

**HINDUSTHAN COLLEGE OF ARTS AND SCIENCE (AUTONOMOUS)
COIMBATORE-641 028
CONTROLLER OF EXAMINATIONS**

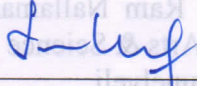

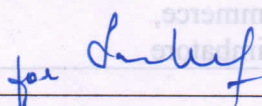
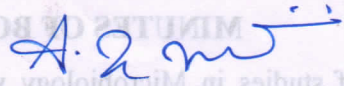

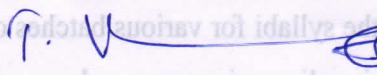
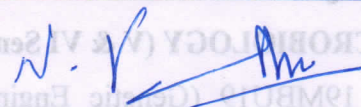
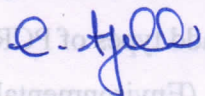
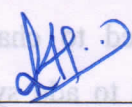

**BOARD OF STUDIES MEETING IN MICROBIOLOGY
(For the Academic year 2021-22)**

Attendance Report

Date: 29.07.2021

Time: 10.00 AM

Venue: Online (Google meet)

Chairman	DR. Lali Growther Professor & Head Department of Microbiology	
	Name & Designation	Signature
Members (Internal)	1. Dr.N.Hema Shenpagam Professor Department of Microbiology	
	2. Dr.R.Manju Associate Professor Department of Microbiology	
	3. Dr. A. Manivannan Assistant Professor Department of Microbiology	
	4. Dr. G. ArunKumar Assistant Professor Department of Microbiology	
	5. Dr. T. Vinotha Assistant Professor Department of Microbiology	
	6. Dr. N. Vanitha Professor Department of Microbiology	
	7. Mrs. C. Ajitha Assistant Professor Department of Microbiology	
	8. Ms. T. Krithika Assistant Professor Department of Microbiology	
	9. Dr. J. Achuth Assistant Professor Department of Microbiology	
Members (External Subject experts)	External Experts Name & Designation	Signature
	Dr.M.Kulandhaivel Associate Professor, Department of Microbiology Karpagam University Coimbatore	Attended online

	Dr Sudha S S Professor, Department of Microbiology Dr.N.G.P Arts and Science College, Coimbatore	Attended online
Member (Industrial expert)	Dr.L.Karthik, FLS (London), Project Lead – Synthetic Biology Salem Microbes private limited.	Attended online
Alumni	Dr. A. Muthukumar, Assistant Professor Sri Ram Nallamani Yadava College of Arts & Science Tirunelveli	Attended online
University Nominee	Dr.D.Latha Associate Professor, Department of Microbiology, CMS College of Science and Commerce, Coimbatore	Attended online

MINUTES OF BOARD OF STUDIES MEETING

The Board of studies in Microbiology was held at 10.00 AM in the department of Microbiology through online mode (Google meet)

The Chairman welcomed the members of the Board of studies in Microbiology. Dr. Lali Growther presented the syllabi for various batches of UG and PG.

The following discussions are made.

B.Sc., MICROBIOLOGY (V & VI Semesters)-2019-2020 batch & onwards

- In 19MBU19 (Genetic Engineering), fourth unit, Dr. L. Karthik, Industrial expert, suggested to add types of PCR and as accepted by all the members the topic was added.
- In 19MBU20 (Environmental and Agricultural Microbiology), Dr. D. Latha, University Nominee suggested to change the title Water Microbiology in II Unit as Aquatic Microbiology and to add synergism –protocooperation in III Unit. It was added as all members accepted.
- In 19MBU22A (Textile Microbiology), based on the feedback from our faculty (Dr. Arunkumar) who handled the paper in the previous year, 3rd & 4th units were combined and Medical textiles was introduced as IV unit. This was accepted by all the members.
- In 19MBU26 (Virology), viral vaccines were included as suggested by Dr. D. Latha and accepted by the board members.
- In 19MBU29A (Entrepreneurship in Microbiology), in I unit Bioentrepreneur was added as

suggested by Dr.M.Kulandhaivel, external subject expert. In II Unit, internal members suggested to add Institutions and schemes of government of India and was accepted and in III unit Leadership skills was added.

B.Sc., MICROBIOLOGY (III & IV Semesters) (2020-2021 & onwards)

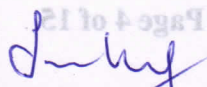
- a. In 20MBU13 (Medical Bacteriology & Immunology), in II unit, as Dr.M.Kulandhaivel suggested, *Proteus mirabilis* was added.

B.Sc., MICROBIOLOGY (I & II Semesters) (2021-2022 & Onwards)

- a. The scheme of Examinations was revised as per the guidelines of CDC. As Generic Electives, Basic Computers and Bioinformatics (III Semester), and Biophysics, Biomathematics & Biostatistics (IV Semester) have been included with their respective practicals.
- b. Fast track system including two online courses (Food Microbiology and Food Safety, Industrial Biotechnology) from the NPTEL portal is included in the sixth semester

M.Sc., MICROBIOLOGY (III & IV Semesters) (2020-2021 & onwards)

- a. In 20MBP14 (Food and Dairy Microbiology), in I unit Pediocin and Nisin was added as suggested by Dr. L.Karthik and accepted by the members.
- b. In 20MBP15 (Bioprocess technology), contents were rearranged and Strain improvement was included under Upstream process. In the V unit probiotics-food grade vectors and Immobilization techniques were added as suggested by Dr. L.Karthik and accepted by the members.
- c. In 20MBP16B (Microbial Genomics and Proteomics), Nanopore, Illumina was added in the I unit as suggested by Dr. L.Karthik and accepted by the members.
- d. In 20MBP16C (Microbial Production of Recombinant molecules), pET 28, *Pichia*, *Yersinia* vectors were added in the I unit as suggested by Dr. L.Karthik and accepted by the members.
- e. In 20MBP17 (Practical V – Environmental, Food Microbiology and Bioprocess Technology, Isolation of *Lactococcus* from dairy products was added as suggested by Dr. D. Latha and accepted by the members
- f. In 20MBP18A (Practical VI - Pharmaceutical Microbiology), ADME software was included as suggested by Dr. L.Karthik and accepted by the members.
- g. In 20MBP18B (Practical VI - Microbial Genomics and Proteomics), Purification of PCR products was added as suggested by Dr. L.Karthik and accepted by the members.
- h. In 20MBP18C (Practical VI- Microbial Production of Recombinant Molecules), DNA

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Assembly, Gibson Assembly, Golden gate assembly (Workshop) was added.

i. In 20MBP20 (Bioethics, IPR and Biosafety), Patent drafting was added in the III unit as suggested by our Alumni Dr. Muthukumar and accepted by all the members.

j. In 20MBP21 (Biostatistics & Research Methodology), Statistical tools-Overview of SPSS, DOE were added as suggested by Dr. L.Karthik and accepted by the members.

k. In 20MBP22A (Bioinformatics and Nanotechnology), DNA Assembly tools in the third unit and characterization of nanoparticles (XRD) were added in the IV unit as suggested by Dr. L.Karthik and accepted by the members.

l. In 20MBP22B (Entrepreneurial Microbiology) Skills for entrepreneurs were added in the I unit and Institutions and schemes of government of India in the II unit as suggested by our internal faculty members and accepted by all the members.

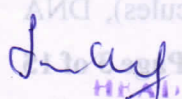
m. In 20MBP23 (Practical VII - Biostatistics and Bioinformatics), Phylogenetic tree construction-Simple phylogeny (EMBL, EBI) were added as suggested by Dr. L.Karthik and accepted by all the members

M.Sc., MICROBIOLOGY (I & II Semesters)

a. Fast track system including two online courses (Food Microbiology and Food Safety, Industrial Biotechnology and Experimental Biotechnology) from the NPTEL portal is included in the fourth semester

Based on the above discussions the following resolutions were made

1. The syllabi of V & VI Semesters of UG Microbiology programmes for the students admitted during the academic year 2019-2020 and onwards were approved
2. The syllabi of III & IV Semesters of UG Microbiology programmes for the students admitted during the academic year 2020-2021 and onwards were approved
3. The syllabi of III & IV Semesters of PG Microbiology programme for the students admitted during the academic year 2020-2021 and onwards were approved with the following modifications
4. It is resolved that changes are recommended in the existing scheme of examinations of the choice based credit systems (CBCS) & learning outcomes based curriculum framework (LOCF) for UG & PG Microbiology Programmes from the academic year 2021-2022 batch and onwards.
5. No changes are recommended in the syllabi of I & II Semesters of the Diploma in clinical laboratory techniques programme for the students admitted during the academic year 2021-2022 & onwards
6. The revised panel of Examiners/ Question paper setters list was accepted and approved



Department of Microbiology

Madhan College of Arts & Science

Chennai - 600 028

7. Aptitude/ placement training/ Online courses (Job oriented courses) are introduced as Skill Enhancement courses (SEC) and grades for each semester was discussed and approved
8. The updation in the Programme Educational objectives (PEOs), Programme Outcomes (POs), and Course Outcomes (COs) were discussed and approved
9. The open Elective courses, Value added programmes and the implementation of Student Development Record were discussed and approved

B.Sc Microbiology

S.No	Subject code	Title of VAC course
1	21VAC01A	a) Human Microbiome
2	21VAC01B	b) Public Health Microbiology
3	21VAC01C	c) Mushroom Cultivation Technology
4	21VAC01D	d) Biofertilizers and Biopesticides
5	21VAC01E	e) Microbial quality control in food & pharmaceutical industries
6	21VAC01F	f) Forensic Microbiology
7	21VAC01G	g) Intellectual Property Rights
8	21VAC01H	h) Plant pathology & disease management
9	21VAC01I	i) Microbial Biotechnology
10	21VAC01J	j) Communicable and Non-communicable diseases
11	21VAC01K	k) Medical Informatics

M.Sc Microbiology

S.No	Subject code	Title of VAC course
1	20VAC01A	A) Developmental Biology
2	20VAC01B	B) Inheritance Biology
3	20VAC01C	C) System Physiology - Plant
4	20VAC01D	D) System Physiology - Animal
5	20VAC01E	E) Diversity of Life Forms
6	20VAC01F	F) Ecological Principles
7	20VAC01G	G) Evolution and Behaviour

Name & Signature of the Chairman (With seal)

PRINCIPAL

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Coimbatore - 641 028.

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