

MEMBERS PRESENT

UNIVERSITY NOMINEE : DR. R. SHENBAGARATHAN,  
Head & Assoc Prof of Zoology,  
Lady doak college, Madurai

SUBJECT EXPERTS : ① DR. R. GANESAN, M.Sc., Ph.D.,  
Head & Asst. Prof in Microbiology,  
P.K.N. College, Thirumangalam.

② MR. G. MANIVANNAN, M.Sc., M.Phil., Ph.D.,  
Head & Asst. Prof in Microbiology,  
NM.S.S.V.N College, Madurai

ALUMNUS : ① MR. R.M. Lakshmanan, M.Sc., M.Phil., Ph.D.,  
Head & Asst prof in Microbiology,  
HKRH college, Uthamapalayam.

INDUSTRIAL / CORPORATE SECTOR : ① MR. S. SARAVANA RAJKUMAR, M.Sc.,  
CINDRELLA BIOPRODUCTS, Madurai

MEMBERS

- ① DR. S. VENKATESAN, Head & Asst. prof in Microbiology
- ② MR. T. DURAI ANAND, Asst. Prof in Microbiology
- ③ MR. R.M. GOBINATH, "
- 4 DR. M. KANNAN, "
- 5 DR. G. RAMANATHAN, "
- 6 Mrs. M. KIRITHIKA, "
- ⑦ MR. K. SIVA, "

## RESOLUTIONS:-

The minutes of meeting for B.Sc & M.Sc Microbiology board of studies held on 18.01.2013.

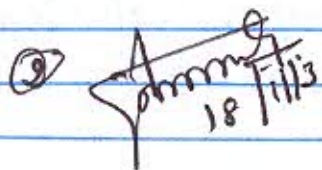
The following matters were discussed and resolved.

- 1) The syllabus for I<sup>st</sup> B.Sc and II M.Sc Microbiology courses was discussed. ~~by~~ &
- 2) The syllabus was approved after necessary addition and deletions wherever required.
3. The Board members discussed and approved the necessary changes in the question paper pattern for part IV - skill base subject and non major electives subject.
4. The preparation of panel of Examiners for each paper is to be decided by the chair person and staff members of microbiology department.
- 5) The Distribution of Internal and External marks for Project during the IV<sup>th</sup> semester of M.Sc student was changed as 40+60 marks respectively.

Signature of the Members Present:

① R. Lakshmanan

Rm. Lakshmanan, Head, Department of Microbiology, H.K.R.H. College, Vthamangalaya

②  18/1/13

Dr. R. Ganesan,

Principal & Head, Dept of Micro,  
PKN College,  
Tirumangalam 621006.

③ S. Saravana Raj Kumar

S. SARAVANA RAJ KUMAR  
CINDERELLA BIO MARKETING  
MADURAI

③ G. Y →

G. Manivannan  
Asst, Dept of Microbiology,  
N.M.S.S.V.N College,  
Nagamalai, Madurai.

④ ~~G. R~~  
18/1/13

Dr. G. Ramasubban.

⑤ R. 18/1/13

R.M. GOBINATH

⑥ M. G. 18/1/13

M. KIRITHIKA

⑦ S. Venkatesan  
18/1/13

S. VENKATESAN

⑧ ~~Siva~~

K. SIVA

⑨ ~~S~~ 18/1/13

Dr. M. KANNAN.

MINUTES OF MEETING - B.Sc., MICROBIOLOGY  
BOARD OF STUDIES MEETING HELD ON 7/12/13

MEMBERS PRESENT

UNIVERSITY NOMINEE : DR. R. SHENBAGARATHAI,  
HEAD & ASSOC. Prof in Zoology,  
Lady doak College, Madurai.

SUBJECT EXPERTS : (1) DR. R. GANESAN, M.Sc., Ph.D.,  
PRINCIPAL & Head dept of  
Microbiology,  
P.K.N. College, Tirumangalam.

(2) MR. G. MANIVANNAN, M.Sc., M.Phil., Ph.D.,  
Head & ASST Prof in Microbiology,  
NMSSUN College, Madurai.

ALUMNUS : (1) MR. R. M. LAKSHMANAN, M.Sc., M.Phil., Ph.D.  
Head & ASST Prof in Microbiology,  
HKRH College, Uttamapalayam.

INDUSTRIAL / CORPORATE

SECTOR : (1) MR. S. SARAVANA RAJ KUMAR, M.Sc.,  
CINDRELLA BIOPRODUCTS,  
MADURAI.

MEMBERS:

- (1) MR. T. DURAI ANAND, Head & ASST Prof in Microbiology
- (2) MR. R. M. GOBINATH, ASST Prof in Microbiology
- (3) DR. M. KANNAN, "
- (4) DR. G. RAMANATHAN, "
- (5) MRS. M. KERITHIKA, "
- (6) MRS. M. NIRMALA, "
- (7) MRS. S. AJITHA, "

## RESOLUTIONS:

The following matters were discussed and resolved.

- ① The syllabus for III B.Sc., Microbiology course was discussed.
- ② In the Biocomputing paper some chapters are modified.
- ③ It is resolved to remove some of the topics in Microbial genetics and genetic engineering.
- ④ It is resolved to retrench the content of Entrepreneurship in Microbiology (NME).
- ⑤ In Bioinformatics, some units have been changed into some other chapters.
- ⑥ It is resolved to mitigate the portions of cell biology paper.
- ⑦ It is resolved to make minor changes in Practical - IV.
- ⑧ It is resolved to delete and add some chapters of Diagnostic Microbiology paper.
- ⑨ We have prepared the panel of examiners for each paper by the chair person and staff members of Microbiology department.

Signature of the members present

① ~~Dr. R. Ganesan~~

Dr. R. Ganesan.  
Principal And HOD of Microbiology,  
PKN College. Tiruvallur,

2. G. M

G. MANIVANAN.  
H R A D,  
DEPT OF MICROBIOLOGY  
N. M. S. S. V. N. COLLEGE  
MADURAI-19.

3. S. Saravana

S. SARAVANA RAI KUMAR,  
CINDRELLA BIO PRODUCTS  
MADURAI

4. T. Durai Anand

T. DURAI ANAND  
Assistant Professor & Head,  
Department of Microbiology,  
VHNSN College, Virudhunagar.

5. R. M. GOBINATH

R. M. GOBINATH  
AAAP, Prof in Microbiology,  
VHNSN College,  
Virudhunagar.

6. (Dr. G. Ramanathan) G. R

Dept of Microbiology, VHNSN College.

7. M. Nirmala  
(M. NIRMALA)

Dept. of Microbiology, VHNSNC, VNR.

8. Dr. M. KANNAN.  
7/12/2013

Dept. of Microbiology.

9. S. ASITHA

10. M. Kirithika  
7/12/13

"

"

MINUTES OF MEETING - B.Sc. MICROBIOLOGY & M.Sc. MICROBIOLOGY,  
BOARD OF STUDIES MEETING HELD ON 28-03-2015.

MEMBERS PRESENT.

UNIVERSITY NOMINEE : Dr. N. SIVAKUMAR,  
Assistant Professor,  
Department of Molecular Biology,  
School of Biotechnology,  
Madurai Kamaraj University,  
Madurai - 21.

Subject Experts : 1. Dr. J. Rajendran,  
Assistant Professor,  
Department of Genetics,  
School of Biological Sciences,  
Madurai Kamaraj University,  
Madurai.  
2. Dr. M. Jeyalakshmi,  
Assistant Professor, Dept. of Immunology,  
School of Biological Sciences,  
Madurai Kamaraj University,  
Madurai.

Alumnus : Dr. S. Venkatesan,  
Associate Professor & Head,  
Department of Environmental Sciences,  
Periyar University,  
Salem.

Industrialist : Mr. R. Singaravel M.Sc.,  
Excellent Lab,  
4/3H Thiruvalluvar Street,  
SNB Sentil Prabu Ikkam,  
Virudhunagar.

Members : 1. Dr. T. Durai Anand, Head & Asst. Prof. of Microbiology  
2. Dr. M. Kannan, Assistant Professor in Microbiology  
3. Dr. G. Ramanathan, " " "  
4. Mrs. M. Nirmala, " " "  
5. Mr. P. Punitharaj, " " "  
6. Ms. J. Mugil, " " "

RESOLUTIONS:

The minutes of meeting for M.Sc., and B.Sc.,  
Microbiology Board of Studies held on 28-03-'1

The following matters were discussed and Resol

1. All the members discussed the title of the paper and members approved the title of the paper.
2. The subject experts insisted to give importance for the practicals.
3. Some of the units are modified as per the suggestions of subject experts.
4. Some new topics have been added.
5. Some complicated and irrelevant topics have been deleted.
6. The preparation of Panel of Examiners for each paper is discussed by the all members.

1. T. Purali Asst. Prof. SBS, MKU

2. Dr. J. Rajendhran, Asst. Prof. SBS, MKU

3. Dr. N. Sivakumar, Asst. Prof. SBS, MKU.

4. Dr. M. Jayalakshmi Asst. Prof. SBS, Madurai Kamaraj University

5. Dr. G. Ramasathan, VANSN.

6. Mrs. M. NIRMALA, VANSN

7. Ms. J. MUGIL

8. P. PUNITHARAJ

*[Signatures]*  
G. Pe  
Mugil  
P. Punitharaj



MEMBERS PRESENT

UNIVERSITY NOMINEE : DR. N. SIVAKUMAR  
Assistant Professor,  
Department of Molecular Biology,  
School of Biotechnology,  
Madurai Kamaraj University,  
Madurai - 21.

Subject Expert : Dr. J. Rajendran,  
Assistant Professor,  
Department of Genetics,  
School of Biological Sciences,  
Madurai Kamaraj University,  
Madurai - 21.

Alumnus : Dr. S. Venkatesan,  
Associate Professor  
Department of Environmental Sciences,  
Periyar University,  
Salem.

Subject Expert : Dr. M. Jeyalakshmi,  
Asst. Prof., Department of Immunology,  
School of Biological Science, M.K. University,  
Madurai - 21.

Industrialist : Mr. R. Singaravel, M.Sc.,  
Excellent Lab., 4/3H, Thiruvalluvar Street,  
SNB Senthil Prabhu Illam, Virudhunagar.

Members : 1. Dr. T. Durai Anand, Head & Asst. Prof. in Microbiology.  
2. Dr. M. Kannan, Assistant Professor in Microbiology  
3. Dr. G. Ramanathan, " "  
4. Mrs. M. Nirmala, " "  
5. Mr. P. Punitharat, " "  
6. Ms. J. Mugil, " "

## Resolutions :

The minutes of meeting for M.Sc. and B.Sc. second year syllabus modification by Board of Studies held on 20.02.2016.

Following issues were discussed and resolved.

- i) All the members of Board of Studies discussed the title of the concern subject papers and members approved the titles.
- ii) Subject experts suggested to include some new chapters and alter the existed chapter in the syllabus.
- iii) units have rearranged as per the suggestion noted by the subject experts.
- iv) New recent application based chapters have been suggested by subject experts for elective papers.
- v) Alterations have been mentioned in ancillary papers by subject experts including practicals.
- vi) The preparation of panel of examiners for each papers or is discussed by all the members.

1. Dr. N. SIVAKUMAR,  
ASST. Prof., SBT, MKU. ]

*[Signature]*  
20/02/16

2. DR. S. VENKATESAN,  
Associate Prof., Periyar Univ. ]

*[Signature]*  
20/2/16

3. Dr. J. Rajendran,  
ASST. Prof., SBS, MKU ]

*[Signature]*  
20/2/16

4. Dr. T. Durai Anand,  
Head & ASST. Prof., VHNSNC ]

—————

5. Dr. M. Kannan,  
ASST. Prof., VHNSNC ]

*[Signature]*  
20/2/16

6. Dr. G. Ramanathan,  
ASST. Prof., VHNSNC ]

*[Signature]*  
20/2/16

7. Mrs. M. Nirmala,  
ASST. Prof., VHNSNC ]

*[Signature]*

8. Mr. P. Punitharaj,  
ASST. Prof., VHNSNC ]

*[Signature]*  
20/02/16

9. Ms. J. Mugil,  
ASST. Prof., VHNSNC ]

*[Signature]*

MINUTES OF MEETING : B. SC. MICROBIOLOGY ( III YEAR)

BOARD OF STUDIES MEETING HELD ON 07.03.2017.

MEMBERS PRESENT

University Nominee : Dr. N. Sivakumari, Assistant Professor,  
Department of Molecular Biology,  
School of Biotechnology,  
Madurai Kamaraj University,  
Madurai-21.

Subject Expert : Dr. B. Ashok Kumar, Assistant Professor,  
Department of Genetic Engineering,  
School of Biotechnology,  
Madurai Kamaraj University,  
Madurai.

Subject Expert : Mr. R. N. Lakshmanan, The Head,  
Department of Microbiology,  
Hajee Karethe Routhar Howdia College,  
Uthamapattinam.

Alumnus : Mrs. N. Krishnaveni, Assistant Professor,  
Department of Microbiology,  
PSG College of Arts & Science,  
Coimbatore.

Members :

1. Dr. T. Durai Anand, Head & Asst. Prof. in Microbiology
2. Dr. G. Ramanathan, Asst. Prof in Microbiology
3. Mrs. M. Nirmala, " "
4. Mr. P. Punitharaj, " "
5. Dr. M. Suresh, " "
6. Ms. A. R. Vijaya Lalitha, " "
7. Mrs. T. Shanmugaprabha, " "

## Resolutions:

The minutes of meeting for B.Sc. third year syllabus modification by Board of Studies held on 07.03.2017.

Following issues were discussed and resolved based on the suggestions given by subject experts during Board of Studies Meeting held on 07.03.2017 at 02.00 PM in the Department of Microbiology.

Core paper-9 : Microbial Genetics and Molecular Biology.

- \* Addition of a chapter in unit II and typographical spelling corrections were made.

- \* Deletion of existed two chapters from unit III and addition of new chapter (Topoisomerase) are made.

- \* Punctuation errors were corrected in unit IV and V.

- \* Reference part alignment errors were corrected.

Core paper-10 : Environmental and Agricultural Microbiology.

- \* First sentence in objectives is deleted as per the suggestion of subject experts.

- \* One chapter is modified (positive interaction) in unit I.

- \* A new chapter is added (chlorinated pesticide 2,4-D) in unit II.

- \* Spelling mistakes were corrected in microorganisms.

- \* Unwanted use of lower case in reference part were corrected.

Core paper-11 : Medical Microbiology.

- \* Corrections and sentence modifications were made in objectives.

- \* In unit I, new chapters have been included concerned with infectious diseases (Nosocomial and waterborne diseases).

- \* Spelling corrections were done in unit II and III.

- \* A new viral and fungal diseases were included in unit IV.

- \* Chapters were modified in unit V.

Core paper-12 : Major Practical

- \* Specification of experimental types in experiment number 1 and 2 (Tube dilution/Well diffusion) is done.

- \* Addition of new experiment, demonstration/observation of microalgae and diatoms from water sample is done.

Allied paper-13 : Cell Biology

- \* Preposition error corrections were made in objectives.

- \* Rearrangement of chapters and addition of one chapter is included (Lampbrush chromosome) in unit III.

- \* Chapter modification is done in unit V.

SBS paper - 3 : Mushroom Technology.

- \* Conjunction and preposition were made in objectives.
- \* Addition of one chapter in unit III (Paddy straw mushroom cultivation) is done.

NME Paper - 1 : Entrepreneurship in Microbiology.

- \* Sentence, phrasal verb and lettercase modifications were made in objective part.
- \* Addition of one chapter in unit I (Success stories of entrepreneur) is done.

Core paper - 13 : Recombinant DNA Technology.

- \* All units were rearranged based on suggestions of subject experts.

UNIT-I Enzymes involved in rDNA technology.

UNIT-II Vectors involved in rDNA technology.

UNIT-III Methods involved in rDNA technology.

UNIT-IV screening of recombinants.

UNIT-V Applications of rDNA technology.

Core paper - 14 : Food and Industrial Microbiology.

- \* Sentence modification in objectives is done.
- \* Certain terms were modified in unit I.
- \* Spelling corrections in remaining units were made.

Core Paper - 15 : Bioinformatics

- \* Minor typographical errors are corrected.

Core paper - 16 : Major Practical

- \* Spelling mistakes were corrected in experiment 3 and 5.

Allied Paper - 15 : Applied Ecology.

- \* Sentence modifications in objectives are done.
- \* One chapter is removed from unit II.
- \* Minor spelling corrections are made.

Allied Paper - 16 : Biology Practical

- \* Minor spelling corrections in the title of experiments 3 and 6 are made.
- \* Sentence modification is made in experiment 6.

SBE Paper - 5 : Microbial Nanotechnology.

- \* Deletion of one chapter (Nanowire) in unit I is done.
- \* Deletion of one chapter in unit II is done.

## SBE Paper - 6 : Pharmaceutical Microbiology.

- \* Preposition corrections were made in objectives.
- \* Minor spelling corrections in unit III were made.

## NME Paper - 2 : Human Diseases and Diagnostic Microbiology.

- \* Sentence modifications in objectives were made.
- \* Specification of bacterial infection such as urinary tract infection (UTI) and gastrointestinal tract infection are followed in unit II.
- \* Addition of one chapter (germ tube test) instead of tuberculin test in unit III.
- \* A specific test regarding detection of clinical pathogen (WIDAL) is added.

The experts expressed their consent regarding the panel of examiners and the experts suggested the name of other Professors also.

Dr. B. Ashok Kumar - Microbial Genetics and Molecular Biology  
Recombinant DNA Technology.

Dr. N. Sivakumar - Food and Industrial Microbiology  
Environmental and Agricultural Microbiology.

Mr. R.M. Lakshmanan - Medical Microbiology.  
Mushroom Technology.  
Human Diseases and Diagnostic Microbiology  
Allied - Cell Biology.

Mrs. N. Krishnaveni - Bioinformatics  
Pharmaceutical Microbiology  
Entrepreneurship in Microbiology  
Allied - Applied Ecology.


1. Dr. N. Sivakumar,  
Assistant Professor,  
SBT, MKU, Madurai.

}   
07/03/17

2. Dr. B. Ashok Kumar  
Assistant Professor,  
SBT, MKU, Madurai.

} B. Ashok Kumar

3. Mr. P. Lakshmanan,  
The Head, Hajee Karim  
Rowther Houdia College,  
Uthamapalayam.

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
4. Mrs. N. Krishnaveni,  
Assistant Professor,  
PSA College of Arts & Science,  
Coimbatore.

} N. Krishnaveni  
7/3/17

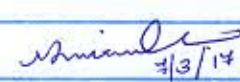
5. Dr. T. Durai Anand,  
Asst. Prof & Head, VHNSNC (Auto)

}  7.3.17


6. Dr. G. Ramarathnam,  
Asst. Prof., VHNSNC (Auto).

}  7/3/17

7. Mrs. M. Nirmala,  
Asst. Prof., VHNSNC (Auto).

}  7/3/17

8. Mr. P. PUNITHARAJ,  
Asst. Prof., VHNSNC (Auto).

}  07/03/17

9. Dr. M. Suresh,  
Asst. Prof., VHNSNC (Auto).

}  07/03/17

10. Ms. A.R. Vijaya Lalitha,  
Asst. Prof., VHNSNC (Auto).

} A.R. Vijaya Lalitha  
7/03/2017

11. Mrs. T. Shanmugaprabha,  
Asst. Prof., VHNSNC (Auto).

} T. Shanmugaprabha



MINUTES OF MEETING : B.Sc, Microbiology (I year; III year NME).  
M.Sc, Microbiology (I year)

BOARD OF STUDIES MEETING HELD ON 17.02.2018

MEMBERS PRESENT

University Nominee : Dr. M. Murugan  
Assistant Professor  
Dept. of Microbial Technology,  
School of Biological Sciences,  
Madurai Kamaraj University,  
Madurai - 625 021

Subject Expert : Mr. R. M. Lakshmanan,  
The Head,  
Department of Microbiology,  
Hajee Karutha Rowther Howardia College, Uthamapalayam

Industrial Representative : Dr. R. Singaravel Ph. D.,  
Director,  
Aquacare Biological Private Limited  
Vadaperumbakkam, Chennai - 600 060.

Members : Mrs M. Nirmala Asst. Prof. & Head i/c, Microbiology  
Mr. P. Punitharaj Asst. Prof in Microbiology Dept.  
Mrs. J. Mugil ,,  
Dr. M. Suresh ,,  
Mrs T. Shanmugapriya ,,  
Mrs K. Radha ,,  
Ms. E. Harishma Jaska ,,  
Mrs A.R. Vijaya Lalitha ,,

## RESOLUTION :

The Board of Studies meeting for I B.sc, and I M.sc, Microbiology Syllabus and III B.sc Non Major Elective syllabus modification was conducted on 17.2.2018 in the Department of Microbiology, VHSN College (A), Virudhunagar. The following matters were discussed and resolved :

- All the members of board of studies were discussed about the title of the paper, Content of Syllabus and correction in the text books and references were briefly discussed.
- Suggestions on the changes of content in each and every paper were discussed on both UG and PG syllabus and also on UG Nonmajor elective subjects.
- University nominee and subject experts suggested to include new titles and few examples in the syllabus.
- Industrial representative have been suggested the practical wise changes which gives the employment opportunities to the students.
- The content of all the papers discussed and the members make the possible corrections according to the suggestion of board of studies.
- The board resolved to have new subject code for all the discussed subjects and also for non major elective papers.

Dr. M. MURUGAN  
Assistant Professor  
Dept. of Microbial Technology  
MKU, Madurai.

M. Murugan 17/2/2018

Mr. R.M. Lakshmanan,  
Head in Dept of Microbiology,  
Hajee Kanetha Rowther Howard College,  
Uthamapalayam.

R. Lakshmanan  
17/02/2018

Dr. R. Singaravel  
Director,  
AquaCare Biological Private Limited  
Chennai.

R. Singavel  
17/02/2018

Mrs M. Nirmala  
Assistant Professor & Head i/c

M. Nirmala  
17/2/18

Mr. P. Punitharaj  
Assistant Professor

P. Punitharaj  
17/02/18

Ms. J. Mugil  
Assistant Professor

J. Mugil  
17/02/18

Dr. M. Suresh  
Assistant Professor

M. Suresh  
17/02/18

Mrs T. Shanmuga Prabha  
Assistant Professor

T. Shanmugaprabha  
17.2.18

Mrs K. Radha  
Assistant Professor

K. Radha  
17/02/18

Ms. E. Harishma Laska  
Assistant Professor

E. Harishma  
17/2/18

Mrs A.R. Vijaya Lalitha  
Assistant Professor

A.R. Vijaya Lalitha  
17/2/18

M.Phil

MINUTES OF MEETING - M.Phil. MICROBIOLOGY.

7

BOARD STUDIES MEETING HELD ON 28.03.2015.

MEMBERS PRESENT.

UNIVERSITY NOMINEE :

Dr. N. Sivakumar,  
Assistant Professor,  
Department of Molecular Biology,  
School of Biotechnology,  
Madurai Kamaraj University,  
Madurai - 21.

Subject Experts : 1. Dr. J. Rajendran,  
Assistant Professor,  
Department of Genetics,  
School of Biological sciences,  
Madurai Kamaraj University,  
Madurai - 21.

2. Dr. M. Jeyalakshmi,  
Assistant Professor,  
Department of Immunology,  
School of Biological sciences,  
Madurai Kamaraj University,  
Madurai - 21.

Alumnus : Dr. S. Vengatesan,  
Associate Professor & Head,  
Department of Environmental sciences,  
Periyar University,  
Salem.

Industrialist : Mr. R. Singaravel M.Sc.,  
Excellent Lab,  
4/3H, Thiruvalluvar street,  
SNB, Senthil Prabu Illam,  
Vindhanagar.

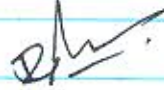


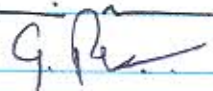



Members : Dr. T. Durai Arand, Head & Asst. Prof. in Microbiology  
Dr. M. Kannan, Asst. Prof. in Microbiology.  
Dr. G. Ramanathan, " " "

## RESOLUTIONS :

The minutes of meeting for M.Phil Microbiology Board of studies held on 28-03-2015.

The following matters were discussed and Resolved.

1. Some of the units are modified as per the suggestions of subject experts.
2. some new topics have been added.
3. Some complicated and Irrelevant topics have been deleted.

1. Dr. J. Rajendran, Asst. Prof, SBS, MKU 
2. Dr. M. Jayalakshmi, Asst. Prof. SBS, Madurai Kamaraj University 
3. Dr. N. SIVAKUMAR, Asst. Prof. SBS, MKU, Madurai 
4. T. Puzai Arand: ~~T. Puzai Arand~~
5. Dr. G. RAMANIHAR 
6. Mrs. M. NIRMALA 
7. Ms. J. MUGIL 
8. P. PUNITHARAJ 

: CERTIFICATE IN MEDICAL LABORATORY TECHNOLOGY

: B.VOC. FOOD SAFETY AND QUALITY MANAGEMENT PROGRAMME

BOARD OF STUDIES MEETING HELD ON 23.02.2019

MEMBERS PRESENT

University Nominee : Dr. M. MURUGAN,  
Assistant Professor,  
Department of Microbial Technology,  
MKU, Madurai.

Subject Expert : Dr. B. ASHOK KUMAR,  
Assistant Professor,  
Department of Genetic Engineering,  
School of Biotechnology,  
MKU, Madurai.

Alumnus : Dr. Rm. LAKSHMANAN,  
The Head, Department of Microbiology,  
Hajee Karutha Rowther Howdia College,  
Uthamapalayam.

Members : 1. Dr. A. Balasubramanian, Asst. Prof. & Head,  
2. Mr. P. Punitharaj, Asst. Prof.  
3. Ms. J. Mugil, "  
4. Dr. T. Shanmuga Praba, "  
5. Ms. E. Harisma Laska, "  
6. Dr. M. Suresh, "  
7. Mr. S. Palpperumal, "  
8. Dr. B. Govindarajan, "

## RESOLUTIONS:

The minutes of meeting for B.Sc. Second year and M.Sc. Second year syllabuses modification by Board of Studies held on 23.02.19. New syllabuses for Certificate in Medical Laboratory Technology and B.Voc. in Food safety and Quality Management Programme were introduced <sup>and passed.</sup> Following issues were discussed and resolved based on the suggestions given by subject experts during Board of Studies Meeting held on 23.02.2019 at 11.00 AM in the

### Department of Microbiology.

B.Sc.:

#### Allied Paper: 7 Plant Science

- \* Typographical corrections were made in objective.
- \* Typographical correction was made in unit I.
- \* Spelling mistakes were corrected in unit II.
- \* Space corrections were made in unit III.
- \* The word 'character' was changed to 'characteristics' in unit IV.

#### Core - 7: Microbial Biochemistry

- \* The chapter 'E.O. pathway' was included in unit II.
- \* The chapter 'vitamins - classification and its role' was added in unit III.
- \* The existed chapter 'waxes' was deleted from unit IV.

#### Allied Paper-II: Animal Physiology

- \* The title of the paper was changed to 'Animal science' from 'Animal physiology'.
- \* In unit I and II, the classification of animals was



defined upto class level and the word 'characters' was changed to 'characteristics'.

\* The chapter 'various steps in digestion' was deleted from the existing syllabus in unit IV

### Allied Paper-12: Lab in Biology

\* Typographical corrections were made in plant science experiments 1, 2 and 3.

\* The name 'Animal physiology' was changed to 'Animal science'.

### Core-6: Lab in Major Practical III

\* The new Industrial visit programme was included.

### M.Sc.:

### Core-11: Environmental and Agricultural Microbiology

\* spelling mistake was corrected in unit I

\* The new plant pathogen 'Agrobacterium' was included instead of 'Pseudomonas' in unit V.

### Core-12: Genetic Engineering

\* The word 'provide' was substituted instead of the word 'give' in objectives.

\* In unit III, the chapter 'Analyzing DNA' was deleted. Instead, the detailed study of "DNA sequencing - Sanger Maxam, Gilbert and Highthrough put techniques" was included.

\* Minor spelling error was corrected in unit IV. And also, the final chapter of this unit was realigned as "production and purification of recombinant proteins in prokaryotic cells".

### Core-14: Lab in Environmental, Agricultural Microbiology and Fermentation Technology

\* The spelling error was corrected in experiment No. 2

\* The new Industrial visit programme was included.

### Core-15: Lab in Genetic Engineering

\* The new experiment, 'RNA isolation from yeast' was introduced as experiment No: 3 in the previous series.

- \* The existing experiment No. 9, 'Multiplex PCR amplification demonstration' was deleted from the series of experiments.
- \* The new experiment, 'RT-PCR demonstration' was included as experiment No. 10

### Elective-2 : Bioinformatics

- \* Minor spelling correction was made in objectives.

### Core-16 : Research Methodology

- \* A new chapter 'plagiarism' was introduced in unit I.
- \* A new chapter 'FTIR Analysis' was included in unit II.
- \* In unit III, DNA sequencing detailed methods was deleted.
- \* A new chapter 'Biostatistics' was added in unit IV. And also, classification in ANOVA was included.
- \* Minor typographical correction was made in unit V.

### Elective-3 : Microbial Nanotechnology

- \* The existing chapters, "scanning electron microscopy and transmission electron microscopy" were deleted from unit I.
- \* The existing chapters, "Magnetic nanoparticle by bacteria: Mechanism of formation, application" were deleted from unit II.
- \* The existing chapters, "Genetic testing, imaging and nanoparticle probe" were deleted from unit III.

MEMBERS PRESENT :

Dr. M. MURUGAN  
Assistant Professor,  
Department of Microbial Technology,  
MKU, Madurai.

M. Murugan 23/2/19

Dr. B. Ashok Kumar,  
Assistant Professor,  
Department of Genetic Engineering,  
School of Biotechnology,  
MKU, Madurai.

B. Ashok Kumar 23/2/19

Dr. Rm. Lakshmanan,  
The Head, Department of Microbiology,  
Hajee Kanutha Rowther Howdia College,  
Uthamapalayam.

Rm. Lakshmanan 23/02/2019

Dr. A. Balasubramanian,  
Head & Associate Professor

A. Balasubramanian 23/2/19

Mr. P. Punitraj,  
Assistant Professor,

P. Punitraj 23/02/19

Ms. J. Mugil,  
Assistant Professor

J. Mugil 23/02/19

Dr. M. Suresh,  
Assistant Professor,

M. Suresh 23/02/19

Dr. T. Shanmuga Praba,  
Assistant Professor.

T. Shanmuga Praba

Ms. E. Harisma Laska,  
Assistant Professor.

E. Harisma Laska 23/2/19

Mr. S. Palpperumal,  
Assistant Professor,

S. Palpperumal 23/02/19

Dr. B. Govindarajan,  
Assistant Professor.

B. Govindarajan

Minutes of Meeting : B.Sc., MICROBIOLOGY (III Year)

Board of Studies meeting held on 29.02.2020

MEMBERS PRESENT

University Nominee : Dr. V. Shanmugaiah,  
Asst. Professor,  
Dept. of Microbial Technology  
SBS, MKU, Madurai

Subject Expert : Dr. S. Abirami,  
Asst. Professor,  
Dept. of Microbiology,  
Kamaraj college, Thoothukudi

: Dr. S. Radha,  
Asst. Professor,  
Dept. of Microbiology,  
SFR college, Sivakasi.

Alumnus

: Dr. N. Jeyakumar,  
Asst. Professor,  
Dept. of Microbiology  
Kamarajar Govt. Arts College,  
Surandai, Thirunelveli.

Industrial Representative

: Dr. R. Singaravel,  
Vice President,  
Technical operations  
Aquacare biological Pvt. Ltd,  
Virudhunagar.

Chairman

: Dr. A. Balasubramanian,  
Associate Professor & Head.

Members Present :

1. A.R. Vijaya Lalitha
2. Dr. B. Govindarajan,
3. Dr. V. Siva.

## Resolutions:

The Minutes of Meeting for B.Sc., III year syllabus modification by Board of Studies held on 29.02.2020. Following issues were discussed and resolved based on the suggestions given by subject experts during Board of Meeting held on 29.02.2020 at 11:30am in Department of Microbiology.

### Major Practical V:

In experiment-3, the title was changed as Maintenance of culture.

### Allied Paper: Introduction to Pharmacognosy.

Some of the titles were added in UNIT I, III and some of them are deleted.

The panel suggested to update the references.

### R-DNA technology:

Typographical & spelling errors were corrected in Unit I, III & IV.

### Food & Industrial Microbiology:

In UNIT I, B. cereus was deleted and added Aspergillus.

In UNIT II, some of the portions were short listed.

In UNIT-III, all the contents were added as Unit V and Unit V is changed as Unit III.

In Unit IV, some of the topics were included.

### Research Methodology & Bioinformatics.

In Unit I, grammatical errors were corrected.

In Unit III & II, some of topics were replaced & errors were corrected.

The heading is changed in Unit V.

### Major Practical VI

The name of enzymes were changed. In Experiment 5, demonstration was cancelled.

### Basic concept of Pharmacology:

Some of typographical & spelling errors were corrected.

### Allied Lab:

In experiment 1, spelling error was corrected.

In experiment 2, name of plant need to be mentioned.

In 6, 7, 8, 9, 10<sup>th</sup> experiment, it was simplified as screening of Phytochemical compounds was included.

### Dairy Technology:

Title of the unit was changed.

### Applied Microbiology:

Unit IV title was changed by the panel.

### Diploma in Health Inspector Course:

In Unit I, some of the topics were changed & in Unit III, some of the topics were deleted.

### Public Health & Administration:

Some of the topics were deleted in Unit IV & V.

### Food, Nutrition & Maternal, child Health:

In all the units most of the topics were deleted and a topic is added in Unit V.

### First Aid, services and Emergency care in Disaster Management:

In UNIT I, II, V, some of the topics were deleted and the Unit III was split as unit III & IV.

### Diploma in Biotechnology:

#### Microbial Biotechnology:

Some of the topics were deleted in all units from Unit I to V.

In Unit V, Primary & Secondary metabolites were added.

#### Nanobiotechnology:

In unit I, the panel suggested to change the order of the topics.

#### Advanced Animal & Plant Biotechnology:

made.

Unit II was deleted.

In Unit III, a topic was added and changed as Unit II.

In Unit IV, a title was changed.

In Unit V, the title was changed. The contents were split as Unit IV and V.

Fermentation technology:

The contents of Unit IV were suggested as Unit I.

Unit I was changed as Unit III.

Unit III was changed as Unit IV.

In Unit III, a topic was deleted.

The Panel suggested to change the course outcome for all the papers in the syllabus of III B.Sc., Microbiology, Diploma in Health Inspector Course, Diploma in Biotechnology course.

Also the University nominee suggested to add the Bloom taxonomy & SOP to all the papers in the syllabus of III B.Sc., Microbiology, Diploma in Health Inspector course & Diploma in Biotechnology courses.

The panel also suggested to add new reference and text books in all the subjects.

The panel suggested to prepare the new study material for the subjects like,

Human Anatomy & Physiology,

Environmental sanitation

Public Health Administration

Care in Disaster Management

First Aid Services

Food & Nutrition, Maternal & Child Health

Microbial Biotechnology.

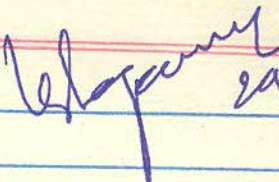
Nanobiotechnology

Advanced Animal & Plant Biotechnology.


Fermentation technology

Minor typographical errors & corrections were made by the Panel in the course outcome of the subjects in III B.Sc. Microbiology,

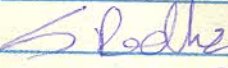
Diploma in Health Inspector course, Diploma in  
Biotechnology too.

  
29/2/2020


1. Dr. V. Shamugaiyah  
Asst. Professor,  
Dept. of Microbial technology,  
SBS, MKU, Madurai

  
29/2/2020

2. Dr. S. Abirami  
Asst. Professor,  
Dept. of Microbiology,  
Kamaraj College, Thoothukudi

  
29/2/2020

3. Dr. S. Radha  
Asst. Professor,  
Dept. of Microbiology,  
SFR College for Women, Sivakasi

  
29/2/2020

4. Dr. N. Jayakumar  
Asst. Professor,  
Dept. of Microbiology,  
Kamarajar Govt. Arts College, Thirunelveli.

  
29/2/20

5. Dr. R. Singaravel  
Vice President,  
Technical operations,  
Aquacare Biological Pvt. Ltd,  
Virudhunagar

6. Dr. A. Balasubramanian, Chairman,  
Associate Professor & Head, Dept. of Microbiology,  
VHNSN College, Virudhunagar.

  
29/2/2020


7. Dr. B. Govindarajam, Asst. Prof.  
Dept. of Microbiology.

BGR

8. Dr. V. Siva, Asst. Prof.  
Dept. of Microbiology.

  
29/2/2020

9. A.R. Vijaya Lalitha, Asst. Prof.  
Dept. of Microbiology.

  
29/2/2020





**BOARD OF STUDIES MEETING OF III UG Microbiology HELD ON 29.02.2020**

**MINUTES OF THE MEETING**

The Board of Studies Meeting of UG Microbiology was held today at 10.30a.m in the Department of Microbiology. After having a detailed discussion, the Board resolved the following:

1. Resolved to revise the syllabus of the courses for III Microbiology as follows:

**Semester V**

Subject Core / Elective / SBE / NME / SLS	Title of the Existing Course	Title of the Course after revision	Focus on Employability / Entrepreneurship / Skill Development	Revised / New / No Change / Interchanged If revised % of change
Core 9	Microbial Genetics and Molecular Biology	Microbial Genetics and Molecular Biology	Nil	No Change
Core 10	Environmental and Agricultural Microbiology	Environmental and Agricultural Microbiology	Nil	No Change
Core 11	Medical Microbiology	Medical Microbiology	Nil	No Change
Core12 Lab	Major Practical V LAB: Environmental, Agricultural and Medical Microbiology	Major Practical V LAB: Environmental, Agricultural and Medical Microbiology	Nil	Revised 25%
Allied 13	<b>Cell Biology</b>	Introduction to Pharmacognosy	Nil	New
Allied14 Lab	<b>Lab: Biology</b>	_____	Nil	New
SBE 3	Mushroom Technology	Mushroom Technology	Nil	No Change
SBE 4	Employability Skills	Employability Skills	Nil	No Change
NME 1	Introduction to Microbiology	Introduction to Microbiology	Nil	No Change



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Semester VI


Subject Core / Elective / SBE / NME / SLS	Title of the Existing Course	Title of the Course after revision	Focus on Employability / Entrepreneurship / Skill Development	Revised / New / No Change / Interchanged If revised % of change
Core 13	Recombinant DNA (rDNA) Technology	Recombinant DNA (rDNA) Technology	Nil	Revised 5%
Core 14	Food and Industrial Microbiology	Food and Industrial Microbiology	Nil	Revised 20%
Core 15	<b>Bioinformatics</b>	Research Methodology and Bioinformatics	Nil	New & Revised 90%
Core16 Lab	Major Practical VI LAB: Recombinant DNA Technology, Food and Industrial Microbiology	Major Practical VI LAB: Recombinant DNA Technology, Food and Industrial Microbiology	Nil	Revised 20%
Allied 15	<b>Applied Ecology</b>	Basic concept of Pharmacology	Nil	New
Allied16 Lab	<b>LAB: Biology</b>	Lab: Pharmacognosy and Pharmacology	Nil	New
SBE 5	<b>Microbial Nanotechnology</b>	Project - Viva & Voce	Nil	New
SBE 6	<b>Pharmaceutical Microbiology</b>			
NME 2	Applied Microbiology	Applied Microbiology	Nil	New

The detailed syllabus passed in the Board of Studies Meeting is given in Annexure – I.

- Resolved to include Project in the final semester and the maximum marks for the projects shall be 100. There shall be **both internal and external valuation in the ratio of 50:50**.
- Resolved to approve the panel of Examiners suggested by the members of the Board as given in Annexure – II.
- (Any other resolutions passed in the meeting) - Nil

1. Dr. A. Balasubramanian Members  
2. Dr. V. Shanmugaiah  
University Nominee

present

  
29/2/2020

Chairman

  
29/2/2020


3. Dr. S. Abirami  
Subject expert

  
29/2/2020

4. Dr. S. Radha  
Subject expert

  
29/2/20

5. Dr. N. Jeyakumar  
Alumnus

  
29/2/2020

6. Dr. R. Singaravel.  
Corporate sector



7. Mrs. A.R. Vijaya Lalitha  
Member

  
29/2/2020

8. Dr. B. Govindarajan  
Member



9. Dr. V. Siva  
member

  
29/2/2020



**BOARD OF STUDIES MEETING OF B.Sc., MICROBIOLOGY HELD ON 19.03.2022**

**MINUTES OF THE MEETING**

The Board of Studies Meeting of **B.Sc., MICROBIOLOGY** was held today at **10.30a.m.** in the Department of Microbiology. After having a detailed discussion, the Board resolved the following:

1. Resolved to revise the syllabus of the courses for I year **B.Sc., MICROBIOLOGY** as follows:

**Semester I**

Subject Core / Elective / SBE / NME / SLS	Title of the Existing Course	Title of the Course after revision	Focus on Employability / Entrepreneurship / Skill Development	Revised / New / No Change / Interchanged If revised % of change
Core 1	Fundamentals of Microbiology	General Microbiology	Skill Development	Revised 45%
Core 2 Lab	Lab: Major Practical – I Fundamentals of Microbiology	Lab: Major Practical – I -General Microbiology	Focus on Employability	Revised 20%
SEB1	Basic techniques in Microbiology	Basic techniques in Microbiology	Entrepreneurship	Revised 25%

**Semester II**

Subject Core / Elective / SBE / NME / SLS	Title of the Existing Course	Title of the Course after revision	Focus on Employability / Entrepreneurship / Skill Development	Revised / New / No Change / Interchanged If revised % of change
Core 3	Microbial Physiology	Microbial Physiology	Skill Development	Revised 20%
Core 4 Lab	Lab: Major Practical – II Microbial Physiology	Lab: Major Practical – II Microbial Physiology	Focus on Employability	Revised 30%
SEB2	Principles of Biochemical techniques	Biochemistry	Skill Development	Revised 50% (III Sem Core moved to II Sem)



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The detailed syllabus passed in the Board of Studies Meeting is given in Annexure - I.

2. Resolved to approve the panel of Examiners suggested by the members of the Board as given in Annexure - II.

3. (Any other resolutions passed in the meeting) Resolved to approve the skeleton structure of three year B.Sc, Microbiology program, which is attached herewith as Annexure III.

Name	Category	Signature
Dr.A.Balasubramanian	Chairman	
Dr.H.Shakila	University Nominee	
Dr.R.Ganesan	Subject Expert	
Dr.M.Manoharan	Subject Expert	
Dr.S.Venkatesan	Alumnus	
Dr.Carolin Sophia	Corporate Sector	
Mrs.A.R.Vijayalalitha	Member	
Dr.B.Govintharajan	Member	
Dr. V. Siva	Member	
Dr.S.Palpperumal	Member	

Dr. B. HARINATHAN Member 

D. Jayabalan Member 

Dr. P. SENTHIL KUMAR member 

**PANEL OF EXAMINERS SUGGESTED BY THE MEMBERS OF THE BOARD**

S. No	Name & Official Address
1.	Dr. G. MANIVANNAN Assistant Professor Department of Biotechnology American College Madurai – 625002 Mobile – 9443150903 dgmanivannan@gmail.com
2.	Mrs M.M.FATIMA MANSOORA Assistant Professor Department Microbiology VVV College for women Virudhunagar – 626 001 Mobile - 9894977297 Mansooracute@gmail.com
3.	Ms.M.VIJAYALAKSHMI Assistant Professor Department Microbiology VVV College for women Virudhunagar – 626 001 vijimicrobes@gmail.com
4.	Dr. T. Sivakumar Assistant Professor Department Microbiology Ayya Nadar Janaki Ammal College Sivakasi – 626 124 sivasadhana@yahoo.co.in 9443310246
5.	Dr. S. MAHENDRAN Assistant Professor Department Microbiology Ayya Nadar Janaki Ammal College Sivakasi – 626 124 mahi.ran682@gmail.com 9884570709



**BOARD OF STUDIES MEETING OF B.Sc., MICROBIOLOGY HELD ON 19.03.2022**

**MINUTES OF THE MEETING**

The Board of Studies Meeting of M.Sc., MICROBIOLOGY was held today at **10.30a.m.** in the Department of Microbiology. After having a detailed discussion, the Board resolved the following:

1. Resolved to revise the syllabus of the courses for I year M.Sc., MICROBIOLOGY as follows:

**Semester I**

Subject Core / Elective / SBE / NME / SLS	Title of the Existing Course	Title of the Course after revision	Focus on Employability / Entrepreneurship / Skill Development	Revised / New / No Change / Interchanged If revised % of change
Core 1	General Microbiology and Microbial Diversity	General Microbiology and Microbial Physiology	Skill Development	Revised 50%
Core 2	Biochemistry	Principles of Immunology	Skill Development	Revised 10% (Sem II Core move to Sem I)
Core 3	Microbial Physiology	Biochemistry	Skill Development	Revised 30%
Core 4 Lab	Lab: General Microbiology and Microbial Diversity	Lab: General Morphology and Microbial Physiology	Focus on Employability	Revised 10%
Core 5 Lab	Lab: Microbial Biochemistry and Physiology	Lab: Principles of Immunology & Biochemistry	Focus on Employability	Revised 20%
Elective 1	Food safety and quality management	Marine Microbiology	Entrepreneurship	New



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**Semester II**

<b>Subject Core / Elective / SBE / NME / SLS</b>	<b>Title of the Existing Course</b>	<b>Title of the Course after revision</b>	<b>Focus on Employability / Entrepreneurship / Skill Development</b>	<b>Revised / New / No Change / Interchanged If revised % of change</b>
Core 6	Immunology	Molecular Microbiology	<b>Skill Development</b>	<b>Revised 10%</b>
Core 7	Medical Microbiology	Clinical Bacteriology and Mycology	<b>Skill Development</b>	<b>Revised 70%</b>
Core 8	Molecular Biology and Microbial Genetics	Virology and Parasitology	<b>Skill Development</b>	<b>Revised 70%</b>
Core 9 Lab	Lab: Medical Microbiology and Immunology	Lab: Molecular Microbiology	<b>Focus on Employability</b>	<b>Revised 25%</b>
Core 10 Lab	Lab: Molecular Biology and Microbial Genetics	Lab: Medical Microbiology	<b>Focus on Employability</b>	<b>Revised 55%</b>
NME	Personal Health and Hygiene	Public Health Microbiology	<b>Entrepreneurship</b>	<b>New</b>





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The detailed syllabus passed in the Board of Studies Meeting is given in Annexure – I.

2. Resolved to approve the panel of Examiners suggested by the members of the Board as given in Annexure – II.

3. (Any other resolutions passed in the meeting) Resolved to approve the skeleton structure of two year M.Sc, Microbiology program, which is attached herewith as Annexure III.

Members Present:

Name	Category	Signature
Dr.A.Balasubramanian	Chairman	
Dr.H.Shakila	University Nominee	
Dr.R.Ganesan	Subject Expert	
Dr.M.Manoharan	Subject Expert	
Dr.S.Venkatesan	Alumnus	
Dr.Carolin Sophia	Corporate Sector	
Mrs.A.R.Vijayalalitha	Member	
Dr.B.Govintharajan	Member	
Dr. V. Siva	Member	
Dr.S.Palpperumal	Member	

Dr.B.HARINATHAN Member 

D. Jaya balan Member 

Dr.P.SENTHIL KUMAR. Member. 



**BOARD OF STUDIES MEETING OF B.Sc., MICROBIOLOGY HELD ON 19.03.2022**

**MINUTES OF THE MEETING**

The Board of Studies Meeting of UG/PG (any discipline) was held today at **10.30a.m.** in the Department of Microbiology. After having a detailed discussion, the Board resolved the following:

1. Resolved to revise the syllabus of the courses for **UG & PG (any discipline)** as follows:

S. No	Subject	Focus on Employability / Entrepreneurship / Skill Development
1.	<b>CELL SIGNALING AND COMMUNICATION</b>	Entrepreneurship
2.	<b>PETROLEUM MICROBIOLOGY</b>	Entrepreneurship



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The detailed syllabus passed in the Board of Studies Meeting is given in Annexure – I.

2. Resolved to approve the panel of Examiners suggested by the members of the Board as given in Annexure – II.

3. (Any other resolutions passed in the meeting) **NIL**

**Members Present:**

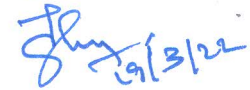
Name	Category	Signature
Dr.A.Balasubramanian	Chairman	 19/3/22
Dr.H.Shakila	University Nominee	
Dr.R.Ganesan	Subject Expert	
Dr.M.Manoharan	Subject Expert	
Dr.S.Venkatesan	Alumnus	 19/3/22
Dr.Carolin Sophia	Corporate Sector	 19/3/22
Mrs.A.R.Vijayalalitha	Member	 19/3/22
Dr.B.Govintharajan	Member	 19/3/22
Dr. V. Siva	Member	 19/3/22
Dr.S.Palpperumal	Member	

Dr. B. HARINATHAN Member

D. Jaya balan Member

Dr. P. SENTHIL KUMAR member



  
19/3/22





**BOARD OF STUDIES MEETING OF B.Sc., MICROBIOLOGY HELD ON 07/06/2023**

**MINUTES OF THE MEETING**

The Board of Studies Meeting of **B.Sc., Microbiology** was held today at **(10.30am)** in the Department of **Microbiology**. After having a detailed discussion, the Board resolved the following:

1. Resolved to revise the syllabus of the courses for I year **B.Sc., Microbiology** as follows:

**Semester I**

Subject Core / Elective / SBE / NME / SLS	Title of the Existing Course	Title of the Course after revision	Focus on			Revised / New / No Change / Interchanged If revised % of change	Course Contribution
			Employability	Entrepreneurship	Skill Development		Local/ National/ Global Level
CC-1	General Microbiology	Fundamentals of Microbiology and Microbial Diversity	✓			New	National
CC-2	Lab: General Microbiology	Practical I - Fundamentals of Microbiology and Microbial Diversity			✓	New	National
Elective-1	-	Basic and Clinical Biochemistry	✓			New	National
SEC-1 (NME)	-	Social and Preventive Medicine			✓	New	National
FC	-	Introduction to Microbiology			✓	New	National
AECC	-	Communication Skills for Employment – I			✓	New	Local



Semester II

Subject Allied/ Core / Elective / SBE / NME / SLS	Title of the Existing Course	Title of the Course after revision	Focus on			Revised / New / No Change / Interchanged If revised % of change	Course Contribution
			Employability	Entrepreneurship	Skill Development		Local/ National/ Global Level
CC-3	Microbial Physiology	Microbial Physiology and Metabolism	✓			New	National
CC-4	Lab: Microbial Physiology	Practical II - Microbial Physiology and Metabolism	✓			New	National
Elective- 2	Biochemistry	Bioinstrumentation			✓	New	National
SEC-2 (NME)	-	Nutrition & Health Hygiene			✓	New	Local
SEC-3	-	Sericulture			✓	New	Local
AECC-2	-	Communication Skills for Employment – II			✓	New	Local

The detailed syllabus passed in the Board of Studies Meeting is given in Annexure – I.

- Resolved to approve the draft syllabi for **I B.Sc., Microbiology** as per the syllabus designed by the Tamilnadu State Council of Higher Education (TNSCHE)
- Any other resolutions passed in the meeting - Nil



**MINUTES OF THE MEETING**

The Board of Studies Meeting of M.Sc., Microbiology was held today at **(10.30am)** in the Department of Microbiology. After having a detailed discussion, the Board resolved the following:

1. Resolved to revise the syllabus of the courses for I year M.Sc., Microbiology as follows:

**Semester I**

Subject Core / Elective / SBE / NME / SLS	Title of the Existing Course	Title of the Course after revision	Focus on			Revised / New / No Change / Interchanged If revised % of change	Course Contribution
			Employability	Entrepreneurship	Skill Development		Local/ National/ Global Level
Core I	General Microbiology and Microbial Physiology	General Microbiology and Microbial Diversity	✓			New	National
Core II	Principles of Immunology	Immunology, Immunomics and Microbial Genetics	✓			New	National
Core III	Lab: General Microbiology and Microbial Physiology	Practical-I	✓			New	National
Elective I	Marine Microbiology	Forensic Science/ Health Hygiene/ Microalgal Technology (Among the three choices anyone can be chosen by the student)			✓	New	National
Elective II	-	Bioinstrumentation/ Herbal Technology and Cosmetic Microbiology / Essentials of Laboratory Management and Biosafety			✓	New	National



		( Among the three choices anyone can be chosen by the student)					
Professional Competency Course	-	Entrepreneurship in Biobusiness		✓		New	Local
Ability Enhancement Compulsory Course Soft Skill – I	-	Tissue culture technology			✓	New	National

**Semester II**

Subject Allied/ Core / Elective / SBE / NME / SLS	Title of the Existing Course	Title of the Course after revision	Focus on			Revised / New / No Change / Interchanged If revised % of change	Course Contribution
			Employability	Entrepreneurship	Skill Development		Local/ National/ Global Level
Core IV	Molecular Microbiology	Medical Bacteriology and Mycology	✓			New	National
Core V	Clinical Bacteriology and Mycology	Medical Virology and Parasitology	✓			New	National
Core VI	Lab: Molecular Microbiology	Practical-II	✓			New	National
Elective III	-	Epidemiology/ Clinical Diagnostic Microbiology/ Bioremediation  (Among the three choices anyone can be chosen by the student)			✓	New	National
Elective IV	-	Bioinformatics/ Nanobiotechnology/ Clinical Research			✓	New	National



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		and Clinical Trials  (Among the three choices anyone can be chosen by the student)					
Skill Enhancement Course I	-	Vermitechnology		✓		New	Local
Ability Enhancement Compulsory Course - Soft Skill - II	-	Mushroom technology		✓		New	Local
Internship* / Industrial Activity	-					New	Local

The detailed syllabus passed in the Board of Studies Meeting is given in Annexure – I.

- Resolved to approve the draft syllabi for **I M. Sc., Microbiology** as per the syllabus designed by the Tamilnadu State Council of Higher Education (TNSCHE)
- Any other resolutions passed in the meeting - Nil

**Members Present:**

Name	Category	Signature
Dr. S. Palpperumal	Chairman	
Dr. R. Ganesan	Subject Expert	
Dr. M. Manoharan	Subject Expert	
Dr. Carolin Sophia	Corporate Sector	
Dr. V. Siva	Member	
Dr. B. Harinathan	Member	
Dr. A. Maniraj	Member	
Mrs. K. Muthulakshmi	Member	
Dr. C. Edward Raja	Member	





**BOARD OF STUDIES MEETING OF B.Sc., MICROBIOLOGY HELD ON 07/06/2023**

**MINUTES OF THE MEETING**

The Board of Studies Meeting of B.Sc., Microbiology was held today at **10.30am** in the Department of Microbiology. After having a detailed discussion, the Board resolved the following:

1. Resolved to revise the syllabus of the courses for II year B.Sc., Microbiology as follows:

**Semester III**

Subject Core / Elective / SBE / NME / SLS	Title of the Existing Course	Title of the Course after revision	Focus on			Revised / New / No Change / Interchanged If revised % of change	Course Contribution  Local/ National/ Global Level
			Employability	Entrepreneurship	Skill Development		
Core 5	Immunology	Immunology			✓	25%	National
Core 6 Lab	Major Practical – III	Lab in Immunology	✓			50%	National
Allied 7	Biology – Plant Science	Biology – Plant Science		✓		10%	Local
Allied 8 Lab	Biology	Lab: Biology	✓			10%	Local

**Semester IV**

Subject Allied/ Core / Elective / SBE / NME / SLS	Title of the Existing Course	Title of the Course after revision	Focus on			Revised / New / No Change / Interchanged If revised % of change	Course Contribution  Local/ National/ Global Level
			Employability	Entrepreneurship	Skill Development		
Core 7	Microbial Biochemistry	Microbial Genetics and Molecular biology			✓	10% (Moved from V <sup>th</sup> Sem)	National



Core 8 Lab	Lab: Major Practical IV	Lab: Microbial Genetics and Molecular biology	✓			20%	National
Allied 10	Biology- Animal Science	Biology- Animal Science			✓	10%	Local
Allied 11 Lab	Lab: Biology	Lab: Biology	✓			10%	Local

The detailed syllabus passed in the Board of Studies Meeting is given in Annexure – I.

2. Resolved to approve the draft syllabi for **II B.Sc., Microbiology** with the following changes:

Course	Unit No.	Changes
<b>SEM III</b>		
<b>Immunology</b>	1	<ul style="list-style-type: none"> <li>• Haemotopoiesis and regulation was added.</li> <li>• Cells and organs of the immune system was spilt into types immune cells and primary &amp; secondary lymphoid organs</li> <li>• Humoral and cell mediated immunity was removed</li> </ul>
	2	<ul style="list-style-type: none"> <li>• Classes of antigens was modified as antigen and its types</li> <li>• Topics Adjuvants – B and T cell epitopes were added</li> </ul>
	3	<ul style="list-style-type: none"> <li>• Topics Antigen antibody interactions was shifted from unit 5 to unit 2</li> <li>• Antigen presenting cells activation and differentiation B and T cells – T cells subtypes were added.</li> </ul>
	4	<ul style="list-style-type: none"> <li>• Topic complement system was shifted from unit 2 to unit 4</li> <li>• The topic organ specific autoimmune disease was removed.</li> <li>• Immune deficiency and its disorder (AIDS) was added.</li> </ul>
	5	<ul style="list-style-type: none"> <li>• Monoclonal antibody production (Hybridoma technology) – Vaccines and their properties types- Immunization Schedule was added.</li> </ul>
<b>Lab in Immunology</b>		<ul style="list-style-type: none"> <li>• Widal tube test, Rocket immunoelectrophoresis was added.</li> <li>• Separation of serum and plasma from blood</li> </ul>



		sample was removed.
Biology – Plant Science	1	<ul style="list-style-type: none"> <li>Herbarium techniques and ICBN principles &amp; rules were included.</li> </ul>
Microbial Genetics and Molecular biology (Moved from V <sup>th</sup> Sem)	1	<ul style="list-style-type: none"> <li>Topic Genetic recombination in Bacteria: Transformation, Conjugation and Transduction moved from unit 1 to 5</li> </ul>
	2	<ul style="list-style-type: none"> <li>Unit 2 was changed 4.</li> <li>Suppressor mutation and Frameshift mutation was removed.</li> <li>Topics Central Dogma – DNA Replication – Semi conservative Replication of DNA &amp; Rolling circle, Enzymes involved in DNA Replication was moved from Unit 3 to 2</li> <li>Some topics Unit 4 was added unit 2</li> </ul>
	3	<ul style="list-style-type: none"> <li>Remain topics unit 4 was added unit 3</li> <li>Additional the topics such as Transposable elements – Types of Bacterial Transposons – Composite transposons &amp; Tn3 transposons; Transposition were added</li> </ul>
	4	<ul style="list-style-type: none"> <li>Unit 4 was replaced with unit 2</li> </ul>
	5	<ul style="list-style-type: none"> <li>Gene transfer mechanisms were added.</li> </ul>
Lab: Microbial Genetics and Molecular biology		<ul style="list-style-type: none"> <li>11 experiments were newly added</li> </ul>
Biology-Animal Science	1	<ul style="list-style-type: none"> <li>In unit 1 instead of family names a specific sample from each family was given</li> </ul>
	2	<ul style="list-style-type: none"> <li>In unit 2 instead of family names a specific sample from each family was given</li> </ul>
Lab: Biology		<ul style="list-style-type: none"> <li>Vegetative structure and reproductive structure in <i>Sargassum</i>, <i>Yeast</i>, <i>Funaria</i>, <i>Selaginella</i> were removed</li> <li>Preparation of Herbarium (10 plants) and Undergo field study to acquaint with the flora of Hills was newly added</li> </ul>

3. Resolved to approve the panel of Examiners suggested by the members of the Board as given in Annexure – II.

4. Any other resolutions passed in the meeting - Nil



**MINUTES OF THE MEETING**

The Board of Studies Meeting of **M.Sc., MICROBIOLOGY** was held today at **(10.30 am)** in the Department of **Microbiology**. After having a detailed discussion, the Board resolved the following:

1. Resolved to revise the syllabus of the courses for II year **M.Sc., Microbiology** as follows:

**Semester III**

Subject Core / Elective / SBE / NME / SLS	Title of the Existing Course	Title of the Course after revision	Focus on			Revised / New / No Change / Interchanged If revised % of change	Course Contribution
			Employability	Entrepreneurship	Skill Development		Local/ National/ Global Level
Core 11	Environmental and Agricultural Microbiology	Food & Industrial Microbiology			✓	30%	National
Core 12	Genetic Engineering	Environmental & Agricultural Microbiology			✓	30%	National
Core 13 Lab	Fermentation Technology	Lab: Food & Industrial Microbiology	✓			50%	National
Core 14 Lab	LAB: Environmental, Agricultural Microbiology and Fermentation Technology	Lab: Environmental & Agricultural Microbiology	✓			50%	Local
Core 15	LAB: Genetic Engineering	Research Methodology and Bioinformatics			✓	30%	National
Elective 2	Bioinformatics	Microbial Omics			✓	New	National



**Semester IV**

Subject Allied/ Core / Elective / SBE / NME / SLS	Title of the Existing Course	Title of the Course after revision	Focus on			Revised / New / No Change / Interchanged If revised % of change	Course Contribution Local/ National/ Global Level
			Employability	Entrepreneurship	Skill Development		
Core 16	Research Methodology	Fermentation Technology				30%	National
Elective 3	Microbial Nanotechnology	Microbial Quality Control in Food and Pharmaceutical Industries		✓		New	National
Core 17	Project & Viva-voce	Project/Internship	✓			50%	Local

The detailed syllabus passed in the Board of Studies Meeting is given in Annexure – I.

2. Resolved to approve the draft syllabi for **II M.Sc., Microbiology** with the following changes:

Course	Unit No.	Changes
<b>SEM III</b>		
Food & Industrial Microbiology	-	In core 11 Food & Industrial Microbiology was newly added
Environmental & Agricultural Microbiology	2	Air borne and Water borne diseases were removed
Lab: Food & Industrial Microbiology	-	9 new experiments were newly included
Lab: Environmental & Agricultural Microbiology	-	Nil
Research Methodology and Bioinformatics	-	Newly added In Core 15 unit 1,2,3 contains topics of Research methodology, unit 4,5 contains topics of



		Bioinformatics
Microbial Omics		Bioinformatics was replaced with microbial Omics
<b>SEM IV</b>		
Fermentation Technology	-	Research methodology was replaced with fermentation technology
Microbial Quality Control in Food and Pharmaceutical Industries	-	Microbial nanotechnology was replaced with Microbial Quality Control in Food and Pharmaceutical Industries
Project/Internship	-	Internship was newly added along with project

- Resolved to approve the panel of Examiners suggested by the members of the Board as given in Annexure – II.
- Any other resolutions passed in the meeting - The revised new skeleton given in serial number 1 was approved.

**Members Present:**

Name	Category	Signature
Dr. S. Palpperumal	Chairman	
Dr. R. Ganesan	Subject Expert	
Dr. M. Manoharan	Subject Expert	
Dr. Carolin Sophia	Corporate Sector	
Dr. V. Siva	Member	
Dr. B. Harinathan	Member	
Dr. A. Maniraj	Member	
Mrs. K. Muthulakshmi	Member	
Dr. C. Edward Raja	Member	



BOARD OF STUDIES MEETING OF MICROBIOLOGY HELD ON 07/06/2023

MINUTES OF THE MEETING

The Board of Studies Meeting of Microbiology was held today at (10.30am) in the Department of Microbiology. After having a detailed discussion, the Board resolved the following:

- Resolved to revise the syllabus of the **Value added courses** (any life science discipline) for as follows:

Title of the Course	Focus on			Revised / New / No Change / Interchanged If revised % of change	Course Contribution  Local/ National/ Global Level
	Employability	Entrepreneurship	Skill Development		
<b>Cultivation of Spirulina</b>		✓		NEW	Local
<b>Cultivation of Azolla</b>		✓		NEW	Local

The detailed syllabus passed in the Board of Studies Meeting is given in Annexure – I.

- Resolved to approve the draft syllabi for **Value added Course**

- Any other resolutions passed in the meeting - Nil

**Members Present:**

Name	Category	Signature
Dr. S. Palpperumal	Chairman	
Dr. R. Ganesan	Subject Expert	
Dr. M. Manoharan	Subject Expert	
Dr. Carolin Sophia	Corporate Sector	
Dr. V. Siva	Member	
Dr. B. Harinathan	Member	
Dr. A. Maniraj	Member	
Mrs. K. Muthulakshmi	Member	
Dr. C. Edward Raja	Member	



**BOARD OF STUDIES MEETING OF B.Sc., MICROBIOLOGY HELD ON 30.10.2023  
MINUTES OF THE MEETING**

The Board of Studies Meeting of B.Sc., Microbiology was held today at **(10.30am)** in the Department of Microbiology. After having a detailed discussion, the Board resolved the following:

- Resolved to revise the syllabus of the courses for I year II Semester B.Sc., Microbiology as follows:

**Semester II**

Subject Allied/ Core / Elective / SBE / NME / SLS	Title of the Existing Course	Title of the Course after revision	Focus on			Revised / New / No Change / Interchanged If revised % of change	Course Contribution
			Employability	Entrepreneurship	Skill Development		Local/ National/ Global Level
Core 3	Microbial Physiology	Microbial Physiology and metabolism	✓			Revised 10%	National
Core 4 Lab	Microbial Physiology	Lab: Microbial Physiology and metabolism			✓	Revised 10%	National
Elective 2	General chemistry	Bioinstrumentation			✓	New	National
Elective 3 Lab	Lab: Volumetric Analysis	Lab: Bioinstrumentation & Basic and clinical Biochemistry			✓	New	Local
NME 2	Applied microbiology	Essentials of applied microbiology			✓	No change	Local

The detailed syllabus passed in the Board of Studies Meeting is given in Annexure – I.

- Resolved to approve the draft syllabi for B.Sc., Microbiology with the following changes:

Course	Unit No.	Changes
Microbial Physiology and metabolism	1	<ul style="list-style-type: none"> <li>Culture Media was removed.</li> </ul>
	2	<ul style="list-style-type: none"> <li>Physiology of microbial growth: Batch, continuous, synchronous cultures and Control of</li> </ul>





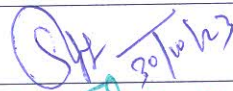



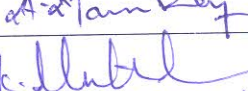
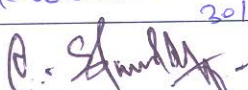
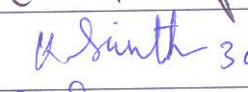


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		microbial growth were added. • Measurement of microbial growth was removed
Lab: Microbial Physiology and metabolism		• TSI, Urease test and anaerobic culture method were added.

3. Any other resolutions passed in the meeting - Nil

**Members Present:**

Name	Category	Signature
Dr. S. Palpperumal	Chairman	 30/10/23
Dr. R. Ganesan	Subject Expert	 30/10/23
Dr. V. Siva	Member	 30/10/23
Dr. P. Senthil Kumar	Member	 30/10/23
Dr. A. Maniraj	Member	 30/10/23
Mrs. K. Muthu Lakshmi	Member	 30/10/23
Dr. C. Edward Raja	Member	 30/10/23
Dr. K. Susithra	Member	 30/10/23
Mrs. R. Renuga Devi	Member	 30/10/23



**BOARD OF STUDIES MEETING OF M.Sc., MICROBIOLOGY HELD ON 30.10.2023**  
**MINUTES OF THE MEETING**

The Board of Studies Meeting of M.Sc., Microbiology was held today at **(10.30am)** in the Department of Microbiology. After having a detailed discussion, the Board resolved the following:

- Resolved to revise the syllabus of the courses for I year II Semester M.Sc., Microbiology as follows:

**Semester II**

Subject Allied/ Core / Elective / SBE / NME / SLS	Title of the Existing Course	Title of the Course after revision	Focus on			Revised / New / No Change / Interchanged If revised % of change	Course Contribution
			Employability	Entrepreneurship	Skill Development		Local/ National/ Global Level
Core IV	Clinical Bacteriology and Mycology	Medical Bacteriology & Mycology	✓			10%	National
Core V	Virology and Parasitology	Medical Virology and Parasitology	✓			10%	National
Core VI	Molecular Microbiology	Microbial Biochemistry	✓			Interchanged (Moved from 1 <sup>st</sup> semester)	Local
Core VII	Medical Microbiology	Lab: Medical Bacteriology, Mycology, Virology and Parasitology			✓	10%	National
Core VIII	Biochemistry	Lab: Microbial Biochemistry			✓	Interchanged (Moved from 1 <sup>st</sup> semester)	Local
NME 2	Public Health Microbiology	Public Health in Microbiology			✓	No change	Local

The detailed syllabus passed in the Board of Studies Meeting is given in Annexure – I.



2. Resolved to approve the draft syllabi for M.Sc., Microbiology with the following changes:

Course	Unit No.	Changes
Medical Bacteriology & Mycology	3	<ul style="list-style-type: none"><li>• <i>Treponema pallidum</i> was added.</li></ul>
	5	<ul style="list-style-type: none"><li>• <i>Coccidioides</i>, <i>Sporothrix</i>, <i>Blastomyces</i> were added.</li><li>• An antiviral drug was removed.</li></ul>
Medical Virology and Parasitology	1	<ul style="list-style-type: none"><li>• Cultivation of viruses – embryonated eggs was added.</li></ul>
	2	<ul style="list-style-type: none"><li>• Unit 2 split into Unit 2 &amp; 3</li><li>• Additionally, Dengue virus (DENV) was added.</li></ul>
	5	<ul style="list-style-type: none"><li>• An anti-protozoan drug was added.</li></ul>
Lab: Medical Bacteriology, Mycology, Virology and Parasitology		<ul style="list-style-type: none"><li>• Throat swab and Nasal swab were newly added.</li><li>• Examination of parasites in clinical specimens - Ova/cysts in faeces was added</li></ul>

3. Any other resolutions passed in the meeting - Nil

**Members Present:**

Name	Category	Signature
Dr. S. Palpperumal	Chairman	
Dr. R. Ganesan	Subject Expert	
Dr. V. Siva	Member	
Dr. P. Senthil Kumar	Member	
Dr. A. Maniraj	Member	
Mrs. K. Muthu Lakshmi	Member	
Dr. C. Edward Raja	Member	
Dr. K. Susithra	Member	
Mrs. R. Renuga Devi	Member	