KARPAGAM ACADEMY OF HIGHER EDUCATION COIMBATORE – 641 021

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Minutes of the meeting of Board of Studies 2018-19

Minutes of the meeting of the Board of Studies in <u>B.Tech Biotechnology</u> held on <u>13.06.2018</u> at <u>10.00 am</u> in the <u>Department of Biotechnology</u> at Karpagam Academy of Higher Education.

Members Present:

- Dr. R. Thilagavathi, Professor & Head , Department of Biotechnology (B.Tech), FoE, KAHE
- 2. Dr. G.R. Prabu, Associate Professor, Dept. of Biotechnology, FASH, KAHE
- 3. Dr. K. Devaki, Associate Professor, Dept. of Biochemistry, FASH, KAHE
- 4. Ms. P. Esther Jemima, Asst Professor, Dept. of Biotechnology (B.Tech), FoE, KAHE
- 5. Ms. V. Vijayalakshmi, Asst Professor, Dept. of Biotechnology (B.Tech), FoE, KAHE
- 6. Dr.K.M.Aravinthan, Director, Marutham Bioages Innovations Pvt Ltd., Coimbatore.

The Chairperson welcomed the members of the Board. Leave of absence granted to $\underline{Dr.~K.}$ $\underline{Ruckmani}$. The Board carefully scrutinized the draft syllabus / syllabi and after detailed discussion the following resolutions were passed.

Agenda: 1

1. To consider and approve the Regulations and Syllabus for <u>B.Tech Biotechnology</u> programme.

Resolution: 1

1. Resolved to approve the Regulations and Syllabus for <u>B.Tech Biotechnology</u> programme and it comes into effect from 2018-19 (Approved Regulations and Syllabus given in Annexure-I).

Annexure I

The following corrections and suggestions may be included in B.Tech Biotechnology Syllabus 2018-2019 on the local and global needs. Employability, Entrepreneurship and Skill development aspects have been taken care off.

S.No.	Course Code	Course Name	Changes made
1.	18BTBT101	Mathematics-I	Changes has been made in Unit 1, Unit 2, Unit 3, Unit 4 and Unit 5

2.	18BTBT102	Chemistry-I	Changes has been made in Unit 1, Unit 2, Unit 3, Unit 4 and Unit 5
3.	18BTBT103	Basic Electrical Engineering	Changes has been made in Unit 1, Unit 2, Unit 3, Unit 4 and Unit 5
4.	18BTBT111	Engineering Graphics & Design	Changes has been made in Unit 2 and Unit 5
5.	18BTBT201	Mathematics –II	Changes has been made in Unit 1, Unit 2, Unit 3, Unit 4 and Unit 5
6.	18BTBT202	Engineering Physics	Changes has been made in Unit 1, Unit 2, Unit 3, Unit 4 and Unit 5
7.	18BTBT203	English	Changes has been made in Unit 1, Unit 2, Unit 3, Unit 4 and Unit 5
8.	18BTBT204	Programming for Problem Solving	New Course Introduced
9.	18BTBT205	Biochemistry	Changes has been made in Unit 1, Unit 2, Unit 3, Unit 4 and Unit 5
10.	18BTBT301	Transforms and partial differential equation	New Course Introduced
11.	18BTBT303	Microbiology	Changes has been made in Unit 5
12.	18BTBT311	Cell Biology and Microbiology Lab	New Course Introduced
13.	18BTBT351	Constitution of India	New Course Introduced
14.	18BTBT352	Synthesis of Organic molecules	New Course Introduced
15.	18BTBT402	Unit operations	Changes has been made in Unit 1 and Unit 5
16.	18BTBT406	Environmental Studies	Changes has been made in Unit 1, Unit 2, Unit 3, Unit 4 and

			Unit 5
17.	18BTBT411	Chemical Engineering Lab	Changes has been made
18.	18BTBT505	Bioinformatics	Changes has been made in Unit 1, Unit 2, Unit 3, Unit 4 and Unit 5
19.	18BTBT711	Downstream Processing Lab	Changes has been made
20.	18BTBT5E06	Human Anatomy and Physiology	New Course Introduced
21.	18BTBT6E01	Recombinant enzyme and therapeutic agents production	New Course Introduced
22.	18BTBT6E04	Good Manufacturing Practice	New Course Introduced
23.	18BTBT6E08	Programming in Bioinformatics	New Course Introduced
24.	18BTBT6E11	Introduction to Data Analytics	New Course Introduced
25.	18BTBT7E03	Molecular Diagnostics	New Course Introduced
26.	18BTBT8E01	Agriculture Biotechnology	New Course Introduced
27.	18BTBT8E06	Structural Biology	New Course Introduced
28.	18BTBT8E08	Introduction to systems Biology	New Course Introduced
29.	18BTBT8E09	Genome informatics and Big data analysis	New Course Introduced
30.	18BTBT8E10	Health informatics	New Course Introduced
31.	18BTBT8E11	Molecular Modeling	New Course Introduced
32.	18BTBT8E12	Neurobiology and cognitive science	New Course Introduced

Agenda: 2

1. To consider and approve the Regulations and Syllabus for <u>Ph.D Biotechnology</u> programme.

Resolution: 2

1. Resolved to approve the Regulations and Syllabus for <u>Ph.D Biotechnology</u> programme and it comes into effect from 2018-19 (Approved Regulations and Syllabus given in Annexure-II).

Annexure II

The following corrections and suggestions may be included in Ph.D. Biotechnology Syllabus 2018-2019.

- Three new courses (18RBTE308, 18RBTE309, 18RBTE310) are introduced in Paper III (Special Paper) and it was approved.
- The contents of Unit V of courses (18RBTE201, 18RBTE205, 18RBTE301, 18RBTE303 may be specifically given with the recent advanced topics and case studies.
- 18RBTE101: Unit IV and V may be clubbed and Unit V may be elaborated on pedagogy.
- 18RBTE202: Topics such as biomarkers for kidney function may be included in Unit I; Tumor suppressor genes, Cell cycle check points may be included in unit IV; In Unit V, under metabolic disorders, apart from diabetes, few more disorders may be included.
- 18RBTE203: Renaming the course as Instrumental Methods of Analysis in Biotechnology is suggested; Flourescence Activated Cell Sorting (FACS) may be included in Unit IV. The topic of protein separation techniques may be included.
- 18RBTE204: The latest editions of the texts in the reference list are suggested.
- Advances in Plant Molecular Biology and Advances in Genetic Engineering courses
 may be clubbed together and a new course on Cell Culture Techniques may be included.
- 18RBTE308: 'Role of Virus infection and human cancer' topic may be included.

The meeting came to an end with a vote of thanks by the Chair.

The UG programme B.Tech Biotechnology consists of 78 courses out of which 14 courses are in Science & Humanities, Management and other allied Engineering courses. 5 courses comes under Skill development, 65 courses comes under Employability, 8 courses comes under Entreprenuership. The 16 new courses are added in the syllabus 2018-2019. The average percentage of change in syllabus for 2018-2019 is 42.11 %.

The PhD programme PhD in Biotechnology consists of 16 courses. There is a syllabus change in 13 courses and hence the total change is 13 / 16 * 100 = 81.25 %

R. Milagaruthi (Chair person)

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