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MINUTES OF THE FIFTEENTH BOARD OF STUDIES MEETING

Faculty: Biosciences

Board: Microbiology

The Meeting of Board of Studies (BoS) was held as given below:

Name of the Body	BoS
Department	Microbiology
Meeting No.	15
Date and Time	10/06/2023 and 10.a.m.
Venue	IQAC Board Room
Members Attended	The details are given in the ANNEXURE -I

AGENDA

1.	Discussion on UG syllabi for Part III - Core Courses in third semester for 2022-23 Batch
2.	Discussion on syllabus for Part III - Inter Disciplinary Course (IDC) offered by Department of Mathematics for the Batch:2022-23
3.	Discussion on Part I (Tamil - III/Hindi-III /French- III/Malayalam - III) offered by Language departments for 2022-23 Batch
4.	Discussion on Part II (English) offered by English department for 2022-23 Batch
5.	Discussion on PG syllabi for third semester courses 2022-23 Batch
6.	Discussion on PG DSE offered by Department of Microbiology to other departments for 2022-23 Batch
7.	Discussion on UG and PG curriculum for 2023-24 Batch
8.	Discussion on Value Added Certificate Courses (VACC) offered by Department of Microbiology for 2022-23 Batch and onwards
9.	Any other matter





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MINUTES OF THE FIFTEENTH BOARD OF STUDIES MEETING

Faculty: Biosciences

Board: Microbiology

The Chairman of BoS welcomed all the Panel members for the meeting. The items listed in the agenda were taken for discussion.

The following are the minutes of the meeting:

Item - 01	Discussion on UG syllabi for Part III - Core Courses in third semester for 2022-23 Batch
Discussion	<p>223MB1A3CA - MICROBIAL DIVERSITY Dr. Murugan recommended for introducing a separate paper since it will be useful for students during their research for taxonomical ranking and classification of microbial isolates with focus on phylogenetic classification.</p> <p>223MB1A3CB - BIOINSTRUMENTATION Dr. Gnanadesigan suggested for inclusion of following topics to have experiential learning on the instruments available in our laboratory and separation methods Unit I: Basic concepts –Solute, Solvent, Molarity, Molality, Normality. Biosensor -Principle, types and applications Unit II: Soxhlet Apparatus- Rotary vacuum evaporator- Distillation unit-Membrane filtration unit. Unit III: Zonal centrifugation and Isopycnic centrifugation.</p> <p>223MB1A3CP - CORE PRACTICAL: MICROBIAL DIVERSITY AND BIOINSTRUMENTATION To expose the students to real time analysis and investigation on microbes Dr. Murugan has recommended to add the following experiments</p> <ul style="list-style-type: none">• Isolation and morphological characterization of fungus from environmental samples-under DBT Star Scheme• Analysis of water sample - MPN techniques• Separation of microbial pigment -column chromatography• Isolation and identification of microbes from skin/oral cavity- under DBT Star Scheme• Isolation and identification of microorganisms from seafood• Isolation and Identification of algae from water sample by inverted microscope - Under DBT Star Scheme <p>223MB1A3SA- FOOD AND WATER QUALITY ANALYSIS Dr. Gnanadesigan and Dr. Murugan recommended the following new topics to emphasize the need for quality assurance in tea and coffee beverages and to be aware of different food standards and guidelines</p> <p>Unit I: Food Quality control of coffee and tea</p>





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	<p>Unit II: Chemical quality of drinking water Unit III: Voluntary and Obligatory standards (PFA, FPO, MMPO, AGMARK etc.,) Codex alimentarius. Unit IV: Subjective and Objective test of sensory parameters. Unit V: Hazard Analysis Critical control Point (HACCP) and its implementation.</p>
Resolution	The Board unanimously approved the syllabus.
Item - 02	Discussion on syllabus for Part III - Inter Disciplinary Course (IDC) offered by Department of Mathematics for 2022-23 Batch
Discussion	222MT1A3ID - PRINCIPLES OF BIostatISTICS The syllabus approved by the Board of Studies in Mathematics was placed for endorsement.
Resolution	The Board unanimously approved the syllabus.
Item - 03	Discussion on Part I (Tamil - III/Hindi - III/French - III/Malayalam - III) offered by Language departments for 2022-23 Batch
Discussion	Part I : 221TL1A2TA Tamil - III 221TL1A2HA Hindi-III 221TL1A2FA French - III 221TL1A2MA Malayalam- III The unified syllabus approved by the Board of Studies in Languages was placed for endorsement.
Resolution	The Board unanimously approved the syllabus.
Item - 04	Discussion on Part II (English) offered by English Department for 2022-23 Batch
Discussion	221EL1A2EA : Part II: Professional English III The unified syllabus approved by the Board of Studies in English was placed for endorsement.
Resolution	The Board unanimously approved the syllabus
Item - 05	Discussion on PG syllabi in third semester courses for 2022-23 Batch
Discussion	223MB2A3CA - ENVIRONMENTAL AND AGRICULTURAL MICROBIOLOGY Dr. Vidhya suggested adding of following topics to have wide exposure on different monitoring techniques to have improvised employability skills: Unit I: Microbial flora of air, Fumigation, Microorganisms, Desiccant rotor dilution Unit II: Isolation, types of organisms and its enumeration Unit III: Wildfire, Crown gall and Soft rot Unit IV: Most Probable Number, Coliform count, Chemical oxygen demand (COD) Unit V: Biosynthesis of amino acid and Lipid 223MB2A3CB - MEDICAL MYCOLOGY AND PARASITOLOGY Dr. Murugan and Dr. Gnanadesigan suggested to add recent outbreak causing fungi and parasites to up keep the knowledge level for disease diagnosis and survey: Unit I: Normal fungal flora of human beings, Specimen collection, preservation, Transportation. Some topics have been reduced. Unit II: Allergic fungal disease Unit IV: Blood parasites





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Unit V: Emerging parasitic and fungal infections-cerebral malaria and encephalitis

223MB2A3CC - PHARMACEUTICAL MICROBIOLOGY AND QUALITY ASSURANCE

Dr. Murugan suggested to add following topics to have better knowledge on environmental monitoring and validation methods in pharmaceutical industry:

Unit I: Overview on practices and sampling

Quality assurance - sampling and its types -raw materials, water, containers, condensates, polythene bags and air.

Unit II: Spoilage and Quality analysis (Physical, chemical and biological methods)

Selection and use of cleaning and disinfection agents in pharmaceutical manufacturing

Unit III: Testing methods and Regulations

Microbiological quality and regulatory requirements: for WHO and FDA

Unit V: Piggy back analysis

223MB2A3CD - FOOD MICROBIOLOGY AND FOOD QUALITY CONTROL

Dr. Gnanadesigan suggested inclusion of following topics for enriching the employability in food industry:

Unit II: Fermented foods –Sauerkraut

Unit III: electrical methods, ATP determination

Unit IV: Internal Microbial Quality control Policy and GMP

Unit V: Hygiene and sanitation in food sector, Waste disposal.
General Principles of Food Hygiene

223MB2A3CE - RESEARCH METHODOLOGY AND BIostatISTICS

Dr. Murugan and Dr. Gnanadesigan suggested for inclusion of following topics to strengthen the skills on research methods.

Unit I: Identification of research gap

Unit III: Article collection - Mendeley reference manager tool, specific aim, Funding agencies in India and their operations - GOs and NGOs.

Unit IV: Essential features, types, significance and limitations
Of Pictorial representation.

Unit V: Correlation - Karl pearsons coefficient of correlation – analysis in SPSS software.

223MB2A3CP - CORE PRACTICAL: APPLIED MICROBIOLOGICAL TECHNIQUES


Dr. Murugan suggested to include the following new experiments

- Quality analysis of non-sterile therapeutic products - Microbial Limit test
- Extraction and estimation of pigments from Bacteria
- Quality analysis of milk sample - Resazurin test
- Cultivation of Oyster Mushroom
- Real Time PCR – Demonstration

Ms. Sharmila, student representative from II M.Sc., Microbiology suggested to include the experiment related to Textile Microbiology as follows

- Microbial dye decolorization - Methylene blue/ Crystal violet



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Resolution	The Board unanimously approved the syllabus.	
Item - 06	Discussion on PG DSE offered by Department of Microbiology to other departments for 2022-23 Batch	
Discussion	223MB2A3DA - MEDICAL LABORATORY TECHNIQUES Dr. Murugan and Dr. Gnanadesigan suggested including the following topics to upgrade the skill sets of clinical microbiologist. Unit II: Minimal Inhibitory Concentration and Minimal Bactericidal Concentration. Unit III: Detection of Cholesterol, Bilirubin, Prolactin and Insulin. Unit V: Incubator, Biomedical waste management, Bureau of Indian Standards- danger signs and Symbols.	
Resolution	The Board unanimously approved the syllabus.	
Item - 07	Discussion on UG and PG curriculum for 2023-24 Batch	
Discussion	The curriculum for UG and PG Adapting R5 regulation was discussed	
Resolution	The Board unanimously approved the curriculum	
Item - 08	Discussion on Value Added Certificate Courses (VACC) offered by Department of Microbiology for 2022-23 Batch and onwards	
Discussion	The following Value Added Certificate Course are to be offered in the odd semester by internal faculty for interested students belonging to all batches from our department and across disciplines HACCP and Food Safety	
Resolution	The Board unanimously approved the syllabus.	
Item - 09	Any other matter	
Discussion	Board members discussed the Panel of Examiners.	
Resolution	The board approved the Panel of Examiners.	

The chairman of Board of Studies (BoS) thanked all the members for their active participation and cordially invited them for the next meeting.

Date: 10/06/2023


 (Dr. J. RENGARAMANUJAM)

Dr. J. Rengaramanujam M.Sc., M.Phil., PGDBL, SET, Ph.D.,
 Professor and Head
 Department of Microbiology
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 Coimbatore-641 048.



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Syllabus Revision

Faculty: Biosciences

Board: Microbiology

Semester: III

Course Code/ Name: 223MB1A3CA / MICROBIAL DIVERSITY

PERCENTAGE OF SYLLABUS REVISED: 100

COURSE FOCUS ON:

Skill Development

Entrepreneurial Development

Employability

Innovations

Intellectual Property Rights

Gender Sensitization

Social Awareness/ Environment

Constitutional Rights/ Human Values/ Ethics





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Syllabus Revision

Faculty: Biosciences

Board: Microbiology

Semester: III

Course Code/ Name: 223MB1A3CB / BIOINSTRUMENTATION

Unit	Existing	Changes
I	Buffers and pH Meter Preparation of solutions - Molar and Normal- Calculation methods. Buffers - Types of Buffers. pH meter - Instrumentation - calomel and glass electrode -Applications.	Basic concepts -Solute, Solvent, Molarity, Molality, Normality. Biosensor -Principle, types and applications
II	Basic Microbiology Instruments Principle, Instrumentation, and Applications of Autoclave, Hot air oven, Incubator, Laminar air flow, metabolic shaker, Lyophilizer. Biosafety cabinets - Introduction and types.	Soxhlet Apparatus- Rotary vacuum evaporator- Distillation unit- Membrane filtration unit.
III	Centrifugation Centrifugation: Principle- Types of Centrifuges -Low speed, High speed, Microfuge-Ultra centrifuge- Analytical and Differential Centrifuge- Applications.	Methods of centrifugation- Differential centrifugation - Density gradient centrifugation- Zonal centrifugation, Isopycnic centrifugation.
IV	Spectrophotometer Colorimetry- Beer and Lambert's law Principle, Instrumentation and Applications- Spectrometry - UV -Visible Spectrophotometer. Spectrofluorimeter	Beer and Lambert's law Principle
V	Chromatography and Electrophoresis Chromatography- Paper, Thin layer, Column, Ion-exchange, Gas and HPLC. Electrophoresis -SDS - PAGE and Agarose gel electrophoresis	Principles and applications

PERCENTAGE OF SYLLABUS REVISED: 30

COURSE FOCUS ON:



Skill Development



Entrepreneurial Development



Employability



Innovations



Intellectual Property Rights



Gender Sensitization



Social Awareness/ Environment



Constitutional Rights/ Human Values/ Ethics



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Faculty: Bioscience

Syllabus Revision

Board: Microbiology

Semester: III

Course Code/ Name: 223MB1A3CP - CORE PRACTICAL: MICROBIAL DIVERSITY AND BIOINSTRUMENTATION

Exp. No.	Existing	Changes
1.	Measurement of Microbial cell size by Micrometry	Measurement of Microbial cell size by Micrometry
2.	Observation of permanent slide for stages of mitosis and meiosis	Preparation of Buffers-Acidic, neutral and alkaline range
3.	Observation of permanent slides of Algae, Fungi and Protozoa	Isolation and Identification of algae from water sample by inverted microscope - Under DBT Star Scheme
4.	Isolation and Identification of algae from water sample by inverted microscope - Under DBT Star Scheme	Isolation and morphological characterization of fungus from environmental samples-under DBT Star Scheme
5.	Extraction of chlorophyll pigments from plant and algae	Evaluation of water sample - MPN techniques
6.	Preparation of Buffers-Acidic, neutral and alkaline range	Extraction of chlorophyll pigments from plant/algae
7.	Measurement of pH - pH-meter	Density Gradient Centrifugation - Sucrose Gradient
8.	Extraction and Quantification of Pigments from Plants	Estimation of Protein-Lowry et al., method
9.	Density Gradient Centrifugation - Sucrose Gradient	Estimation of sugars-DNSA method
10.	Estimation of Protein-Lowry et al., method	Separation of amino acids-Thin Layer & paper Chromatography
11.	Estimation of sugars-DNSA method	Separation of microbial pigment -column chromatography
12.	Separation of amino acids-Thin Layer Chromatography	Isolation and identification of microbes from skin/oral cavity
13.	Isolation of Halophilic bacteria	Isolation and identification of microorganisms from seafood
14.	Determination of motility in bacteria - Hanging drop method	

PERCENTAGE OF SYLLABUS REVISED: 34

COURSE FOCUS ON:



Skill Development



Entrepreneurial Development



Employability



Innovations



Intellectual Property Rights



Gender Sensitization



Social Awareness/ Environment



Constitutional Rights/ Human Values/ Ethics



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Syllabus Revision

Faculty: Biosciences

Board: Microbiology

Semester: III

Course Code/ Name: 223MB1A3SA / FOOD AND WATER QUALITY ANALYSIS

New syllabus

PERCENTAGE OF SYLLABUS REVISED: 100
COURSE FOCUS ON:

Skill Development

Entrepreneurial Development

Employability

Innovations


Intellectual Property Rights

Gender Sensitization

Social Awareness/ Environment

Constitutional Rights/ Human Values/ Ethics



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Faculty: Biosciences

Syllabus Revision

Board: Microbiology

Semester: II

Course Code/ Name: 223MB2A3CA / ENVIRONMENTAL AND AGRICULTURAL MICROBIOLOGY


Unit	Existing	Changes
I	Microbial contamination of air - Sources of contamination - Biological indicators of air pollution. Enumeration of bacteria from air - Air sampling devices. Significance of air Micro flora, Outline of Airborne diseases (Bacterial, Fungal and Viral), Effect of Air pollution on plants and Humans. Air sanitation - UV light, HEPA filters, desiccation, Incineration.	Microbial flora of air Fumigation Microorganisms Desiccant rotor Dilution
II	Structure, Types, Physical and Chemical properties - Soil microbes (Types and Enumeration) - Weathering and Humus formation, Soil pollution - Sources. Biogeochemical cycling - Nitrogen, Carbon, Phosphorous, Sulphur and Iron cycles and its importance.	Isolation, types of organisms and its enumeration
III	Nitrogen Fixing Microorganisms - Symbiotic and free - living nitrogen fixers (Rhizobium, Azotobacter, Azospirillum, Frankia, BGA and Azolla) - Phosphate solubilizers (Phosphobacterium and Aspergillus) - Phytopathogens - Bacterial, Fungal and Viral diseases (Wilt, Blight, Canker and Mosaic only) - Control measures.	Wildfire Crown gall Soft rot
IV	Microbiology of water (Fresh and Marine) - Water Pollution and Waterborne Pathogens. Assessment of water quality (Chemical and Microbial) Bacteriological examination of water - Indicator organisms. Microbiology of Sewage - Waste water treatment - primary, secondary and tertiary - Biological oxygen demand (BOD) and (COD).	MPN, Coliform count Chemical oxygen demand (COD)
V	Recycling of Solid wastes - landfills, vermi-composting - Value added products from wastes - Biogas, Mushroom and SCP production. Biodegradation of Complex Polymers (Cellulose, Hemicellulose, Lignin, Chitin and Pectin), Bioremediation (In- situ, Ex -situ, Intrinsic and Engineered), Bioleaching (Copper and Uranium) - Introduction to biodegradation of recalcitrant's (Xenobiotics).	Biosynthesis of amino acid and Lipid

PERCENTAGE OF SYLLABUS REVISED: 26 %

COURSE FOCUS ON:

- | | |
|--|--|
| <input checked="" type="checkbox"/> Skill Development | <input checked="" type="checkbox"/> Entrepreneurial Development |
| <input checked="" type="checkbox"/> Employability | <input checked="" type="checkbox"/> Innovations |
| <input checked="" type="checkbox"/> Intellectual Property Rights | <input type="checkbox"/> Gender Sensitization |
| <input type="checkbox"/> Social Awareness/ Environment | <input type="checkbox"/> Constitutional Rights/ Human Values/ Ethics |



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Syllabus Revision

Faculty: Biosciences

Board: Microbiology

Semester: III

Course Code/ Name: 223MB2A3CB / MEDICAL MYCOLOGY AND PARASITOLOGY


Unit	Existing	Changes
I	Morphology, Taxonomy, classification of fungi, detection and recovery of fungi from clinical specimens. Classification of medically important Fungi (Morphology, Infection & Reproduction), Immunity to Fungal Infections. Culture Media and Stains in Mycology, Normal fungal flora of human beings, Specimen collection, preservation, Transportation & Identification of Mycological Agent. Biochemical tests for fungal identification, Anti-fungal agents – sensitivity test and quality control – Fungal culture collection methods – Antifungal susceptibility test.	Normal fungal flora of human beings, Specimen collection, preservation, Transportation. Some topics has been reduced.
II	Dermatophytes and agents of superficial mycoses - Trichophyton. Edidermophyton and Microsporium. Yeasts of medical importance - Candida, Cryptococcus. Pityriasis versicolor, White piedra, Black piedra, Tinea nigra, Mycotoxins. Allergic Fungal diseases - Mycetismus.	Allergic fungal disease
III	Subcutaneous Mycosis – Mycetoma, Sporotrichosis, Chromoblastomycosis, Systemic Mycosis- Histoplasmosis, Blastomycosis, Coccidioidomycosis, Opportunistic Mycosis – Candidiasis, Aspergillosis, Miscellaneous Mycosis- Otomycosis. Fungal infections in eyes.	
IV	Introduction and classification of parasites - Laboratory diagnostic techniques in parasitology - Examination of faeces, cultivation, Direct and concentration methods -Intestinal amoebae - Entamoeba histolytica, Entamoeba coli. Free-living amoebae - Naegleria fowleri, Acanthamoeba spp. - Intestinal and genital flagellates - Giardia, Trichomonas. Blood and tissue flagellates - Leishmania donovani, Trypanosoma cruzi. Haemosporina - Malarial parasites. Coccidian - Toxoplasma, Cryptosporium.	Blood parasites- malaria and filariasis.
V	Helminthic Infections - Taenia solium, T. Saginata, Echinococcus granulosus, Fasciola hepatica, Paragonimus westermani and Schistosomes, Ascaris lumbricoids, Ancylostoma duodenale, Trichuris trichura, Enterobius vermicularis and Wuchereria bancrofti. Blood smear examination - Serology and Molecular Diagnosis- Emerging parasitic infections	Emerging parasitic infections

PERCENTAGE OF SYLLABUS REVISED: 25%

COURSE FOCUS ON:

- | | |
|---|--|
| <input checked="" type="checkbox"/> Skill Development | <input type="checkbox"/> Entrepreneurial Development |
| <input checked="" type="checkbox"/> Employability | <input type="checkbox"/> Innovations |
| <input type="checkbox"/> Intellectual Property Rights | <input type="checkbox"/> Gender Sensitization |
| <input checked="" type="checkbox"/> Social Awareness/ Environment | <input type="checkbox"/> Constitutional Rights/ Human Values/ Ethics |



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Syllabus Revision

Faculty: Biosciences

Board: Microbiology

Semester: III


Course Code/ Name: 223MB2A3CC/PHARMACEUTICAL MICROBIOLOGY AND QUALITY ASSURANCE

Unit	Existing	Changes
I	An introduction to pharmaceutical microbiology- WHO good manufacturing practices: Principles for pharmaceutical products Quality management in the drug industry: Heating, Ventilation and Air conditioning systems of sterile and non-sterile pharmaceutical firms - water sampling and testing, Types of Water in pharmaceutical industry and their uses	Overview on practices and sampling Quality assurance - sampling and it types -raw materials, water, containers, condensates, polythene bags and air.
II	Sterility and spoilage in pharmaceutical products- Types of spoilage, Factors affecting microbial spoilage - assessment of microbial spoilage - preservation. Environmental monitoring in sterile and non sterile area - Sterilization control - sterilization monitors and Quality assurance of products.	Spoilage and Quality analysis physical, chemical and biological Selection and use of cleaning and disinfection agents in pharmaceutical manufacturing
III	Sterility testing methods and Regulations- Sterile and non sterile pharmaceutical products and their testing protocols: Sterility test - Microbial Limit Test - Bacterial endotoxin test (LAL test). Microbiological quality and regulatory requirements: Immunological products - Containment system integrity - Veterinary antimicrobial products - Bio therapeutics and Manufactured products - Water analysis in Pharma Industry.	Testing methods and Regulations Microbiological quality and regulatory requirements: for WHO and FDA
IV	Quality assurance in Pharmaceutical industry The role of the Qualified Person in microbiological quality assurance - Safety in microbiology - Rapid enumeration and identification methods - Selection and use of cleaning and disinfection agents in pharmaceutical manufacturing- Measurement of biocide effectiveness - International disinfectant testing protocols. Personal Qualification procedure for clean area entry- Clean-in-Place, Sterilization in-place, Clean room design, operation and regulatory standards.	Irrelevant Content has been removed
V	Validation in quality assurance Microbiological quality assurance. Validation and types. Validation of aseptic processing and media fill - Internal and Regulatory Auditing of the pharmaceutical microbiology department. Report writing and Documentation in microbiology lab - Validation of Instruments - Qualifying Instruments in Pharma Industry.	Piggy back analysis

PERCENTAGE OF SYLLABUS REVISED: 28
COURSE FOCUS ON:

- | | |
|---|--|
| <input checked="" type="checkbox"/> Skill Development
<input checked="" type="checkbox"/> Employability
<input type="checkbox"/> Intellectual Property Rights
<input type="checkbox"/> Social Awareness/ Environment | <input checked="" type="checkbox"/> Entrepreneurial Development
<input type="checkbox"/> Innovations
<input type="checkbox"/> Gender Sensitization
<input type="checkbox"/> Constitutional Rights/ Human Values/ Ethics |
|---|--|



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Syllabus Revision

Faculty: Biosciences

Board: Microbiology

Semester: III

Course Code/ Name: 223MB2A3CD / FOOD MICROBIOLOGY AND FOOD QUALITY CONTROL

Unit	Existing	Changes
I	Food as a substrate Incidence and types of microorganisms in food – Contamination and Spoilage of Meat, Poultry, Sea foods, Vegetables, Fruits. Principles of food preservations: Asepsis, Preservation by use of High temperature, Low temperature, Canning, Drying, Radiation and Food additives.	NIL
II	Fermented foods and food borne diseases. Meat and fishery products – Country cured hams, Dry sausages, Katsuobushi. Fermented milk products –, Yoghurt and Cheese. Food poisoning – Food borne diseases- Bacterial and Non- Bacterial.	Fermented foods – pickles Sauerkraut
III	Microbial analysis of food - Indicator organisms – Direct examination – culture techniques – enumeration methods – plate – Viable & Total Count; Alternative methods –Rapid methods, immunological methods – DNA / RNA methodology – Laboratory accreditation.	Dye reduction tests , electrical methods ATP determination:
IV	Quality assurance in food industry- In house Committee for quality assurance, Persons involved, Quality Check at every step from collection of raw materials till it reaches the customer, SSOP, HACCP- Principles & Applications.	Internal Microbial Quality control Policy GMP
V	Food laws and regulations- National – PFA Essential Commodities Act (FPO, MPO etc.). International – Codex. Alimentarius, ISO – 9000 series, ISO 22000 & BS 5750. Regulatory Agencies. WTO, FSSAI. GHP for commodities, equipment, work area and personnel, cleaning and disinfection (Methods and agents commonly used in the hospitality industry), Safety aspects of processing water (uses & standards) and Waste Water &	Hygiene and sanitation in food sector Waste disposal. General Principles of Food Hygiene

PERCENTAGE OF SYLLABUS REVISED: 23

COURSE FOCUS ON:

<input checked="" type="checkbox"/>	Skill Development	<input checked="" type="checkbox"/>	Entrepreneurial Development
<input checked="" type="checkbox"/>	Employability	<input type="checkbox"/>	Innovations
<input type="checkbox"/>	Intellectual Property Rights	<input type="checkbox"/>	Gender Sensitization
<input checked="" type="checkbox"/>	Social Awareness/ Environment	<input type="checkbox"/>	Constitutional Rights/ Human Values/ Ethics



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15th

Syllabus Revision

Faculty: Biosciences

Board: Microbiology

Semester: III

Course Code/ Name: 223MB2A3CE / RESEARCH METHODOLOGY AND BIostatISTICS

PERCENTAGE OF SYLLABUS REVISED: 100

COURSE FOCUS ON:

Skill Development

Entrepreneurial Development

Employability

Innovations


Intellectual Property Rights

Gender Sensitization

Social Awareness/ Environment

Constitutional Rights/ Human Values/ Ethics



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Syllabus Revision

Faculty: Bioscience

Board: Microbiology

Semester: III

Course Code/ Name: 223MB2A3CP - CORE PRACTICAL: APPLIED MICROBIOLOGICAL TECHNIQUES

PERCENTAGE OF SYLLABUS REVISED: 100

COURSE FOCUS ON:

<input checked="" type="checkbox"/>	Skill Development	<input checked="" type="checkbox"/>	Entrepreneurial Development
<input checked="" type="checkbox"/>	Employability	<input checked="" type="checkbox"/>	Innovations
<input type="checkbox"/>	Intellectual Property Rights	<input type="checkbox"/>	Gender Sensitization
<input type="checkbox"/>	Social Awareness/ Environment	<input type="checkbox"/>	Constitutional Rights/ Human Values/ Ethics





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15th

Syllabus Revision

Faculty: Biosciences

Semester: III

Board: Microbiology

Course Code/ Name: 223MB2A3DA / MEDICAL LABORATORY TECHNIQUES

Unit	Existing	Changes
I	Introduction to Clinical laboratory Basic laboratory principles - Organization of clinical laboratory - Biosafety in containment laboratory - National and International GLP (Good laboratory Practices) - Role of medical laboratory technician - personnel hygiene and safety measures, Nosocomial infection.	Nil
II	Antiseptics & Disinfectants Definition -Types - Mode of Action - Uses. Antimicrobial agents and Antibiotics: Introduction, mechanism of action, classification and uses, Antibiotic susceptibility testing - Stokes, Kirby-Bauer method,	Minimal Inhibitory Concentration and Minimal Bactericidal Concentration.
III	Collection and processing of blood Collection and processing of blood sample- separation of serum and plasma - Sampling errors - Preservation of samples. Determination of Total Count, Differential Count, Erythrocyte Sedimentation Rate, Hemoglobin concentration (Hb), Bleeding Time & Clotting Time. ABO Blood group system. Determination of blood glucose, Urea, Profiling - Liver function test, Renal function tests. Hormones - T3, T4, TSH, FSH, LH.	Detection of Cholesterol and Bilirubin, Prolactin, Insulin.
IV	Processing of Urine, Stool and Sputum sample Collection, transport and Storage of Urine, Stool and Sputum sample. Macroscopic and Microscopic examination - Urine: sugar, albumin, bile salts, bile pigments and ketone bodies - Pregnancy Test. Stool - Cyst, Ova, Mucus, Pus, RBC, Reduced sugar, Occult blood. Sputum -Petroff's method, AFB staining.	Nil
V	Maintenance of Laboratory Maintenance of Laboratory Equipment's - Centrifuge, calorimeter, microscope, autoclave. Laboratory Certification process - National Accreditation Board for Laboratories, Standard Operating Procedure - Clinical Laboratory records.	Incubator, Biomedical waste management, Bureau of Indian Standards (BIS)- Caution signs and symbols.

PERCENTAGE OF SYLLABUS REVISED: 22

COURSE FOCUS ON:

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Entrepreneurial Development

Employability

Innovations

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Gender Sensitization


Social Awareness/ Environment

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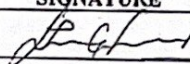
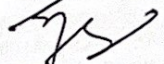
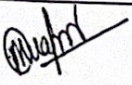
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FACULTY OF BIOSCIENCES
DEPARTMENT OF MICROBIOLOGY
BOARD OF STUDIES MEETING

VENUE : IQAC BOARD ROOM
DATE : 10.06.2023
TIME : 10.00AM

ATTENDANCE OF THE 15TH BOARD OF STUDIES MEETING

S.NO	NAME	POSITION	SIGNATURE
1	Dr. J. Rengaramanujam Professor and Head	Chairman	
2	Dr. S. Murugan Associate Professor Karunya University Coimbatore - 641114	Member (Subject Expert)	
3	Dr. K. Vijila Professor, Department of Agricultural Microbiology TNAU Coimbatore - 641 003	Member (Subject Expert)	ABSENT
4	Dr. Chitra Tangavel Scientist Proteomics Mettupalayam Road Kavundampalayam Coimbatore - 641 043	Member (Industrial Expert)	ABSENT
5	Dr. M. Gnanadesigan Assistant Professor, Department of Microbial Biotechnology Bharathiar University Coimbatore - 641 046	Member (Subject Expert Nominated by Vice Chancellor)	
6	Durgadevi . S Quality Control of Microbiologist	Alumini	ABSENT





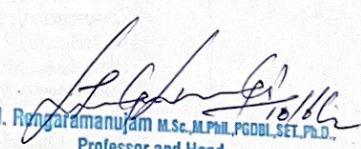
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	Amway India Enterprises Pvt. Lmt, Sipcot Industry Road, Pallapati, Dhindugal - 624201		
7	Sharmila. R (PG)	Student	R. Sharmila 10/6/23
	Deebini. G (UG)	Representatives	D. Deebini 10/6/23
8	Dr. N. Kuppusamy Part - I (Four Semester Language)	Co - Opted Member	R. V. 10/6/23
9	Dr. N. Vithya Prabha Part - II (Four Semester Language)		R. V. 10/6/23
10	Dr. R. Sowrirajan Allied		
11	Dr. S. S. Sudha Professor	Member	S. S. Sudha 10/6/23
12	Dr. N. Vidhya Professor	Member	N. Vidhya 10/6/23
13	Dr. S. Senthil Prabhu Professor	Member	S. Senthil Prabhu 10/6/23
14	Dr. A. M. Ramachandran Associate Professor	Member	A. M. Ramachandran 10/6/23
15	Dr. C. Sasikala Associate Professor	Member	C. Sasikala 10/6/23
16	Dr. S. Karthiksundaram Assistant Professor	Member	S. Karthiksundaram 10/6/23
17	Dr. R. Mahenthiran Assistant Professor	Member	R. Mahenthiran 10/6/23
18	Prof. M. Nivethitha Assistant Professor	Member	M. Nivethitha 10/6/23
19	Dr. J. Devakumar Assistant Professor	Member	J. Devakumar 10/6/23


Dr. J. Ranganamanujam M.Sc., M.Phil., PGDIL, SET, Ph.D.,
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