

DWARAKA DOSS GOVERDHAN DOSS VAISHNAV COLLEGE

(Autonomous)

College with Potential for Excellence, Linguistic Minority Institution

Affiliated to University of Madras

Arumbakkam, Chennai – 600 106

PG DEPARTMENT OF BIOTECHNOLOGY

Board of Studies - Academic Year (2022-2023)

Minutes of Meeting

The Department of Biotechnology has conducted the Board of Studies meeting for the Academic year 2022 - 2023 on 02.05.2022 from 11.00 am hours in a blended mode.

Online meeting link: meet.google.com/czp-imem-cbx

The meeting constituted the following members:

Sl. No	Name and Details of the BOS Members	
1.	Dr.M.D.BalaKumaran, Assistant Professor and Head (i/c),	Chairman
2.	Dr. K. Uma Maheswari, Associate Professor, Department of Biotechnology, University of Madras, Chennai - 600 025, Mobile: 9940326510; Email id: rk_uma@yahoo.com	Vice Chancellor Nominee
3.	Dr. A. Vijaya Anand, Professor, Department of Human Genetics and Molecular Biology, Bharathiar University, Coimbatore -46. Mobile: 9842525830; Email id: avahgmb@buc.edu.in	Subject expert 1
4.	Dr. Mohanasrinivasan, Associate Professor & PAT Coordinator, M.Sc. Programs, Department of Biomedical Sciences, School of Biosciences and Technology, VIT University, Vellore, Mobile: 9952185510, 9486802902; Email id: v.mohan@vit.ac.in	Subject expert 2
5.	Mr. J. Sridhar, CEO, Indian Healthcare BPO, Prince Info City II, OMR, Kandanchavadi, Chennai - 600096, Mobile: 7200035525;	Industrial expert

DWARAKA DOSS GOVERDHAN DOSS VAISHNAV COLLEGE

(Autonomous)

College with Potential for Excellence, Linguistic Minority Institution

Affiliated to University of Madras

Arumbakkam, Chennai – 600 106

	Email id: careers@indianhealthcarebpo.com; ceo@indianhealthcarebpo.com	
6.	Dr. Lakshmi Subramanian, Research Investigator, Syngene International Limited, Bangalore, Karnataka 560099, Mobile: 09884108927, Email id: lakshmi1386@gmail.com	Meritorious Alumnus Nominated by the Principal
7.	Dr. P. Indumathi, Assistant Professor	Internal Members
8.	Dr. M. RM. Sivasankaran, Assistant Professor	
9.	Dr. P. Amali, Assistant Professor	
10.	Dr. A. Sivaranjani, Assistant Professor	
11.	Ms. S. Uma, Assistant Professor	
12.	Dr. R. Ashwini, Assistant Professor	
13.	Dr. M. Pavithra, Assistant Professor	
14.	Ms. K. Nithya, Guest Lecturer	
15.	Ms. Kiran Sharma B, Guest Lecturer	
16.	Ms. G. Shoba, Guest Lecturer	

- The Chairman, Dr. M.D. BalaKumaran greeted the members with a formal welcome note and in his introductory remarks, he presented the agenda of the meeting.
- He also informed about the NAAC Visit to DDGDVC, with a glimpse of the contributions from the Biotechnology Department towards the same.
- This was followed by a general discussion on the development of UG and PG curriculum based on NAAC guidelines and panel members appreciated the overall curriculum.

Confirmation of the Minutes of the meeting of Board of studies in the Department of Biotechnology held on 13.05.2021 at Department of Biotechnology, Dwaraka Doss Goverdhan Doss Vaishnav College Vaishnav College.

DWARAKA DOSS GOVERDHAN DOSS VAISHNAV COLLEGE

(Autonomous)

College with Potential for Excellence, Linguistic Minority Institution

Affiliated to University of Madras

Arumbakkam, Chennai – 600 106

The meeting adopts the following resolutions:

B.Sc. Biotechnology

Agenda 1: Review of the syllabus for all the courses in UG stream of Biotechnology, with no revision for the academic year 2022-2023.

In view of the complete revision of the syllabus to all the courses in UG and PG streams of Biotechnology that was made in the academic year 2020-2021, the BOS members suggested no revision for the academic year 2022-2023 for all the courses in UG stream of Biotechnology.

Decision: The BOS members approved the syllabus with no revision for the academic year 2022-2023 for all the courses in UG stream of Biotechnology. However, suggestions were put forward for the revision and upgrade of syllabus in the forthcoming academic year 2023-2024.

Agenda 2: Panel of Examiners for Question paper Setting/Practical /Viva-voce Examination.

A list of the Examiners for Question paper setting and also for practical exams were prepared to ensure that the OBE pattern system is emphasized and followed in the ESE examination.

Decision: The list of Examiners was presented before the BOS forum and the members approved the same. In reference to ESE practical's, the choice or selection of spotters to be advised by the External Examiner was suggested.

Agenda 3: Inclusion of Interdisciplinary elective course in final year.

The Department of biotechnology offers an Interdisciplinary Elective Course: Public Health and Hygiene to final year students in the 6th semester based on the revised curriculum in 2020-2021, to enhance and to train their mind towards development of multi-disciplinary competency.

The department of biochemistry offers following Interdisciplinary Elective Course: Therapeutic nutrition and First Aid to final year students in the 6th semester.

Decision: The BOS members approved and continue with the above Interdisciplinary elective course offered to other Departments and also by the other department.

DWARAKA DOSS GOVERDHAN DOSS VAISHNAV COLLEGE

(Autonomous)

College with Potential for Excellence, Linguistic Minority Institution

Affiliated to University of Madras

Arumbakkam, Chennai – 600 106

Agenda 4: Elective courses with one to choose among three options

In order to identify their potential towards either skill based, employability or entrepreneur development, the syllabus revised in 2020 have included a choice of 3 options to choose in each elective courses in the 5th and 6th semesters, for the students in UG stream, to identify and advance themselves towards their professional career.

Fifth Semester:

Elective paper: 1A Marine Biotechnology

Elective paper: 1B Agricultural Biotechnology

Elective paper: 1C Basics of Stem Cell Biology

Sixth Semester:

Elective paper: 2A Entrepreneurship, Biosafety, Bioethics and Intellectual property rights

Elective paper: 2B Biofertilizer

Elective paper: 2C Medical Biotechnology

Decision: Since the above agenda is already a regular protocol in the Department with three options for each elective courses, the BOS members acknowledged the same.

Agenda 5: Course Outcome Attainment

In order to validate the attainment and to analyze the course outcomes for UG program of Biotechnology, the following common Question paper pattern with K level indicators for CIA was suggested.

CIA Question paper pattern (K Levels)

CIA 1- to include CO1 and CO2.

CIA 2 – to include CO3 and CO4

Generic Skills- to include CO5

For UG

Section A 1 x 10 = 10

1- 10 Questions (K1 level)

Section B 4 x 5=20

11. K2 (internal choice)

12. K2 (internal choice)

13. K3 (internal choice)

DWARAKA DOSS GOVERDHAN DOSS VAISHNAV COLLEGE

(Autonomous)

College with Potential for Excellence, Linguistic Minority Institution

Affiliated to University of Madras

Arumbakkam, Chennai – 600 106

14. K3 (internal choice)

Section C 2 x 10 =20

15. Compulsory Question from one unit (K4 Level)

16. Internal Choice question from the other unit (K4 Level)

Decision: The Course outcome attainment was highly appreciated by the subject expert and the common proposed CIA question paper pattern was approved for the following academic year.

Agenda 6: Result analysis- November 2021 Examination.

The controller of examination has extensively worked on the results analysis part, where the student pass percentage based on the internal and external component was made available to all the courses.

Decision: The results analysis process was appreciated by the subject expert and other members.

Agenda 7: Certification Course / Value- added Course.

With regard to the value -added courses, that are included as part of the curriculum in the for UG students, an extra credit of 2 to be included in the statement of marks.

Value added courses such as Clinical Research & Data Management, and Bio-Entrepreneurship - a) Organic Biofarming, b) Mushroom Cultivation c) Production of Microbial Fertilizer have been already initiated for the UG students.

Decision: The BOS members approved the existing Value- added courses to be continued with 2 credits for UG stream of Biotechnology. The board members also approved to change the existing value added courses and to add new courses for the academic year 2022 -2023 depending upon the industrial and curriculum demand.

Agenda 8: Components used to evaluate Generic Skills, that constitute CIA-3.

Presently, the following components were used to evaluate Generic Skills (CIA-3) that includes Oral/Poster presentation, Model preparation (miniature model), Short review/Case studies (from published work) and Entrepreneur Ideas presentation which will motivate the critical thinking, communication and problem solving among the students.

DWARAKA DOSS GOVERDHAN DOSS VAISHNAV COLLEGE

(Autonomous)

College with Potential for Excellence, Linguistic Minority Institution

Affiliated to University of Madras

Arumbakkam, Chennai – 600 106

Decision: The BOS members approved the various generic skills employed for CIA - 3 for the UG stream of Biotechnology.

Agenda 9: IPR as part of any Employability or Entrepreneurship course.

The students in the UG stream are introduced to Intellectual Property Rights (IPR) as part of the Elective paper 2A - Intellectual Property Rights, Biosafety and Bioethics in their sixth semester.

Decision: The BOS members acknowledged the same pertaining to the significance of IPR and patenting in the current scientific research.

Agenda 9: Any other matter.

Change in the schedule of Mini Project and Internship Programs for UG students.

In the previous board, the internship program was scheduled for 3rd year UG students and Mini Project for 2nd UG students. Based on the suggestion from student and teaching fraternity, the Field work, Project, Internship programs for Undergraduate students was scheduled as below.

First year	Field work
Second year	Internship programs
Third year	Mini Project

Decision: The BOS members approved the above following suggestions of mini project and internship UG stream of Biotechnology.

DWARAKA DOSS GOVERDHAN DOSS VAISHNAV COLLEGE

(Autonomous)

College with Potential for Excellence, Linguistic Minority Institution

Affiliated to University of Madras

Arumbakkam, Chennai – 600 106

M.Sc. Biotechnology

Agenda 1: Review of the syllabus for all the courses in PG stream of Biotechnology, with no revision for the academic year 2022-2023.

In view of the complete revision of the syllabus to all the courses in UG and PG streams of Biotechnology that was made in the academic year 2020-2021, the BOS members suggested no revision for the academic year 2022-2023 for all the courses in PG stream of Biotechnology.

Decision: The BOS members approved the syllabus with no revision for the academic year 2022-2023 for all the courses in PG stream of Biotechnology. However, suggestions were put forward for the revision and upgrade of syllabus in the forthcoming academic year 2023-2024. The syllabus frame to have current and advanced topics in the basic course papers to distinguish PG over UG syllabus, was emphasized by the panelists.

Agenda 2: Panel of Examiners for Question paper Setting/Practical /Viva-voce Examination.

A list of the Examiners for Question paper setting and also for practical exams were prepared to ensure that the OBE pattern system is emphasized and followed in the ESE examination.

Decision: The list of Examiners was presented before the BOS forum and the members approved the same.

Agenda 3: Inclusion of Interdisciplinary elective course in final year.

The Department offers an Open Elective Course: Herbal Technology to PG students in the 4th semester based on the curriculum in 2020-2021 to enhance and to train their mind towards development of multi-disciplinary competency.

The department of microbiology offers following Interdisciplinary Elective Course: Biofertilizer Technology and Organic Farming to the final year students in the 4th semester and the department of biochemistry offers following Interdisciplinary Elective Course: Life style Disease and Health Care Management to the final year students in the 4th semester.

Decision: The BOS members approved the above Interdisciplinary elective course offered to other Departments.

DWARAKA DOSS GOVERDHAN DOSS VAISHNAV COLLEGE

(Autonomous)

College with Potential for Excellence, Linguistic Minority Institution

Affiliated to University of Madras

Arumbakkam, Chennai – 600 106

Agenda 4: Elective courses with one to choose among three options

In order to identify their potential towards either skill based, employability or entrepreneur development, the syllabus revised in 2020 have included a choice of 3 options to choose in each elective courses in the 1st, 2nd and 3rd semesters, for the students in PG stream, to identify and advance themselves towards their professional career.

First Semester:

Elective paper: 1A Molecular Genetics

Elective paper: 1B Ecology, Evolution and Behavior

Elective paper: 1C Developmental Biology.

Second Semester:

Elective paper: 2A Forensic Science

Elective paper: 2B Marine Biotechnology

Elective paper: 2C DNA Bar Coding Technology

Elective Paper – 3A: Animal and Plant Physiology

Elective Paper – 3B: Clinical Trials

Elective Paper – 3C: Stem cell Biology

Third Semester

Elective Paper – 4A: Advanced Molecular techniques

Elective Paper – 4B: Nano Biotechnology

Elective Paper – 4C: Tissue Engineering.

Decision: Since the above agenda is already a regular protocol in the Department with three options for each elective courses, the BOS members acknowledged the same.

Agenda 5: Course Outcome Attainment

In order to validate the attainment and to analyze the course outcomes for PG program of Biotechnology, the following common Question paper pattern with K level indicators for CIA was suggested.

CIA Question paper pattern (K Levels)

CIA 1- to include CO1 and CO2.

CIA 2 – to include CO3 and CO4

Generic Skills- to include CO5

DWARAKA DOSS GOVERDHAN DOSS VAISHNAV COLLEGE

(Autonomous)

College with Potential for Excellence, Linguistic Minority Institution

Affiliated to University of Madras

Arumbakkam, Chennai – 600 106

For PG

Section A 1 x 10 = 10

1- 10 Questions (K2 level)

Section B 4 x 5=20

11. K3 (internal choice)

12. K3 (internal choice)

13. K4 (internal choice)

14. K4 (internal choice)

Section C 2 x 10 =20

15. Compulsory Question from one unit (K6 Level)

16. Internal Choice question from the other unit (K5 Level)

Decision: The Course outcome attainment was highly appreciated by the subject expert and the common proposed CIA question paper pattern was approved for the following academic year.

Agenda 6: Result analysis- November 2021 Examination.

The controller of examination has extensively worked on the results analysis part, where the student pass percentage based on the internal and external component was made available to all the courses.

Decision: The results analysis process was appreciated by the subject expert and other members.

Agenda 7: Certification Course / Value added Course.

With regard to the value -added courses, that are included as part of the curriculum, an extra credit of 2 to be included in the statement of marks.

Value added courses such as Clinical Research & Data Management and Food Safety and Hygiene have already initiated for the PG students.

Decision: The BOS members approved the existing Value- added courses to be continued with 2 credits for PG stream of Biotechnology. The board members also approved to change the existing value added courses and to add new courses for the academic year 2022 -2023

DWARAKA DOSS GOVERDHAN DOSS VAISHNAV COLLEGE
(Autonomous)
College with Potential for Excellence, Linguistic Minority Institution
Affiliated to University of Madras
Arumbakkam, Chennai – 600 106

depending upon the industrial and curriculum demand.

Agenda 8: Research methodology, Research Ethics as a mandatory course to PG students.

The students in the PG stream are introduced to Research Methodology, Bioethics & Biostatistics as an extra disciplinary course in their fourth semester to enhance their research capabilities.

Decision: The BOS members acknowledged the same as it would facilitate and broaden the research perspective of PG students and also to compile their results towards effective communication.

Agenda 9: Plagiarism check for Final year Projects:

The M.Sc. Dissertation submitted in partial fulfilment to the award of M.Sc. Program is subjected to review and scrutiny and also to plagiarism check to ensure the originality of the student's project work.

Decision: The BOS members approved the plagiarism check in dissertations to emphasize on the novelty and originality of the project work carried out by PG students. Further, inclusion of plagiarism check softwares as a syllabus topic in Bioinformatics course was recommended.

The following changes will be effective from 2022 – 2023 batches for both UG and PG stream of Biotechnology.



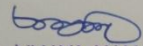

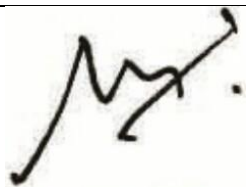
DWARAKA DOSS GOVERDHAN DOSS VAISHNAV COLLEGE

(Autonomous)





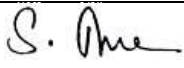




College with Potential for Excellence, Linguistic Minority Institution

Affiliated to University of Madras

Arumbakkam, Chennai – 600 106

Sl. No	Name and Details of the member		Signature
1.	Dr.M.D.BalaKumaran, Assistant Professor and Head (i/c),	Chairman	
2.	Dr. K. Uma Maheswari, Associate Professor, Department of Biotechnology, University of Madras, Chennai - 600 025, Mobile: 9940326510; Email id: rk_uma@yahoo.com	Vice Chancellor nominee	
3.	Dr. A. Vijaya Anand, Professor, Department of Human Genetics and Molecular Biology, Bharathiar University, Coimbatore -46. Mobile: 9842525830; Email id: avahgmb@buc.edu.in	Subject expert 1	 Dr. A. VIJAYA ANAND Ph.D. Professor Dept. of Human Genetics and Molecular Biology Bharathiar University, Coimbatore - 641 046.
4.	Dr. Mohanasrinivasan, Associate Professor & PAT Co- ordinator, M.Sc. Programs, Department of Biomedical Sciences, School of Biosciences and Technology, VIT University, Vellore, Mobile: 9952185510, 9486802902; Email id:v.mohan@vit.ac.in	Subject expert 2	
5.	Mr. J. Sridhar, CEO, Indian Healthcare BPO, Prince Info City II, OMR, Kandanchavadi, Chennai - 600096, Mobile: 7200035525; Email id: careers@indianhealthcarebpo.com; ceo@indianhealthcarebpo.com	Industrial expert	
6.	Dr. Lakshmi Subramanian, Research investigator, Syngene International Limited, Bangalore, Karnataka 560099, Mobile: 09884108927, Email id: lakshmi1386@gmail.com	Meritorious Alumnus Nominated by the Principal	Absent

DWARAKA DOSS GOVERDHAN DOSS VAISHNAV COLLEGE
(Autonomous)
College with Potential for Excellence, Linguistic Minority Institution
Affiliated to University of Madras
Arumbakkam, Chennai – 600 106

Sl. No	Name and Details of the member		Signature
7.	Dr. P. Indumathi Assistant Professor	Internal Members	
8.	Dr. M. RM. Sivasankaran, Assistant Professor		
9.	Dr. P. Amali, Assistant Professor		
10.	Dr. A. Sivaranjani, Assistant Professor		
11.	Ms. S. Uma, Assistant Professor		
12.	Dr. R. Ashwini, Assistant Professor		
13.	Dr. M. Pavithra, Assistant Professor		
14.	Ms. K. Nithya, Guest Lecturer		Absent
15.	Ms. Kiran Sharma, Guest Lecturer		
16.	Ms. G. Shoba, Guest Lecturer		

DWARAKA DOSS GOVERDHAN DOSS VAISHNAV COLLEGE
(Autonomous)
College with Potential for Excellence, Linguistic Minority Institution
Affiliated to University of Madras
Arumbakkam, Chennai – 600 106

