical coding course in Sri Raetna solutions, Chennai. Dedicated, resourceful and innovative professor having knowledge across Mushroom cultivation, Vermitechnology, Immunology, Microbiology and Biodiversity. She employs effective teaching methods including laboratory instructions and experimental learning to engage students to facilitate their understanding of microbiological concepts. She provides guidance, mentorship and support to students in their academic and research pursuits.



**Mrs., N.PAVITHRA M.Sc., EMT  
Assistant Professor., DMLT incharge.  
Department Of Microbiology.**

She has an M.Sc. qualification with seven months of experience in teaching and an additional course has been completed in EMT-Emergency Medical Technician in six months for medical technician training at Syedha Clinic Hospital. She is on a small Grand Programme committee of the Marine Biological Association of India (MBAI) deciding the Project on Enhancement of Bioelectricity Production by Marine Bacteria. She has attended and presented at National level and International Level conferences. Her teaching interests include Medical Microbiology, Food Microbiology and Industrial Microbiology, Gynaecology, Haematology, Cardiology. He has a dedicated, punctual, positive attitude, directions to learn and follow directions, problem-solving skills, and an ability to teach students from diverse backgrounds.

**Ms.P.Pugazhenth, Msc,  
Assistant professor,  
Department of Microbiology.**

She has Msc, qualification with two months of experience in teaching and one year of experience in microbiologist at Harita fehrer Ltd.Her teaching interest includes on Medical Microbiology, Biotechnology ,Food Microbiology and Industrial Microbiology.She is hard working, honest individual. She is a good timekeeper, always willing to learn new skills. She is friendly, helpful and polite, have a good sense of humour and able to work independently in busy environments and also within a team setting.

**B.Sc., MICROBIOLOGY – PROGRAMME STRUCTURE**  
**ALAGAPPA UNIVERSITY, KARAUKUDI**  
**NEW SYLLABUS UNDER CBCS PATTERN (w.e.f.2017-18)**

ALAGAPPA UNIVERSITY, KARAUKUDI  
NEW SYLLABUS UNDER CBCS PATTERN (w.e.f.2017-18)

**B.Sc., MICROBIOLOGY – PROGRAMME STRUCTURE**

Sem	Part	Course Code	Title of the Course	Cr.	Hrs./ Week	Max. Marks		
						Int.	Ext.	Total
I	I	711T	Tamil / Other Languages – I	3	6	25	75	100
	II	712E	English – I	3	6	25	75	100
	III	7BMI1C1	Core – I – General Microbiology	4	6	25	75	100
		7BMI1P1	Core – II – General Microbiology – Practical – I	4	6	40	60	100
			Allied-I-(Theory only) (or)	5	5	25	75	100
			Allied-I-(Theory cum Practical)	4	3	15	60	75
			Allied Practical – I	–	2**	–	–	–
	IV	7NME1A / 7NME1B / 7NME1C	(1) Non-Major Elective-I (A) jkpo; nkhopapd; mbg;gilfs; (B) ,f,fhy yf,fpak; / (C) Communicative English	2	1	25	75	100
			Total(Allied Theory only)	21	30	–	–	600
			Total(Allied Theory cum Practical)	20				575
II	I	721T	Tamil / Other Languages – II	3	6	25	75	100
	II	722E	English – II	3	6	25	75	100
	III	7BMI2C1	Core – III – Microbial Physiology	4	6	25	75	100
		7BMI2P1	Core – IV – Microbial Physiology – Practical – II	4	5	40	60	100
			Allied-II -(Theory only) (or)	5	5	25	75	100
			Allied-II-(Theory cum Practical)	4	3	15	60	75
			Allied practical – I	2	2	20	30	50
	IV	78ES2	(3) Environmental Studies	2	2	25	75	100
			Total(Allied Theory only)	21	30	–	–	600
			Total(Allied Theory cum Practical)	22				625
III	I	731T	Tamil /Other languages – III	3	6	25	75	100
	II	732E	English – III	3	6	25	75	100
	III	7BMI3C1	Core-V-Molecular Biology and Microbial Genetics	4	5	25	75	100
		7BMI3P1	Core –VI-Molecular Biology and Microbial Genetics-Practical – III	4	5	40	60	100
			Allied –III (Theory only) (or)	5	5	25	75	100
			Allied-III (Theory cum Practical)	4	3	15	60	75
			Allied Practical – II	–	2**	–	–	–
	IV	7NME3A/ 7NME3B/ 7NME3C	(1) Non-major Elective-II (A),yf,fpakK;nkhopg,gad,ghLk;/ (B )goe,jkpo; yf,fpag,fSk; yf,fpatuyhWk;/ (C) Effective Employability Skills	2	1	25	75	100
		7SBS3A1/ 7SBS3A2/ 7SBS3A3	(2) Skill Based Subjects – I	2	2	25	75	100

	V	7BEA3	Extension activities	1	–	100	–	100
			Total(Allied Theory only)	24				800
			Total(Allied Theory cum Practical)	23	30	–	–	775
	I	741T	Tamil /other language – IV	3	6	25	75	100
	II	742E	English – IV	3	6	25	75	100
IV	III	7BMI4C1	Core – VII – Immunology	4	5	25	75	100
		7BMI4P1	Core–VIII–Immunology–Practical – IV	4	4	40	60	100
			Allied –IV-(Theory only) (or)	5	5	25	75	100
			Allied–IV-(Theory cum Practical)	4	3	15	60	75
	IV		Allied Practical - II	2	2	20	30	50
		7SBS4B1/ 7SBS4B2/ 7SBS4B3	(2) Skill Based Subjects – II	2	2	25	75	100
		7BVE4/ 7BMY4/ 7BWS4	(7) Value Education / Manavalakalai Yoga / Women's Studies	2	2	25	75	100
			Total(Allied Theory only)	23				700
			Total(Allied Theory cum Practical)	24	30	–	–	725
V	III	7BMI5C1	Core– IX – Medical Microbiology	4	6	25	75	100
		7BMI5C2	Core – X – Environmental and Agricultural Microbiology	4	5	25	75	100
		7BMI5P1	Core–XI–Medical, Environmental and Agricultural Microbiology – Practical – V	4	5	40	60	100
		7BMIE1A / 7BMIE1B	Elective – I- A) Biochemistry (or) B) Bioethics	5	5	25	75	100
		7BMIE2A / 7BMIE2B	Elective–II-A)Bioinstrumentation (or)B)Renewable energy resources	5	5	25	75	100
	IV	7SBS5A4/ 7SBS5A5/ 7SBS5A6/ 7SBS5A7	(2) Skill Based Subjects – I	2	2	25	75	100
			(2) Skill Based Subjects – I	2	2	25	75	100
			Total	26	30	–	–	700
VI	III	7BMI6C1	Core – XII – Recombinant DNA Technology	4	6	25	75	100
		7BMI6C2	Core–XIII–Industrial Microbiology	4	5	25	75	100
		7BMI6C3	Core – XIV – Food and Dairy Microbiology	4	5	25	75	100
		7BMI6P1	Core – XV – Recombinant DNA Technology, Industrial, Food and Dairy Microbiology–Practical–VI	4	5	40	60	100
		7BMIE3A / 7BMIE3B	Elective – III-A) Bioinformatics (or) B) Mushroom cultivation	5	5	25	75	100
	IV	7SBS6B4/ 7SBS6B5/ 7SBS6B6/ 7SBS6B7	(2) Skill Based Subjects – II	2	2	25	75	100
			(2) Skill Based Subjects – II	2	2	25	75	100

2022 onwards

**B.Sc., MICROBIOLOGY**  
**Programme Structure**

Sem.	Part	Course Code	Courses	Title of the Course	T/P	Credits	Hours/Week	Max. Marks		
								Int.	Ext.	Total
I	I	2211T	T/OL	Tamil /Other Languages -I	T	3	6	25	75	100
	II	712CE	E	Communicative English - I	T	3	6	25	75	100
	III	22BMI1C1	CC	General Microbiology	T	5	5	25	75	100
		22BMI1P1	CC	Practical-General Microbiology	P	4	4	40	60	100
		-	AL-IA	Biochemistry/ Botany Biotechnology / Zoology	T	3	3	25	75	100
		-	AL -IA	Practical - Respective Allied Theory Course	P	2	2	40	60	100
	IV	22BVE1	SEC-I	Value Education	T	2	2	25	75	100
				Library / Yoga/ Counseling/Field trip		--	2	--	--	--
				<b>Total</b>		<b>22</b>	<b>30</b>	<b>205</b>	<b>495</b>	<b>700</b>
II	I	2221T	T/OL	Tamil /Other Languages -II	T	3	6	25	75	100
	II	722CE	E	Communicative English - II	T	3	6	25	75	100
	III	22BMI2C1	CC	Microbial Physiology	T	5	5	25	75	100
		22BMI2P1	CC	Practical-Microbial Physiology	P	4	4	40	60	100
		-	AL-IIIB	Biochemistry/ Botany Biotechnology / Zoology	T	3	3	25	75	100
		-	AL -IIB	Practical - Respective Allied Theory Course	P	2	2	40	60	100
	IV	22BES2	SEC-II	Environmental Studies	T	2	2	25	75	100
				Library		--	2	--	--	--
				<b>Total</b>		<b>22</b>	<b>30</b>	<b>205</b>	<b>495</b>	<b>700</b>
III	I	2231T	T/OL	Tamil /Other languages – III	T	3	6	25	75	100
	II	2232E	E	English for Enrichment - I	T	3	6	25	75	100
	III	22BMI3C1	CC	Molecular Biology	T	3	3	25	75	100
		22BMI3C2	CC	Microbial Genetics		3	3	25	75	100
		22BMI3P1	CC	Practical - Molecular Biology & Microbial Genetics	P	3	3	40	60	100
		-	AL-III A	Biochemistry/ Botany Biotechnology / Zoology	T	3	3	25	75	100
		-	AL-III A	Practical - Respective Allied Theory Course	P	2	2	40	60	100
	IV	22BE3	SEC-III	Entrepreneurship		2	2	25	75	100
		-	NME-I	1. Adipadai Tamil (or) 2. Advance Tamil (or) 3. IT Skills for Employment (or) MOOC'S	T	2	2	25	75	100
				<b>Total</b>		<b>24</b>	<b>30</b>	<b>255</b>	<b>645</b>	<b>900</b>
IV	I	2241T	T/OL	Tamil /Other languages – IV	T	3	6	25	75	100
	II	2242E	E	English for Enrichment - II	T	3	6	25	75	100

	III	22BM14C1	CC	Microbial Biochemistry	T	4	4	25	75	100
		22BM14C2	CC	Immunology	T	4	4	25	75	100
		22BM14C3	CC	Practical-Microbial Biochemistry & Immunology	P	3	3	40	60	100
		-	AL-IVA	Biochemistry/ Botany Biotechnology / Zoology	T	3	3	25	75	100
	IV	-	AL-IVB	Practical - Respective Allied Theory Course	P	2	2	40	60	100
		-	NME-II	1. Adipudai Tamil 2. Advance Tamil 3.Small Business Management/ MOOC's	T	2	2	25	75	100
Total						24	30	230	570	800
V	III	22BM15C1	CC	Medical Microbiology	T	4	4	25	75	100
		22BM15C2	CC	Environmental Microbiology	T	4	4	25	75	100
		22BM15C3	CC	Agricultural Microbiology	T	4	4	25	75	100
		22BM15C4	CC	Microbial Biotechnology	T	4	4	25	75	100
		22BM15P1	CC	Practical-Medical Microbiology	P	4	6	40	60	100
	22BM15P2	CC	Practical-Environmental Microbiology	P	4	6	40	60	100	
				Carrier development employability skills			2			
Total						24	30	180	420	600
VI	III	22BM16I	DSE	Internship		24	30	150	250	400
		Or								
		22BM16E1		Virology	T	6	6	25	75	100
		22BM16E2		Mycology	T	6	6	25	75	100
		22BM16E3		Microbial Technology	T	6	6	25	75	100
		22BM16E4		Biosafety, IPR and Bioethics	T	6	6	25	75	100
			Others	Library/Yoga etc			2			
				Carrier development employability skills		..	4	..	..	..
						24	30	100	300	400
		Or								
		22BM16P1		Project		6	10	25	75	100
		22BM16E5		Industrial Microbiology	T	6	6	25	75	100
		22BM16E6		Food Microbiology	T	6	6	25	75	100
		22BM16E7		Dairy Microbiology	T	6	6	25	75	100
			Others	Library/ Yoga/ Career development/ employability skills/Field trip etc			2			
Total						24	30	100	300	400
Grand Total						140	...	..	..	4100

2023 onwards



### B. SciMicrobiology Programme Structure

Sem.	PART	Course Code	Courses	Title of the course	T/P	Credits	Hours/ week	Marks		
								CIA	ESE	Total
<b>I</b>	Part –I	2311T	T/OL	தமிழ் இலக்கியம் மற்றும் /Other Language	T	3	6	25	75	100
	Part –II	2312E	E	General English-I	T	3	6	25	75	100
	Part -III	23BM11C1	CC-1	Fundamentals of Microbiology And Microbial Diversity	T	5	5	25	75	100
		23BM11P1	CC-2	Practical I- Fundamentals of Microbiology And Microbial Diversity	P	3	4	25	75	100
		-	Generic Elective	Biochemistry/ Botany Biotechnology / Zoology	T	3	3	25	75	100
		-	(Allied)	Respective Allied Theory Course	P	2	2	25	75	100
	Part –IV	23BM11S1	SEC-1	Social and Preventive medicine	T	2	2	25	75	100
		23BM11FC	FC	Introduction to Microbial World	T	2	2	25	75	100
				Total	-	<b>23</b>	<b>30</b>	<b>200</b>	<b>600</b>	<b>800</b>
<b>II</b>	Part I	2321T	T/OL	தமிழ்இலக்கியம்த்ரம்/Other Language	T	3	6	25	75	100
	Part II	2322E	E	General English-II	T	3	6	25	75	100
	Part III	23BM12C1	CC-3	Microbial Physiology And Metabolism	T	4	5	25	75	100
		23BM12P1	CC-4	Microbial Physiology And Metabolism Practical	P	4	4	40	60	100
		--	Generic Elective	Biochemistry/ Botany Biotechnology / Zoology	T	3	3	25	75	100
		--	(Allied)	Respective Allied Theory Course	P	2	2	25	75	100
	Part IV	23BM12S1	SEC-2	Nutrition & Health Hygiene	T	2	2	25	75	100
		23BM12S2	SEC -3	Sericulture	T	2	2	25	75	100
				Total		<b>23</b>	<b>30</b>	<b>215</b>	<b>585</b>	<b>800</b>
<b>III</b>	Part –I	2331T	T/OL	தமிழ்சாஹஸ்யம்அன்பாடும்/ Other Language-III	T	3	6	25	75	100
	Part –II	2332E	E	General English-III	T	3	6	25	75	100
	Part -III	23BM13C1	CC-5	Molecular Biology and Microbial Genetics	T	4	5	25	75	100
		23BM13P1	CC-6	Molecular Biology and Microbial Genetics Practical	P	4	4	40	60	100
		--	Generic Elective	Biochemistry/ Botany Biotechnology / Zoology	T	3	3	25	75	100

		–	III (Allied)	Respective Allied Theory Course	P	2	2	25	75	100
	Part –IV	23BMI3S1	SEC-4	Organic Farming & Biofertiliser Technology	T	2	2	25	75	100
		233AT/ 23BMI3S2	SEC-5	Adipadai Tamil/ Aquaculture	T	2	2	25	75	100
				Total	-	23	30	215	585	800
IV	Part –I	2341T	T/OL	தமிழ் அறிவியல் / Other Language	T	3	6	25	75	100
	Part –II	2342E	E	General English-IV	T	3	6	25	75	100
	Part –III	23BMI4C1	CC-7	Immunology & Immunotechnology	T	4	4	25	75	100
		23BMI4P1	CC-8	Immunology & Immunotechnology Practical	P	3	3	40	60	100
		–	Generic Elective	Biochemistry/ Botany Biotechnology / Zoology	T	3	3	25	75	100
		–	IV (Allied)	Respective Allied Theory Course	P	2	2	25	75	100
	Part –IV	23BMI4S1	SEC-6	Vaccine Technology	T	2	2	25	75	100
		234AT/ 23BMI4S2	SEC - 7	Adipadai Tamil/ Apiculture	T	2	2	25	75	100
		23HES4	EVS	Environmental Studies	T	2	2	25	75	100
				Total	-	24	30	215	585	800
V	Part –I	23BMI5C1	CC-9	Bacteriology and Mycology	T	4	5	25	75	100
		23BMI5C2	CC-10	Virology and Parasitology	T	4	5	25	75	100
		23BMI5P1	CC-11	Medical Microbiology Practical - V	P	4	5	40	60	100
		23BMI5PR	CC-12	Group Project	P	4	5	40	60	100
		23BMI5E1	DSE-I	Recombinant DNA Technology	T	3	4	25	75	100
	Part –II	23BMI5E2	DSE-II	Biosafety and Bioethics	T	3	4	25	75	100
		23BVE5		Value Education	T	2	2	25	75	100
		23BMI5I		Internship/Industrial Visit/ Field Visit		2	-	25	75	100
				Total	-	26	30	180	420	600
VI	Part –I	23BMI6C1	CC-13	Environmental and Agriculture Microbiology	T	4	6	25	75	100
		23BMI6C2	CC-14	Food, Dairy and Probiotic Microbiology	T	4	6	25	75	100
		23BMI6P1	CC - 15	Food, Dairy and Probiotic Microbiology – Practical - VI	P	4	6	25	75	100
		23BMI6E1	DSE-III	Pharmaceutical Microbiology	T	3	5	25	75	100
		23BMI6E2	DSE-IV	Entrepreneurship and Bio-business	T	3	5	25	75	100
	Part –II	23BMI6S1	PCS	Microbial Quality Control and	T	2	2	25	75	100

**M.Sc., MICROBIOLOGY – PROGRAMME STRUCTURE**  
**ALAGAPPA UNIVERSITY, KARAİKUDI**

**Credit Distribution for PG Courses**  
**First Year**  
**M.Sc., Microbiology**  
**Semester-I**

Sem	Course	Course Code	Course Title	T/P	Credit	No. of Hours	Marks		
							Int.	Ext.	Total
I	Core-I	23MMI1C1	General Microbiology and Microbial Diversity	T	5	6	25	75	100
	Core-II	23MMI1C2	Microbial Physiology	T	5	6	25	75	100
	Core – III	23MMI1P1	Practical I – General Microbiology, Microbial Diversity and Microbial Physiology	P	4	6	25	75	100
	Elective -I Discipline Centric	23MMI1E1/ 23MMI1E2/ 23MMI1E3	Forensic Science/ Nanobiotechnology/ Microalgal Technology	T	3	5	25	75	100
	Elective- II Generic:	23MMI1E4/ 23MMI1E5/ 23MMI1E6	Bioinstrumentation/ Herbal Technology and Cosmetic Microbiology / Essentials of Laboratory Management and Biosafety	T	3	5	25	75	100
	PCS	23MMI1S1	Entrepreneurship in Biobusiness	T	2	2	25	75	100
<b>Total</b>					<b>22</b>	<b>30</b>	<b>150</b>	<b>450</b>	<b>600</b>
II	Core IV	23MMI2C1	Medical Bacteriology and Mycology	T	5	6	25	75	100
	Core V	23MMI2C2	Medical Virology and Parasitology	T	5	6	25	75	100
	Core VI	23MMI2P1	Practical II - Medical Microbiology	P	4	6	25	75	100
	DSE-III	23MMI2E1/ 23MMI2E2/ 23MMI2E3	Epidemiology/ Clinical Diagnostic Microbiology/ Bioremediation	T	3	4	25	75	100
	DSE-IV	23MMI2E4/ 23MMI2E5/ 23MMI2E6	Bioinformatics/ Biosafety, Bioethics and IPR / Clinical Research and Clinical Trials	T	3	4	25	75	100
	Skill Enhancement I	23MMI2S1	Vermitechnology	T	2	4	25	75	100
	<b>Total</b>					<b>22</b>	<b>30</b>	<b>150</b>	<b>450</b>
III	Core-VII	23MMI3C1	Immunology, Immunotechnology and Microbial Genetics	T	5	6	25	75	100
	Core-VIII	23MMI3C2	Molecular Biology and Recombinant DNA Technology	T	5	6	25	75	100
	Core – IX	23MMI3P1	Practical III - Immunology, Microbial Genetics and Molecular Biology	P	4	6	25	75	100
	Core – X	23MMI3C3	Fermentation Technology and Pharmaceutical Microbiology	T	4	6	25	75	100

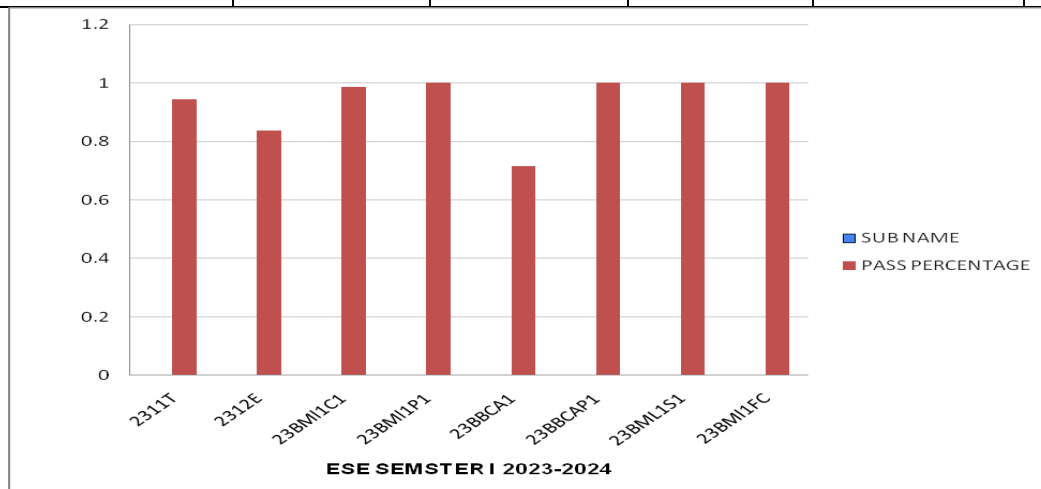
**External Mark Statement**

**Batch – 2023 to 2026: Odd Semester November 2023**

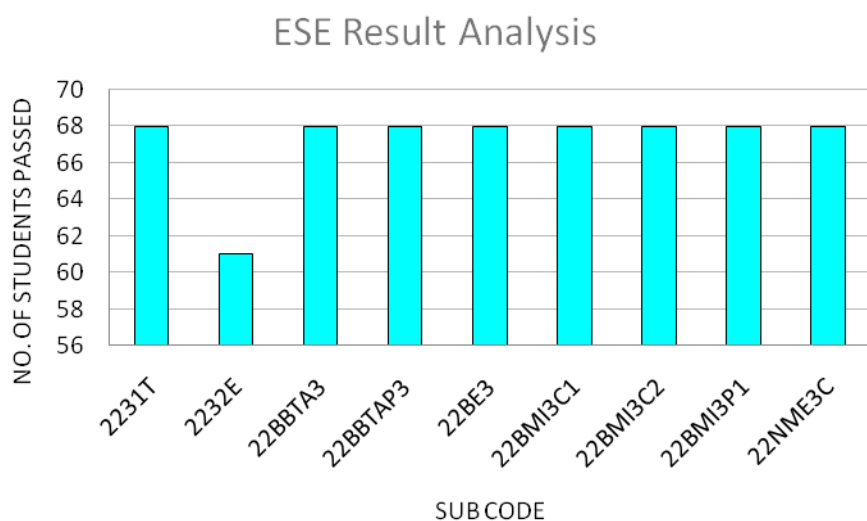
**Class: I B.Sc Microbiology**

**Semester: I**

SUB CODE	SUB NAME	TOTAL NO. OF STUDENTS	NO. OF STUDENTS APPEARED	NO. OF STUDENTS PASSED	NO. OF STUDENTS FAILED	PASS PERCENTAGE
2311T	Tamil	74	74	70	4	95%
2312E	English for enrichment	74	74	62	12	84%
23BM11C1	Fundamentals of microbiology and microbial diversity	74	74	73	1	99%
23BM11P1	Lab for Fundamentals of microbiology and microbial diversity	74	74	74	0	100%
23BBCA1	Allied Biochemistry 1	74	74	53	21	72%
23BBCAP1	Lab for Allied Biochemistry 1	74	74	74	0	100%
23BML1S1	Social and preventive medicine	74	74	74	0	100%
23BM11FC	Introduction to microbial world	74	74	74	0	100%



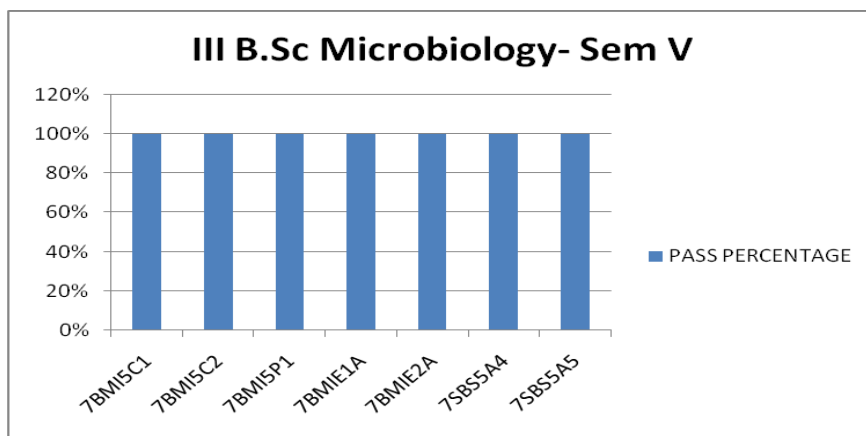
SUB CODE	SUB NAME	TOTAL NO. OF STUDENTS	NO. OF STUDENTS APPEARED	NO. OF STUDENTS PASSED	NO. OF STUDENTS FAILED	PASS PERCENT AGE
2231T	Tamil	68	68	68	0	100%
2232E	English for enrichment	68	68	61	8	88%
22BBTA3	Biodiversity	68	68	68	0	100%
22BBTAP3	Biodiversity practical	68	68	68	0	100%
22BE3	SEC	68	68	68	0	100%
22BMI3C1	Molecular Biology	68	68	68	0	100%
22BMI3C2	Microbial Genetics	68	68	68	0	100%
22BMI3P1	MB and MG practical	68	68	68	0	100%
22NME3C	NME	68	68	68	0	100%



**Class: III B.Sc Microbiology**

**Semester: V**

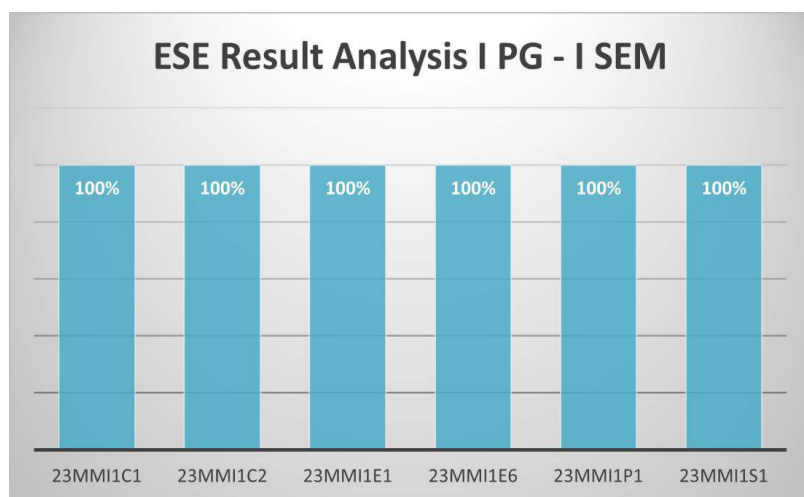
<b>SUB CODE</b>	<b>SUB NAME</b>	<b>TOTAL NO. OF STUDENTS</b>	<b>NO. OF STUDENTS APPEARED</b>	<b>NO. OF STUDENTS PASSED</b>	<b>NO. OF STUDENTS FAILED</b>	<b>PASS PERCENT AGE</b>
7BMI5C1	Medical Microbiology	35	35	35	0	100%
7BMI5C2	Environmental and Agricultural Microbiology	35	35	35	0	100%
7BMI5P1	Medical, Environmental and Agricultural Microbiology	35	35	35	0	100%
7BMIE1A	Biochemistry	35	35	35	0	100%
7BMIE2A	Bioinstrumentation	35	35	35	0	100%
7SBS5A4	Skill Based Subjects-I	35	35	35	0	100%
7SBS5A5	Skill Based Subjects-II	35	35	35	0	100%



Class: I M.Sc Microbiology

Semester: I

SUB CODE	SUB NAME	TOTAL NO. OF STUDENTS	NO. OF STUDENTS APPEARED	NO. OF STUDENTS PASSED	NO. OF STUDENTS FAILED	PASS PERCENT AGE
23MMI1C1	General Microbiology and Microbial Diversity	30	30	30	Nil	100%
23MMI1C2	Microbial Physiology	30	30	30	Nil	100%
23MMI1E1	Forensic Science	30	30	30	Nil	100%
23MMI1E6	Essentials of Laboratory Management and Biosafety	30	30	30	Nil	100%
23MMI1P1	General Microbiology and Microbial Diversity & Microbial Physiology Practical I	30	30	30	Nil	100%
23MMI1S1	SEC - Entrepreneurship in Biobuisness	30	30	30	Nil	100%



## EVENTS AND PROGRAM CONDUCTED BY DEPARTMENT OF MICROBIOLOGY

### Guest Lecture

**Guest Lecture** was conducted by Department of Microbiology, Velumanoharan arts and Science College for women on 7th July 2023 from 11.00 am to 12.30 pm.



Chief guest Dr. Kathiresan Purushothaman, Scientist, Faculty of Veterinary Medicine, Department of Preclinical Sciences and Pathology, Norwegian Life Sciences University, Norway has given a lecture on topic “**Modern Innovative Techniques in Life Sciences Research**”.

### WORLD HEPATITIS DAY- 2023

An awareness program on WORLD HEPATITIS DAY was conducted by Department of Microbiology, Velumanoharan arts and Science College for women on 28th July 2023. Dr A Kanchana, Principal gave an awareness speech among the students.

After this session, students were able to understand the different kinds of Hepatitis diseases and its virulence factors.

### INTERNATIONAL MICROORGANISM DAY – 2023 QUIZ COMPETITION

**Quiz competition** was conducted by Department of Microbiology, Velumanoharan arts and Science College for women on 22st September 2023 from 1.30 pm to 2.30 pm for III B. Sc and I M. Sc students in order to celebrate the International Microorganism Day (Sep 17).





Third year students got the first prize. I Pg students got the second and third prize.

## DEPARTMENT OF MICROBIOLOGY & DEPARTMENT OF CHEMISTRY ORGANIZED

### TWO DAYS INDUSTRIAL TRAINING PROGRAM

Industrial training programme was conducted by the Department of Microbiology and the Department of Chemistry for the II, III B.Sc & I M.Sc Microbiology students and the II, III B.Sc Chemistry students on 5.10.2023 & 7.10.2023. This Workshop conducted for the students to get the ideas about the project. In this training, they got the knowledge about Paint making, Biofuel production from marine algae.



### Louis Pasteur's Birthday remembrance e- quiz Competition

The Louis Pasteur's Birthday remembrance e- quiz Competition was conducted by the Department of Microbiology, Velumanoharan Arts and Science College for women. For this program google form was created and sent to students group. Totally Fifty nine students from I M.Sc, III, II & I B.Sc Department of Microbiology participated.



The E- Quiz competition was conducted on 27/12/2023. The Google form was created and sent to student's group. In this program fifty five students of Microbiology were participated. Among them thirty eight students got the certificate of merit, who got more than 80 percentage.

### **GUEST LECTURE ON BIO FRONTIERS AN INSIGHT FOR PG STUDENTS.**

Department of microbiology organized a Guest lecture on Bio Frontiers- an insight for PG students on February 23<sup>rd</sup> 2024. Dr. S Mohandass, M.Sc, M.Phil., PSG College of Arts and Science, Coimbatore is the resource person who delivered the lecture about Scopus indexed journals and shared his research experiences followed by PG students seminar presentation.



### **SCIENCE DAY CELEBRATION**

Department of Microbiology organized **SCI FEST 2K24** on 29.2.2024. This event aims to commemorate the wonders of science and foster a spirit of inquiry and discovery among our community.



### **WORLD WILDLIFE DAY- 2024**

An awareness program on **WORLD WILDLIFE DAY- 2024** in the theme as **“Connecting People and Planet; Exploring Digital Innovation in Wildlife Conservation”** was conducted by the Department of Microbiology, Velumanoharan arts and Science College for women on 4th March 2024 from 2.15 pm to 3.15 pm.



In this event III B.Sc Microbiology students had prepared placards which were representing the awareness of endangered animals. I UG students had delivered speech about the role of wild lives in this earth.

#### **DEPARTMENT OF MICROBIOLOGY ASSOCIATION MICROGENIA 2K24**

Department of Microbiology- Microgenia 2K Association Off Stage events were conducted in the month of January, 2024 for the Microbiology students. On 25<sup>th</sup> April 2024, the valedictory function was celebrated. The prizes for the offstage competition were distributed by the Dr.A. KANCHANA AMARNATH, HOD & PRINCIPAL of VMASCW.



Along with the valedictory function of MICROGENIA we had conducted a farewell celebration to the outgoing students of 2021-2024 batch. The students were enjoyed very well by the competitions conducted by the juniors and PG students.

### ACADEMIC AND NON-ACADEMIC ACTIVITIES 2023- 2024

Name of the Students	Activity/ participation/ presentation	Name of the college/organization
<b>All III B.Sc Microbiology students</b>	Presented poster One Day National Level Seminar on “Biological Science and Sustainable Utilization” on 04.10.2024	Department of Biochemistry, Raja College of Arts and Science, Vedhalai.
<b>III B. Sc Microbiology</b> Lakshana R Sornamugi S Deepika S Preethi M Kanniga S Keerthana V Pradeepa S Devadharshini M Kavinitha B Amaithipoo	Presented an Abstract in National Symposium on “ <b>Blue Carbon Sink</b> ” organized by on 22 & 23 March 2024	Department of Marine and Coastal Studies, School of Energy, Environment and Natural Resources, Madurai Kamaraj University in collaboration with Seaweed Research and Utilization Association(SRUA)

Lakshana R	Won Best Poster Presentation award in National Symposium on “ <b>Blue Carbon Sink</b> ” organized by on 22 & 23 March 2024	Department of Marine and Coastal Studies, School of Energy, Environment and Natural Resources, Madurai Kamaraj University in collaboration with Seaweed Research and Utilization Association(SRUA)
Deepika S Preethi M Kavinitha B Bhanupriya M Pradeepa S	Participated in plant your talent Competitions.	Plant your talent organized by talent hunt, Chennai
Jastika S Pavithra S Muvedha B	Won Best Poster presentation award in International Conference on Recent Developments in the Microbiological Research for the upliftment of Humanity (ICRDMRH-24)	PG Department of Microbiology & IQAC Syed Ammal Arts and science college in association with Indian Science Congress Associatin (ISCA), Chennai
<b>All III B. Sc Microbiology</b> Students	Participated in Two Day International Training of Paints, Biofuels, & Petroleum production	Galileovasan Offshore & Research and Development Pvt. Ltd. And Department of Microbiology & Chemistry, VMASCW.
<b>All III B. Sc Microbiology</b> Students	Participated in Skill development Programme	BHUMI Foundation, Chennai

Lakshana R Kanniga S Keerthana V Pradeepa S Devadharshini M Kavinitha B Bhanupriya M Jastika S	Attended interview and got selected	Infotech MNC Company, Chennai
<b>II B.Sc Microbiology</b> P.Vinitha S.Madhumidha P.Ponni K.Kiruthika B.Sarupriya T. Akshaya S.Dharshana A.Agalya R.Sowmiya K.Sabithra S.Uma Bharathi	Presented poster One Day National Level Seminar on “Biological Science and Sustainable Utilization” on 04.10.2024	Department of Biochemistry, Raja College of Arts and Science, Vedhalai
P.Vinitha S.Madhumidha	Participated in design extravaganza Topic - Edible vaccine from transgenic plants	Microfiesta-2024 Organized by the department of Microbiology, The American college, Madurai .
S.Uma Bharathi	Participated in Spill in the ink Topic - Microbes as a tool in renewable resources	Microfiesta-2024 Organized by the department of Microbiology, The American college, Madurai .
Naveen.S Aarthi sri.R Abinaya. K Vinothini.V Bavatharani.T Harini.K	Mime Topic - Health and wellness	Microfiesta-2024 Organized by the department of Microbiology, The American college, Madurai .
A.Agalya N.Anitha P.Pooja Shree K.Yadhavi L.Deepika L.Pandeeswari	Dance Topic - Indian cultural heritage	Microfiesta-2024 Organized by the department of Microbiology, The American college, Madurai .

V.Nithya sri N.Abitha	Rangoli Topic - Nano medicine II - Prize	Microfiesta-2024 Organized by the department of Microbiology, The American college, Madurai .
U.Uma maheswari R.Sowmiya	Participated in fireless cooking Topic - Millet	Microfiesta-2024 Organized by the department of Microbiology, The American college, Madurai .
K.Sabithra V.Keerthika	Participated in Petri Art Topic - Probiotic and Guts	Microfiesta-2024 Organized by the department of Microbiology, The American college, Madurai .
All II UG Students	Participated in Two Day International Training (Paints, Biofuels, & Petroleum)	Galileovasan Offshore & Research and Development Pvt. Ltd. And Department of Microbiology & Chemistry, VMASCW.
K.Kiruthika V.Keerthika S Naveena P.Poojashree S Uma Bharathi U.Uma maheswari S Sabithra S.Madhumitha S.Dharshana P.Vinitha	Participated in plant your talent Competitions.	Plant your talent organized by talent hunt, Chennai
K.Tharanika N.Muthu rabeena S.Suvathi K.Yadhavi A.Agalya P.Pooja Shree S.Dharshana S. Tharshini S. Naveena	Dance - II Prize Topic - Women Empowerment	Syed Ammal Arts and science college
P.Vinitha P.ponni M.Madhumitha S.Tharshini K.Kiruthika K.Sabithra S.Umabharathi	Participated in international women's day celebration organised by arogya hospital.	International women's day -2023. Arogya hospital, Ramanathapuram.

K.Sabithra S.Uma Bharathi K.Kiruthika T Akshaya B.Saru Priya S.Madhumitha P.Vinitha	Participated in kalai thendral viruthu .	Kalai thendral viruthu organized by Agathiya maamunivar kalai ilakiya panpaattu aayivu maiyam and Kavingan Pathipagam, Agatheeshvaram.
P.Vinitha B.ponni K. Sabithra	Participated in Yuva Utsav : India @ 2027	Government of India, Ministry of youth affairs and sports, Nehru Yuva Kendra organized by Syed ammal arts and science colleges, Indian Red Cross society and Rotary club of coral City Ramnad
S.Uma Bharathi	World tamil sangam  Essay	Tamil Payirchi Pattarai  Tamil Valarchi Durai
P.Vinitha S Madhumitha K.Sabithra	TN SDG Girls championship 2022 Topic - Algae as a fertilizer	TN SDG Girls championship 2022 organized by Thassim Beevi Abdul Kadar college for women ,
P.Vinitha	Participated in the two days Intellectual property rights and entrepreneurship work shop through online at Alagappa University hub, Karaikudi.	Organized by Entrepreneurship development and innovation institute ( PMO- IEDP), Karaikudi.
P.ponni	Participated in speech competition Topic on Self Employment	velumanoharan arts and science college for women (KHDHI PEP)
K. Sabithra	ONLINE PROGRAMMES  Online training - overview of space science	Dept of space, ISRO, govt of india  Dept of space, ISRO, Govt of india



K. Sabithra	<p>IIRS outreach programme "Monitoring forest Disturbance using geo spatial technology"</p> <p>Workshop on" chatgpt for everyone "</p> <p>Workshop on Game development using pygame</p>	GUVI geek Network - chennai
K. Sabithra	<p>NSS Activities with CERTIFICATIONS</p> <p>1. South zone Pre Republicday parade camp @ 2023</p> <p>2. state Level Republicday parade camp - 2024</p> <p>( Online NSS Activities with CERTIFICAtIONS)</p> <p>3. Activities on cleanliness</p> <p>4. Activities on Non violence</p> <p>5. Activies on Organ donation</p>	<p>Digital India &amp; mygov</p> <p>Health and family welfare govt of India</p>
<p><b>I B. Sc Microbiology</b></p> <p>Dharani Raj G</p> <p>Ragavi B</p> <p>Bavatharani K</p> <p>Aswatha R</p> <p>Jaya akshaya T</p> <p>Pooja S</p> <p>Harshini K</p> <p>Madhumitha G</p> <p>Gopika B</p> <p>Bharkavi S</p>	Participation - Dance	Plant ur talent
<p>1.Bharkavi S</p> <p>2. Ammu priya V</p> <p>3. Dharani Raj G</p>	Participation - Marathon	
M.Sarmitha	1.Volleyball - 2nd prize	Sethakathi stadium

	volleyball - 2nd prize Foot ball - 2nd prize Volleyball - 3rd prize	Mohamed sathak engineering college Sethakathi stadium Syed Ammal engineering college
S Akshaya	Volleyball - 2nd prize Volleyball - 2nd prize Football - 2nd prize Volleyball - 3rd prize	Sethakathi stadium Mohamed sathak engineering college Sethakathi stadium Syed Ammal engineering college
G Asmitha N Keerthika Kaviya S Hema Kiruthika C Sindhuja G Seeni Reslin S Santhiya T Mahalakshmi M Rahini K Manimegala B Shanmuga Priya. M N Nagarani	Volunteered the clean-up drive at Pufumadam beach	Department of Marine and Coastal Studies School of Energy, Environment and Natural Resources, Madurai Kamarajar University
M Gowsalya V Shanmuga Priya S Nafila G Kaviya R Vithya B Manimegala P Mathumitha S Yoga Shiva Shree	Participated in Two Days International Conference on “Recent Trends in Vaccines and Biomaterials for Animal Health”	Department of Animal Health and Management, Alagappa University, Karaikudi.
S Noorul Murshitha M Shanmuga Priya R Ruba sri	Presented poster and paper in Two Days International Conference on “Recent Trends in Vaccines and Biomaterials for Animal Health”	Department of Animal Health and Management, Alagappa University, Karaikudi.

P Arthi G Asmitha M Gayathri S Kaviya C Hemakiruthika N Nagarani S Nafila G Sindhuja P Vijaya Tharshini	Presented poster One Day National Level Seminar on “Biological Science and Sustainable Utilization”	Department of Biochemistry, Raja College of Arts and Science, Vedhalai.
All I PG Students	Participated in Two Day International Training (Paints, Biofuels, & Petroleum)	Galileovasan Offshore & Research and Development Pvt. Ltd. And Department of Microbiology & Chemistry, VMASCW.

#### FACULTY SKILL UPGRADATION 2023 -2024

Name of the Faculty	Activity/ Participation/ Presentation	Name of the College/Organisation
Ms R MohanaPriya., M.SC, Assistant Professor, Department of Microbiology.	Submitted an abstract on BIODEGRADATION OF CRUDE OIL USING ISOLATED MARINE BACTERIA ISOLATED FROM a POLLUTED SITE NEAR the COASTAL AREA and Oral presentation in Two Days International Conference on "Recent Developments in the Microbiological Research for the Upliftment of Humanity (ICRDMRH-24)	PG Department of Microbiology & IQAC, Syed Ammal Arts and Science College, Ramanathapuram in association with the Indian Science Congress Association (ISCA), Chennai.
	Enrolled in Human Physiology, Data Analysis for Biology Online Certificate Courses	NPTEL

	“Five Days International Level Online Faculty Development Program on the topic” Artificial Intelligence in Chemistry: Current Trends and Future Perspectives AICCTFP- 2023”	PG and Research Department of Chemistry, Holy Cross College (Autonomous), Tiruchirappalli - 2.
	Participated in One Day National Level Seminar on “Biological Science and Sustainable Utilization”	Department of Biochemistry, Raja College of Arts and Science, Vedhalai.
	Participated in Two Days of Industrial Training (Paint, Petroleum, and Biofuel)	Galeleovasan Offshore & Research Development Pvt. Ltd.
	One Day National Level Seminar on “Biological Science and Sustainable Utilization”	Raja College of Arts and Science, Vedhalai.
Ms M Nithyakalyani.,M.SC, Assistant Professor, Department of Microbiology.	“Five Days International Level Online Faculty Development Program on the topic” Artificial Intelligence in Chemistry: Current Trends and Future Perspectives AICCTFP- 2023”	PG and Research Department of Chemistry, Holy Cross College (Autonomous), Tiruchirappalli - 2.
	Two Days Industrial Training (Paint, Petroleum, and Biofuel)	Galeleovasan Offshore & Research Development Pvt. Ltd.
	One Day National Level Seminar on “Biological Science and Sustainable Utilization”	Raja College of Arts and Science, Vedhalai
	Five days offline FDP program on the topic "PCR Technology"	Government of Tamilnadu, Tamilnadu skill development naan mudhalvan scheme, Alagappa University.
	Enrolled 1.RNA Biology 2.Molecular Biology 3.I Think Biology	NPTEL
Ms K Kanakatharshini.,M.SC,	“Five Days International Level Online Faculty Development	PG and Research Department of Chemistry, Holy Cross College

Assistant Professor, Department of Microbiology.	Program on the topic” Artificial Intelligence in Chemistry: Current Trends and Future Perspectives AICCTFP- 2023”	(Autonomous), Tiruchirappalli - 2.
	Two Days Industrial Training (Paint, Petroleum, and Biofuel)	Galeleovasan Offshore & Research Development Pvt. Ltd.
	One Day National Level Seminar on “Biological Science and Sustainable Utilization”	Raja College of Arts and Science, Vedhalai
	One-day trainingProgramme of UBI	Gandhigram University, Dindigul
	Won second price in poster presentation competition in the National level competition on Biodiversity and Biotechnology of Fungi	School of Life Sciences, B. S. Abdur Rahman Institute of Science and Technology, Chennai, TamilNadu in association with Mycology Society of India (MSI) and Nano & Biomaterials Association.
	Presented an Abstract entitled Isolation and characterization of potential organic waste degrading and plant growth promoting bacteria(PGPB) from vegetable waste compost in the National Virtual Conference on “Food and Agri Waste Utilization: Strategies, Applications, and Safety Aspects- (FAWU- 2023)	Department of Academics and Human Resource Development, National Institute of Food Technology, Entrepreneurship and Management, Tanjavur (NIFTEM- T)
	Enrolled 1. Bioelectricity	NPTEL
	Presented an abstract entitled Targeted Drug Delivery in Oncotherapy atthe International Conference on RecentTrends in Vaccines and Biomaterials for Animal Health (RTVBAH 2024)	Biomaterials & Biotechnology in Animal Health Lab, Department of Animal Health and Management, Alagappa University
	Presented an Abstract entitled The Blue Carbon Ecosystems: Significance in the National Symposium on Blue Carbon Sink	Department of Marine and Coastal Studies, School of Energy, Environment and Natural Resources, Madurai Kamaraj University in Collaboration with Seaweed Research and Utilization

		Association(SRUA)
	Presented an Abstract entitled Anti-Biofilm Activity of <i>Prosopis juliflora</i> leaf Extracts against <i>Pseudomonas aeruginosa</i> at the International Conference on Recent Developments in the Microbiological Research for the Upliftment of Humanity (ICRDMRH- 24)	PG Department of Microbiology & IQAC, Syed Ammal Arts and Science College, Ramanathapuram in association with the Indian Science Congress Association (ISCA), Chennai.
Ms A. Gunapriya.,M.SC, Assistant Professor, Department of Microbiology.	Submitted an abstract on the Desalination process of water: An innovative approach to water purification and gave a Oral presentation in Two Days International Conference on "Recent Developments in the Microbiological Research for the Upliftment of Humanity (ICRDMRH-24)	PG Department of Microbiology & IQAC, Syed Ammal Arts and Science College, Ramanathapuram in association with the Indian Science Congress Association (ISCA), Chennai.
	“Five Days International Level Online Faculty Development Program on the topic” Artificial Intelligence in Chemistry: Current Trends and Future Perspectives AICCTFP- 2023”	PG and Research Department of Chemistry, Holy Cross College (Autonomous), Tiruchirappalli - 2.
	Two Days Industrial Training (Paint, Petroleum, and Biofuel)	Galeleovasan Offshore & Research Development Pvt. Ltd.
	Enrolled 1. Bioengineering: An Interface with Biology and Medicine 2. RNA biology	NPTEL
Ms Pavithra.,M.SC,	Two Days Industrial Training	Galeleovasan Offshore & Research

Assistant Professor, Department of Microbiology.	(Paint, Petroleum, and Biofuel)  One Day National Level Seminar on “Biological Science and Sustainable Utilization”  Two days International Conference on “Recent Trends in Vaccines and Biomaterials for Animal Health”	Development Pvt. Ltd.  Raja College of Arts and Science, Vedhalai.  Alagappa University, Karaikudi.
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## STUDENTS TESTIMONIALS

I am proud to write about my college and my department.

I am **R LAKSHANA** from department of MICROBIOLOGY in VMASW. I proudly feel that I cherished every moment of my college. In my college there is a beautiful campus, quality education, faculty members and amazing friends. My staff members helped me to share my ideas, talents and I improve my skills. And also infrastructure gave me awesome feelings. I would like thank VMASW specially my faculty members for guiding more knowledge....



I have had an amazing time studying at VMASW , the comfortable study environment, friendly staff and wonderful resources , I am from microbiology department , while at first I thought I made a mistake in choosing microbiology as major , I so learned how wrong i was . The faculty and staff within the microbiology department are exceptional and is great teacher and you have great future.

**P Vijayadharshini**

**I M.Sc Microbiology**

*" Education is one thing no one can take away from you "*