

**Ramnarain Ruia Autonomous College**  
**Department of Microbiology**  
**Board Members for Subject Board Meeting**  
**22<sup>nd</sup> February 2018**

Sr. No.	Board Designation	Name of the Board Member	Signature
1	Head of the Department	Dr. Anushree Lokur	<i>Anushree Lokur</i>
2	Head of the University Department	Dr. Padma Deshmukh	<i>Padma Deshmukh</i>
3	Senior Teacher	Dr. Varsha Shukla	<i>N.S. Shukla</i>
4	Senior Teacher	Mr. Vidyadhar Tupe	<i>V Tupe</i>
5	Subject Expert	Dr. Nagesh Malik	—
6	Subject Expert	Ms. Durga Pawar	<i>Durga Pawar</i>
7	Subject Expert	Dr. Nishigandha Naik	<i>N Naik</i> 22-2-18
8	Professional Expert	Dr. Annamma Anil	<i>Annamma Anil</i>
9	Professional Expert	Dr. Archana Krishnan	<i>Archana Krishnan</i>
10	MSc Part II Student	Mr. Shubham Katke	<i>Shubham Katke</i>
11	TYBSc Student	Mr. Isha Desai	<i>Isha Desai</i>



# **Agenda for Subject board meeting**

**22<sup>nd</sup> February 2018**

**Department of Microbiology**

**Ramnarain Ruia Autonomous College**

1. To read and confirm minutes of first Subject Board meeting held on 28<sup>th</sup> July, 2017
2. To induct two new members to the subject board due to superannuation of two members from the current subject board
3. To approve syllabi for FYBSc, SYBSc, TYBSc, MSc Part I & II in the subject of Microbiology for the academic year 2018-19
4. To prepare panel of Examiners for conducting TYBSc, MSc Part I & II Theory & Practical examination & suggest the same to the examination Committee
5. To discuss modalities of assessment for FYBSc, SYBSc, TYBSc, MSc Part I & II for internal as well as term end examination
6. To consider internal component for practical examination from academic year 2018-19
7. To approve theory and practical question papers of Semester I, III, V and M.Sc. Semester I and III
8. Any other matter with the permission of the chair

## Minutes of the Subject Board Meeting for Microbiology

22ndFebruary, 2018

The first subject board meeting for Microbiology under autonomy was conducted in the department of Microbiology, Ramnarain Ruia Autonomous College on **Friday, 22ndFebruary, 2018 at 2.00 pm.**

The meeting was attended by:

Sr. No.	Board Designation	Name of the Board Member
1	Head of the Department	Dr. AnushreeLokur
2	Head of the University Department	Dr. Padma Deshmukh
3	Senior Teacher	Dr. Varsha Shukla
4	Senior Teacher	Mr. VidyadharTupe
5	Subject Expert	Prof. Durga Pawar
6	Professional Expert	Dr. Annamma Anil
7	Professional Expert	Dr. Archana Krishnan
8	MSc Part II Student	Mr. Shubham Katke
9	TYBSc Student	Mr. Isha Desai

Dr. Nagesh Malik was unable to attend the meeting and was granted leave of absence.

The meeting began with the members of the board introducing themselves.

Dr. AnushreeLokurbriefed about the agenda of the meet. She also briefed the attendees about the objectives of the syllabi, and the desired outcomes.

Following are the minutes of the meeting and resolutions passed therein as per the agenda of the meeting:

**9. To Prepare & approve syllabi for FYBSc, SYBSc, TYBSc, TYBSc (Applied Component) andMSc Part I & II in the subject of Microbiology for the academic year 2018-19**

All the members were given a hard copy of the draft of the syllabi for FY, SY and TYBSc with suggested changes/ modifications that were prepared by the department members and were also mailed to all the members prior to the meeting.

a. The discussion began with reviewing the **FYBSc Syllabus.**

In Paper RUSMB101,Dr. Annamasuggested deletion of subtopic on vitaminsto ensure more elaboration on other major macromolecules.

Ms. Pawar suggested removal of Cryo Electron Microscopy as it would increase complexity at FYBSc level.

Dr. Deshmukh suggested deletion of practical on Lichen symbiosis as it was repeated in SYBSc.

Ms. Pawar suggested that in paper 201 virology section should focus on diversity of life forms and not just on virology. She suggested that instead of general structure of viruses, structure of representative plant, animal and bacterial viruses should be taught and detailed life cycle of viruses can be omitted as it is covered at TY level.

- b. After this **SYBSc Syllabus** was reviewed by the committee. Dr. Anushree briefed the board members about the changes made in the syllabi.

Dr. Deshmukh suggested swapping of paper numbers 301 and 303 to bring in more coherence in topic distribution for both semesters.

Dr Varsha Shukla suggested that in paper 302, Poisson distribution should be included in the syllabus.

Dr. Durga suggested that, 'Buried slide technique to study soil flora' can be included in the practicals of paper 303 with the aim of bringing about more clear understanding on soil flora diversity.

In paper 303 Dr. Annamma suggested inclusion of 'BOD of untreated and treated sewage and Mapping of soil flora- building phylogenetic trees'.

In paper 401 unit 1, Dr. Varsha suggested inclusion of all microbial plant pathogens instead of *Agrobacterium* alone.

In paper 403 Mr. Tupes suggested inclusion of Apsesis and HACCP under Food Microbiology.

Dr. Archana said that 'Isolation of *Xanthomonas* from spoilt citrus fruit' can be added under practical for paper 401.

Dr. Durga suggested that FSSAI standards should be used in for determination of 'Microbial load of Cheese and Butter' in practical for paper 403.

- c. Dr. Anushreethen explained to the members the proposed changes in **TYBSc Syllabus** under the second year of autonomous status. She brought to the notice of the members the changes done like combining of all Medical Microbiology topics together as paper 504 and Immunology topics as paper 604. And also restructuring of Paper RUSMB604 to include all types of Industrial fermentations.

In paper 502 Dr. Padma suggested that 'Processing and collection of medical samples' should be incorporated in the theory as well as practical syllabus.

Dr Anamma said that Regulations for effluent treatment and modern methods for effluent treatment should be incorporated in Paper 504.

She also suggested that 'Demonstration of HPLC for alcohol estimation' can be incorporated in the syllabus of paper 504 as a demonstration experiment.

In paper 604, under the subtopic of Microbiological assays, Ms. Durga suggested to add comparison of chemical and biological assays. Dr. Archana then suggested inclusion of modern methods for assay of fermentation products.

- d. The **TYBSc Applied Component Biotechnology Syllabus** was then discussed. Dr. Varsha briefed the members of the interchanging of some units from Sem VI to sem V and visa versa as they were relevant to the title of the respective papers. She also said that they had added more practicals like PCR, Expression of cloned genes to familiarize students to modern methods of gene amplification and to techniques in R-DNA technology. To induce students towards project-based learning practicals like wine making, manufacturing yoghurt, making of SCP and enrichment of bacteria for bioremediation were added.
- e. Dr. Anushree then explained that the 2017-18 **M.Sc syllabus** was not modified much and it was decided in the last meeting that the curricula would be revised step wise. Changes were made in the **MSc part I syllabus** this year to include a 6 months internship in semester IV for the batch of 2018-2020. Papers on Medical Microbiology and Immunology were replaced with papers on Research Methodology (paper 104) and Bioinstrumentation (paper 204) in semester I and II. This was done with the view of orientating students to research before they go for an internship. The **M.Sc part II syllabus** was not changed and changes would be made in 2019-20.

All the suggestions made by the members were incorporated in the respective syllabi.

**RESOLVED that: the syllabi for FYBSC, SYBSc, TYBSc, TYBSc (Applied Component) and M.Sc (Part 1), M.sc (Part II) 2018-19 are finalized and approved unanimously after incorporation of the suggestions made by the committee members.**

**10. To approve modality of assessment for FYBSc, SYBSc, TYBSc, TYBSc (Applied Component) and MSc Part I & II in the subject of Microbiology for the academic year 2018-19**

Dr. Anushree Lokur then suggested the following modality for the Theory and Practical Examination Pattern:

**A) Internal Assessment - 40% 40 marks.**

**Theory:**

Sr No	Evaluation type	Marks
1	One Assignment/Case study/Project	10
2	One class Test (multiple choice questions / objective)	20
3	Active participation in routine class instructional deliveries (case studies/ seminars//presentation)	05
4	Overall conduct as a responsible student, manners, skill in articulation, leadership qualities demonstrated through organizing co-curricular activities, etc.	05

**B) External examination - 60 %Semester End Theory Assessment - 60%  
60 marks**

Duration - These examinations shall be of two hours duration.

Theory question paper pattern: - There shall be four questions each of 15 marks, one on each unit. All questions shall be compulsory with internal choice within the questions.

**Practical Examination Pattern:**

**(A)Internal Examination: -**

	Paper I	Paper II	Paper III	Paper IV
Journal	05	05	05	05
Tests	10	10	10	10
Participation	05	05	05	05
Total	20	20	20	20

**(B) External (Semester end practical examination):- 30 Marks Per Section**

Sr.No.	Particulars	Marks	Total
1.	Laboratory work	50 + 50	= 100
2.	Viva	10 +10	= 20

**Proposed pattern for PG Internals of each paper under Autonomy (40Mks):**

<b>Presentation/ Assignment</b>	<b>Test</b>	<b>Attendance</b>	<b>Class Participation</b>	<b>Total</b>
10Mks	20Mks	5Mks	5Mks	40Mks

The test would be conducted mid-term on the basis of the theory portion completed and will have critical thinking/ analytical questions to enhance the thinking ability and enhance the research aptitude of the students.

**RESOLVED that: The examination pattern for Internal evaluation for FYBSC, SYBSc, TYBSc, TYBSc (Applied Component) and M.Sc (Part 1), M.sc (part 2) are finalized and approved.**

**11. To prepare panel of Examiners for conducting TYBSc, MSc Part I & II Theory & Practical examination & suggest the same to the examination Committee**

Dr. Padma Deshmukh suggested that since the University already had a panel of examiners and moderators, Ruia College under the autonomous status should invite any of these teachers as external examiners for both Practical as well as Theory examinations. It was also suggested that teachers conducting lectures and practicals for respective courses in other autonomous colleges could also be invited.

**RESOLVED that: Finalized and approved that: The College can invite examiners approved by the University / other Autonomous Colleges as external examiners for the Theory and Practical component under the Semester end summative assessment for TYBSc, M.Sc (Part 1), M.sc (part 2).**

**12. Any other matter with the permission of the chair**

As there was no other matter proposed for discussion by the members, the meeting concluded with Dr. Anushreeproposing a vote of thanks to all the committee members.