# 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: 15.07.2020

- To consider and approve the Curriculum and Syllabi for candidate admitted during the academic year 2020-2021 and onwards.
- 2. To consider and approve the pattern of question papers for the academic year 2020 2021 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

PRINCIPAL,

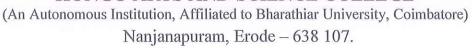
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### KONGU ARTS AND SCIENCE COLLEGE





The meeting of the Board of Studies in Biochemistry (UG & PG) was conducted on 15.07.2020 at 10.10 a.m. through Online.

The following members were present:

Chairman: Dr.A.K.Vidya

#### Members:

- 1.Mr.R.Rasu
- 2.Dr.N.Sangeetha
- 3.Dr.T.Palvannan
- 4.Dr.M.Saravanakumar
- 5.Dr.S.Suja
- 6.Dr.S. Sudarshan
- 7. Mr.S. Natarajan
- 8.Ms.T.Radha
- 9.Mr.G.Karthikeyan



Dr. N. RAMAN

PRINCIPAL,

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Subject related to CBCS, Outcome based Syllabus, Advanced Learners Course and Attendance Marks in CIA were discussed and the following are the resolutions:

- 1. It is resolved to approve there is no change in the syllabi of I and II Semesters for B.Sc. Biochemistry students admitted during the academic year 2020-2021 and onwards be approved.
- 2. It is resolved to approve there is no change in the syllabi of I and II Semesters for M.Sc. Biochemistry students admitted during the academic year 2020-2021 and onwards be approved.
- 3. It is resolved to approve there is no change in the syllabi of III and IV Semesters for M.Sc. Biochemistry students admitted during the academic year 2019-2020 and onwards be approved.
- 4. It is resolved to approve there is no change in the syllabi of IV & V Semester Advanced Learners Course for B.Sc. Biochemistry students admitted during the year 2019-2020 & 2018-2019 and onwards be approved.
- It is resolved to approve there is no change in the syllabi of III Semester Advanced Learners Course for M.Sc. Biochemistry students admitted during the year 2019-2020 and onwards be approved.
- 6. It is resolved to approve there is no change in the syllabi of III and IV Semesters Non-major Elective Courses for other UG students admitted during the academic year 2019- 2020 and onwards be approved.
- 7. It is resolved to approve there is a modification in the syllabi of III & IV Semesters for B.Sc. Biochemistry students admitted during the year 2019-2020 and onwards be approved. (Annexure a & b)
- 8. It is resolved to approve there is a modification in the syllabi of V and VI Semesters for B.Sc. Biochemistry students admitted during the academic year 2018-2019 and onwards be approved. (Annexure a & b)
- 9. It is resolved to approve the Additional name for the panel of Question Paper Setters and Examiners be approved.



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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 III and IV Semesters & V and VI Semesters for the B.Sc Biochemistry students admitted from the 2019-2020 batch onwards & 2018-2019 batch onwards based on the feedback obtained from Stakeholders and recommendations of the BOS Panel members.

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

			II B.Sc Biochemistry		
S. No	Course Code	Name of the Course	New Content Introduced	Topics Removed	% of Revision
1	19UAPCT302	Microbiology	<ul><li>Sterilization</li><li>DNA Virus</li><li>RNA Virus</li></ul>	<ul> <li>Retrovirus &amp; Life Cycle – HIV</li> <li>Types of Oncogenic Viruses &amp; Mechanism of oncogenesis</li> </ul>	25 %
2	19UAPST304	Skill Based Course I - Nutritional Biochemistry	<ul><li>Nutrigenetics &amp; Nutrigenomics</li><li>Cavid Disease</li></ul>	NIL	5 %
3	19UAPCP402	Core Biochemistry Practicals - II	<ul> <li>Media Preparation</li> <li>Sterilization techniques</li> <li>Serial dilution</li> <li>Pure culture techniques</li> <li>Staining Techniques</li> <li>Enzyme Kinetic Studies - Amylase &amp; Catalase (from core Practicals 4)</li> <li>Estimation of Nutritional content in food samples by Calorimeter &amp; Titrimetric method</li> </ul>	<ul> <li>Estimation of Glucose by OT Method</li> <li>Estimation of Phosphorous by FS Method</li> <li>Estimation of Urea by DAM-TSC Method</li> <li>Estimation of Uric acid by Carraways's Method</li> <li>Estimation of Protein by Bradford Method</li> <li>Estimation of RNA by Orcinol Method</li> <li>Estimation of Creatinine by AP Method</li> <li>Estimation of DNA by Diphenylamine Method</li> <li>Estimation of Chloride – Vanslyke's Method</li> <li>Column Chromatography</li> <li>Paper Electrophoresis</li> </ul>	90 %
4	19UAPST405	Skill Based II - Nanotechnology and Clinical Trials	• FESEM • FETEM	Nanoparticle synthesis from Bacteria and Fungi	5 %

S. No	Course Code	Name of the Course	New Content Introduced	Topics Removed	% of Revision
1	20UAPCT501	Human Physiology and Endocrinology	Stress Physiology:     Definition, factors,     Indicators	NIL	6 %
2	20UAPCT502	Clinical Biochemistry	Reye's Syndrome     Intestinal Function test	Lipidosis     LCAT Deficiency	10 %
3	20UAPCP504	Core Biochemistry Practicals - III	Dipstick analysis  ERODE 638 107	Qualitative analysis of normal and abnormal urine constituents ND SCI	MAN, AL,

4	20UAPET506	Elective I: Plant and Animal Biotechnology	<ul> <li>Ethical Issues - ELSI of Biotechnology - Patenting</li> </ul>	Cell transformation:     Mass Cultivation of     cells – Scale up in     monolayer &     Suspension culture	10 %
5	20UAPST508	Skill Based: Medical Coding	<ul> <li>Unit 1 &amp; 2 – Terminologies of Hematology, Cardiology, Gastroenterology, Pulmonology, Neurology, Opthamology, Musculoskeletal system, Urology, Nephrology, Gynecology and Obstetrics</li> </ul>	<ul> <li>UNIT 1 – Anatomy</li> <li>&amp; Physiology</li> <li>UNIT 2 – Medical Terminology</li> </ul>	40 %
6	20UAPCT601	Medicinal Biochemistry	<ul> <li>Drug discovery - Ligand based &amp; computer based designing</li> <li>Applications of Computational biology and AI in Drug discovery</li> </ul>	<ul> <li>Method of         extraction, isolation,         separation,         identification,         analysis &amp;         applications of         bioactive         components</li> </ul>	40 %
7	20UAPCT602	Plant Biochemistry and Plant Therapeutics	Role of Secondary metabolites in pathogens, insects, animals and mankind	NIL	5 %
8	20UAPCT603	Immunology and Immunotechniques	NIL	Hybridoma technology	1 %
9	20UAPCP604	Core Biochemistry Practicals - IV	<ul> <li>Physiology Experiments</li> <li>Immunotechniques</li> <li>Qualitative analysis of Phytochemicals</li> <li>Total antioxidant Activities of medicinal plants</li> <li>Molecular Biology experiments</li> </ul>	<ul> <li>Media Preparation</li> <li>Sterilization techniques</li> <li>Serial dilution</li> <li>Pure culture techniques</li> <li>Staining Techniques</li> <li>Enzyme Kinetic Studies - Catalase</li> <li>Biochemical identification of Bacteria - IMPiC</li> </ul>	90 %
10	20UAPEP605	Elective II: Bioinformatics Practicals	NIL	Data retrieval tools     & methods	1 %

In overall, there had been a 8.24 % 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

Adday n.nati N. Lyush

2. Mr.R.Rasu

3. Dr.N.Sangeetha

- 4. Dr.T.Palvannan
- 5. Dr.M.Saravanakumar
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