



SRI SANKARA ARTS & SCIENCE COLLEGE

Autonomous

*A Unit of Sri Kanchi Kamakoti Peetam Charitable Trust
and Affiliated to University of Madras
Accredited by NAAC with 'A' Grade*

ENATHUR, KANCHIPURAM - 631 561. Phone : 044-27264066, 044-27264066

04/01/2018

MINUTES OF MEETING OF THE BOARD OF STUDIES

Department: Biotechnology

Venue: Board Room

Date: January 4th, 2018




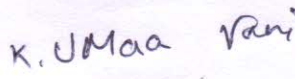
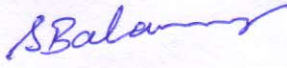
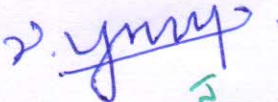

Agenda: Development of curriculum for B.Sc., Biotechnology and M.Sc., Biotechnology to take effect from the academic year 2018-19. Approval of Syllabus and Regulation of Advanced Diploma in Bio-Informatics – Value Added Program to take effect from 2018 -2019.

The following members were present in the meeting:

1. Prof.B.Ramesh, Ph.D., Professor and Head, Dept. of Biotechnology, Sri Sankara Arts and Science College, Enathur, Kanchipuram – Chairman.
2. Dr.A.Koodalingam, Ph.D., Assistant Professor, Dept. of Biotechnology, Sri Sankara Arts and Science College, Enathur, Kanchipuram – Member.
3. Dr.V.Guruchandran, Ph.D., Assistant Professor, Dept. of Biotechnology, Sri Sankara Arts and Science College, Enathur, Kanchipuram – Member.
4. Dr.K.Umaarani, Ph.D., Assistant Professor, Dept. of Biotechnology, Sri Sankara Arts and Science College, Enathur, Kanchipuram – Member.
5. Dr.S.Balamurugan, Ph.D., Assistant Professor, Dept. of Biotechnology, Sri Sankara Arts and Science College, Enathur, Kanchipuram – Member.
6. Mr.V.Prabakaran, M.Sc., ADBI, Senior Executive Microbiologist, Bureau Veritas Consumer Product Service Pvt. Ltd., Chennai - Post Graduate Alumnus.
7. Prof.K.R.Venkatesan, Ph.D., Principal, Sri Sankara Arts and Science College, Enathur, Kanchipuram – Special invitee.

- Board of Studies suggested to develop curricula with relevance to Local needs, Regional needs, National needs and Global needs with focus on Employability, Entrepreneurship and Skill development take effect from the academic year 2018-19.
- Board of Studies unanimously approved the Syllabus and Regulation of Advanced Diploma in Bio-Informatics – Value Added Program to take effect from the academic year 2018-19 (Annexure).

Signature of members:

1. Prof.B.Ramesh - 
2. Dr.A.Koodalingam - 
3. Dr.V.Guruchandran - 
4. Dr.K.Umaarani - 
5. Dr.S.Balamurugan - 
6. Mr.V.Prabakaran - 
7. Prof.K.R.Venkatesan - 

Syllabus for Advanced Diploma in Bioinformatics

MODULE – I

1. Biological Databases
 - a. Introduction
 - b. Classification
 - c. Primary Databases
 - i. Nucleotide databases – Genbank, EMBL and DDBJ.
 - ii. Protein databases – Uniprot, TrEMBL and Genpept.
 - iii. Structure databases – PDB and NDB.
 - d. Secondary Databases – PRPSITE, Pfam, CATH and SCOP.
 - e. Pathway databases – KEGG and GenomeNet.
2. Linux Basics
3. HTML
4. PHP

MODULE – II

Sequence Analysis

1. DNA and Protein sequence retrieval
2. Sequence formats and its conversion
3. ORF Prediction and Translation
4. Sequence Similarity Search
 - Local alignment, Global alignment, Pairwise sequence alignment and Multiple sequence alignment
5. Phylogenetic analysis
 - Distance based and Character based methods
6. Pattern and Pattern databases
7. Profile and Profile databases
8. Protein structure prediction
 - Secondary structure prediction, Tertiary structure prediction and Evaluation of predicted structure
9. Protein function prediction
10. Pathway prediction
11. C and SQL

MODULE – III

Drug designing and docking

Identifying new targets for drug, Molecular docking, Ligand binding, Denovo drug design, Pharmacophore elucidation, QSAR, Combinatorial Library Design.

MODULE – IV

Hands-on Project, Thesis submission and Viva voce.