



KONGU ARTS AND SCIENCE COLLEGE

(An Autonomous Institution, Affiliated to Bharathiar University, Coimbatore)

ERODE – 638 107

Department of Biochemistry



KONGU ARTS AND SCIENCE COLLEGE
(An Autonomous Institution, Affiliated to Bharathiar University, Coimbatore)
Nanjanapuram, Erode – 638 107.



DEPARTMENT OF BIOCHEMISTRY

BOARD OF STUDIES MEETING

AGENDA

DATE: 26.03.2021

1. To consider and approve the Scheme and Syllabi for the students admitted during the academic year 2019 – 2020, 2020-2021 and 2021-2022 and onwards.
2. To consider and approve the new course Professional English of I and II Semesters for the students admitted during the academic year 2021-2022 and onwards.
3. To consider and approve the new question paper pattern for the students admitted during the academic year 2021 – 2022 and onwards.
4. To consider and approve the Panel of Examiners.
5. To consider and discuss any other subjects with the permission of the chair.



Dr. N. RAMAN
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The meeting of the Board of Studies in Biochemistry (UG & PG) was conducted on 26.03.2021 at 10.00 a.m. through Google Meet.

The following members were present:

Chairman : Dr. A. K. Vidya

Members :

1. Mr. R. RASU (Senior Faculty)
2. Dr. N. SANGEETHA (Senior Faculty)
3. Dr. S. SUJA (University Nominee)
4. Dr. T. PALVANNAN (Subject Expert)
5. Dr. K. JEYAPRAKASH (Subject Expert)
6. Dr. M. SARAVANAKUMAR (Industrial Expert)
7. Dr. S. SUDARSHAN (Alumni Representative)
8. Mr. S. NATARAJAN (Faculty Member)
9. Mrs. T. RADHA (Faculty Member)
10. Mr. G. KARTHIKEYAN (Faculty Member)
11. Mrs. M. MUTHU ABIRAMI (Faculty Member)



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Subject related to CBCS, Outcome based Syllabus, Credit Systems, Continuous Internal Assessment, End Semester Examinations and Panel of Examiners was discussed and the following are the resolutions:

1. It is resolved to approve

a. There is a change in the Scheme of Examination and Syllabi of I and II Semesters for the B.Sc Biochemistry and M.Sc Biochemistry students admitted during the academic year 2021 – 2022 and onwards. **(Annexure a & b)**

b. The syllabi of 2019-2020 batch of III and IV semesters is followed for the B.Sc Biochemistry students admitted during the academic year 2020 – 2021 and onwards.

c. The syllabi of 2017-2018 batch of III and IV semesters is followed for the M.Sc Biochemistry and M.Sc Biochemistry students admitted during the academic year 2020 – 2021 and onwards.

d. The syllabi of 2018-2019 batch of V and VI semesters is followed for the B.Sc Biochemistry students admitted during the academic year 2019-2020 and onwards.

e. There is a change in the syllabi of Allied Chemistry Courses of I and II semesters for the B.Sc Biochemistry, Biotechnology and Physics students admitted during the academic year 2021 – 2022 and onwards.

2. It is resolved to follow the norms of TANSICHE to incorporate Profession English I and II under part III for the students to be admitted during the academic year 2021 – 2022 and onwards.

3. It is resolved to approve the new question paper pattern to be followed for the students to be admitted during the academic year 2021 – 2022 and onwards. **(Annexure –I & II)**

4. It is resolved to approve the procedure of taking the average marks of both First and Second Internal tests for Continuous Internal Assessment for the students to be admitted during from the academic year 2021-2022 and onwards. **(Annexure -III)**

5. It is resolved to approve the changes made in CIA marks for attendance for the students to be admitted during the academic year 2021-2022 and onwards. **(Annexure -IV)**

6. It is resolved to approve to have a grade system for Internship / Institutional training for both UG and PG Programme for the students to be admitted during the academic year 2021-2022 and onwards. **(Annexure -V)**

7. It is resolved to approve the marks distribution for the Extension Activities for the semesters for the B.Sc Biochemistry students admitted during the academic year 2021-2022 and onwards. **(Annexure -VI)**

8. Extra Credits will be awarded minimum 1 credit and maximum of 2 credits to the students who have completed SWAYAM / MOOC courses for the students admitted during the academic year 2021 – 2022 and onwards.

7. It is resolved to approve the additional name for Panel of Members for Question Paper Setting and Central Valuation. **(Annexure –V)**



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Details of modifications in the Courses offered under the Programme

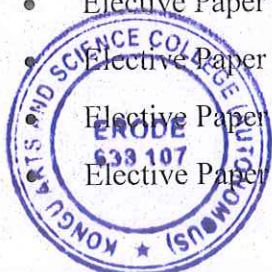
B.Sc Biochemistry

There is a modification in the syllabi of I and II Semesters for the B.Sc Biochemistry students admitted from the 2021-2022 batch onwards based on the feedback obtained from Stakeholders and recommendations of the BOS Panel members.

M.Sc Biochemistry

The Elective courses offered in the I, II, III and IV semester for the M.Sc Biochemistry has been modified for the students admitted from the batch 2021 to 2022 and onwards based on the feedback obtained from Stakeholders and recommendations of the BOS Panel Members.

1. The Core paper - Microbial Biochemistry offered in the II Semester is replaced by the core paper – Bioethics, Biosafety, TQM & IPR.
2. This Microbial Biochemistry paper henceforth will be offered in the III Semester as one of the Elective paper.
3. The Bioinformatics part of the Elective paper I – Bioinformatics and Nanotechnology offered in the I Semester, is incorporated into the Core Paper II – Advanced Bioanalytical Techniques and renamed as Advanced Bioanalytical Techniques and Bioinformatics.
4. Instead of Bioinformatics in the Elective paper of I Semester, Animal Biotechnology portion from the II Semester elective paper is included and the Elective Paper I course name changed into Animal Biotechnology and Nanotechnology
5. The Elective paper III – Biochemical and Environmental Toxicology offered in the III Semester shifted to II Semester
6. The Elective paper II - Genomics offered in the II Semester and the Elective paper III – Proteomics offered in the Semester III are combined together and the Genomics and Proteomics collectively offered as one of the Elective paper I in the I Semester from the from the academic year 2021 – 2022 and onwards.
7. The Elective paper II – Stem Cell Technology will be offered in the I Semester as Elective paper I from the academic year 2021 – 2022 and onwards.
8. The following Elective Papers are removed from the Scheme of M.Sc Biochemistry
 - Elective Paper I – Computational Molecular Biology
 - Elective Paper I – Biophysics and Crystallography
 - Elective Paper III – Characterization and Applications of Nanomaterials
 - Elective Paper IV – Elective Practicals: Bioinformatics




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9. The following Elective Papers are introduced instead of above removed Elective Papers from the Scheme of M.Sc Biochemistry

- Elective Paper II – Hospital Management and Medical Coding
- Elective Paper II – Concepts of Drug Delivery and Clinical Research
- Elective Paper III – Nutritional Biochemistry
- Elective Paper III – Molecular Basis of Infectious & Non-infectious Diseases
- Elective Paper IV – Molecular Diagnostics

Topic wise modifications in the Courses are given in the **Annexure-b**



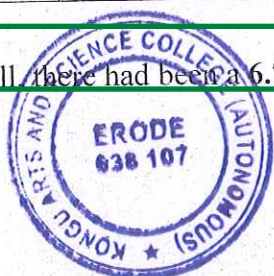

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Details of modifications with specific topics in the Syllabus with % revision

B.Sc Biochemistry

I B.Sc Biochemistry					
S. No	Course Code	Name of the Course	New Content Introduced	Topics Removed	% of Revision
1	21UAPCT101	Core I -Professional English - I	<ul style="list-style-type: none"> Newly Introduced in Curriculum from this Academic Year 	NIL	100 % (New Course)
2	21UAPAT103	Allied I: Chemistry - I	<ul style="list-style-type: none"> Nuclear fusion and Nuclear Fission Laboratory Principles Unit 5 - Completely new - Photochemistry & Metallic Bond 	<ul style="list-style-type: none"> Basic Properties of Iodine Agricultural Chemistry - SOM, Insecticides & Herbicides 	40 %
3	21UAPCT201	Core III - Professional English - II	<ul style="list-style-type: none"> Newly Introduced in Curriculum from this Academic Year 	NIL	100 % (New Course)
4	21UAPCT202	Core IV - Tools and Techniques in Biochemistry	<ul style="list-style-type: none"> Difference between Single and Double beam spectrophotometer 	NIL	2 %
5	21UAPCP202	Core Biochemistry Practicals - I	<ul style="list-style-type: none"> Qualitative analysis of Proteins 	NIL	10 %
6	21UAPAT203	Allied II: Chemistry - II	NIL	<ul style="list-style-type: none"> Laboratory Principles Applications of quantitative and qualitative analysis of coordination compounds Saccharin & Aspartame 	5 %
7	21UAPAP204	Allied Practicals I: Chemistry Practicals	<ul style="list-style-type: none"> Estimation of Calcium, Magnesium Determination of Hardness of water by EDTA 	<ul style="list-style-type: none"> Estimation of Oxalic acid using standard Ferrous Sulphate Estimation of Potassium Permanganate using standard Sodium Hydroxide 	25 %

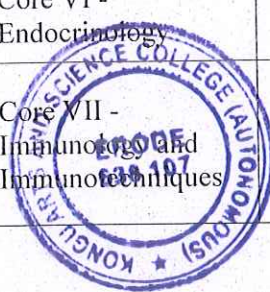
In overall there had been a 6.71 % of revision in the Syllabus of B.Sc Biochemistry Programme



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M.Sc Biochemistry

I M.Sc Biochemistry					
S. No	Course Code	Name of the Course	New Content Introduced	Topics Removed	% of Revision
1	21PBFCT101	Core Paper I - Biopolymers	NIL	<ul style="list-style-type: none"> Fixed oils, fats & waxes potential uses of plant and animal pigments 	2 %
2	21PBFCT102	Core II - Advanced Bioanalytical Techniques and Bioinformatics	<ul style="list-style-type: none"> HPTLC LC-MS 	<ul style="list-style-type: none"> Paper chromatography Adsorption Molecular sieve 2D-GE PFGE Blotting techniques, DNA fingerprinting IR spectroscopy ESR, NMR DNA Quantification using Nanodrop ORD & CD Radiochemical purity, Radiation safety Internet, WWW, Useful websites 	50 %
3	21PBFCT103	Core III - Advanced Enzymology	<ul style="list-style-type: none"> Theories of active site Genetic biosensors 	<ul style="list-style-type: none"> Use of substrate analogues Enzyme Engineering 	5 %
7	21PBFET107	Elective I - Animal Biotechnology and Nanotechnology	<ul style="list-style-type: none"> Transgenesis in large animal - cattle, sheep, goat & chicken Atomic Force Microscopy 	<ul style="list-style-type: none"> Basic principles of ATC Culture vessels Importance of aseptic techniques Adv & disadv of ATC Cell line - initiation, evaluation, hybridization Stem cells & its app in organ synthesis Subculture Monolayer culture Transgenic clone dolly Applications of ATC Biosafety & Bioethics Nanowells & wires Nanolithography, Chemical synthesis, Synthesis from yeast Nanotechnology companies in india 	50 %
8	21PBFET108	Elective I - Genomics and Proteomics	New Course	-	100 % (New Course)
10	21PBFCT201	Core VI - Endocrinology	NIL	Hormone replacement Therapy	1 %
11	21PBFCT202	Core VII - Immunology and Immunotechniques	<ul style="list-style-type: none"> Sars-Covid2 Spike Protein Sars Covid 	<ul style="list-style-type: none"> Mast cells Western Blotting Ebola 	5 % (New Course)




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12	21PBFCT203	Core VIII - Molecular Biology and Molecular Genetics	<ul style="list-style-type: none"> • Transposans • Epigenetics 	<ul style="list-style-type: none"> • Single sequence DNA, SSR • General features of chromosomal replication • Cloning vectors to study gene regulatory regions • RNA editing • Diagnostic Molecular biology to identify diseases • Pedigree analysis 	15 %
13	21PBFCT204	Core IX - Bioethics, Biosafety, TQM & IPR	New Course	-	100 % (New Course)
16	21PBFET207	Elective II - Hospital Management and Health Care	New Course	-	100 % (New Course)
17	21PBFET208	Elective II - Concepts of Drug Delivery and Clinical Research	New Course	-	100 % (New Course)

In overall, there had been a 16.5 % of revision in the Syllabus of B.Sc Biochemistry Programme




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All the above resolutions are approved.

1. Dr.A.K.Vidya (Chairman)

Dr. A.K. Vidya
26/3/21

2. Mr.R.Rasu (Senior Staff Member)

R. Rasu

3. Dr.N.Sangeetha (Senior Staff Member)

N. Sangeetha

4. Dr.S.Suja (University Nominee)

5. Dr.K.Jeyaprakash (Subject Expert)

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10. Ms.T.Radha (Faculty Member)

Radha

11. Mr.G.Karthikeyan (Faculty Member)

G. Karthikeyan

12. Ms.M.Muthu Abirami (Faculty Member)

M. Muthu Abirami

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