

Department of Biochemistry (UG &PG)
Resolutions passed in the Board of Studies Meeting in
Biochemistry held on 26-5-2023

In pursuance to the communication received from the Bharathiar University No.BU/S2/S3/BOS Meet/Syll.Rev/2023 dated 11.05.2023 with regard to the revision of Syllabus for the Academic year 2023-2024 for all the PG degree programmes, the Board of Studies in Biochemistry which met online on 26-5-2023 via online mode. After detailed deliberations, the BoS Members of Biochemistry unanimously passed the following resolutions:

- (i) It is resolved unanimously to adopt the pattern of Examination having 75 marks for External and 25 marks for Internal in lieu of the existing 50: 50 for the students (PG) to be admitted from the Academic Year 2023-2024 and onwards.

As per the suggestions and recommendations given by the various Stakeholders on the above items discussed, the existing/revised the Scheme of Curriculum / Scheme of Examination / Syllabi and Panel of Examiners are to be followed is annexed herewith for the implementation from the commencement of the Academic year 2023 – 2024.

The members after careful scrutiny of the changes to be made unanimously accorded approval for the proposed changes/modifications. They also resolved to authorize the Chairman of Board of Studies to place the changes/modifications now approved by the BOS before the Standing Committee on Academic affairs and Academic Council.

(ii) Ratifications of the credits previously assigned mandatory for SWAYAM/MOOC'S courses for PG Programme

The Board has approved the ratification to the credits previously assigned as mandatory for the SWAYAM/MOOC's courses for PG students who have admitted during the academic year 2021-2022 and to consider the same as extra credits for those students passed earlier. The Board has also approved the same for the PG students admitted during the academic year 2022-2023.

The following were the changes made in PG Syllabi.

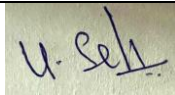
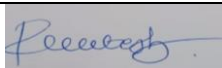
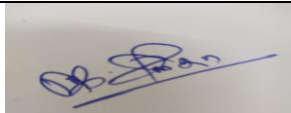

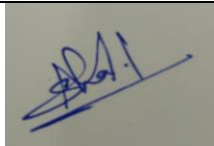
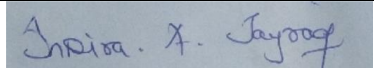
M.Sc. Biochemistry

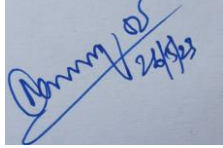
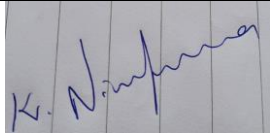
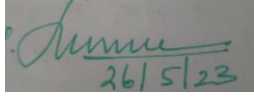
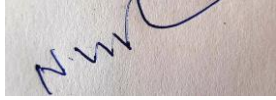
S.No	Subject code	Title of the paper	Changes made
1.	22PBC10 1	C.P.1. Biomolecules and Biopolymers	Unit II include Biologically important compounds synthesized from various amino acids.
2.	22PBC31 1	C.P.11. Advanced clinical biochemistry	Unit I Remove Metabolic disorders of amino acid metabolism - phenylketonuria, alkaptonuria, albinism, Lesch-Nyhan syndrome, disorders of nucleic acids metabolism. Unit II Remove - Glycated Hb. Erythrocyte metabolic pathways, Disorder of erythrocyte metabolic pathways, Porphyrins and porphyrias. Unit IV Include Investigations of diabetes mellitus – OGTT – Indications, procedure, Interpretation and types of GTT curve. HbA1c.
3.	23PBC10 3	C.P.3 Enzymes and Enzyme Technology	Unit V- include Methods - Reversible immobilization (Adsorption, Affinity binding), Irreversible immobilization (Covalent coupling, Entrapment and Microencapsulation, Crosslinking, Advantages and Disadvantages of each method, Properties of immobilized enzymes. Enzyme Biosensors for Biomedical Applications
4.	23PBC10	C.P.2 Bioanalytical	Unit II-include Liquid-Liquid Chromatography


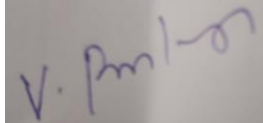

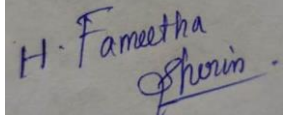
	2	Techniques	<p>Unit IV- Removed overview of microscopy, Morphology and identification of cells using Cell fractionation and flow cytometry, SEM, TEM and Confocal Microscopy, EDAX, Elemental mapping, - Differential Scanning Calorimeter (DSC),</p> <p>Unit IV-Include Organ and tissue slice technique, cell distribution and homogenization techniques, cell sorting, and cell counting, tissue Culture techniques. Cryopreservation,</p> <p>Biosensors- principle and applications. Principle, working and applications of light microscope, dark field, phase contrast and fluorescent microscope. Electron microscope-</p> <p>Principle, instrumentation of TEM and SEM, Specimen preparation and applications-shadow casting, negative staining and *freeze fracturing.</p>
	23PBC10 4	C.P.4 Cellular Biochemistry	Unit II-Included occurrence and structure of cellular organelles.
5.	23PBC20 6	C.P.6 Metabolism and Metabolic Regulation	Unit I-Include Mucopolysaccharides - Hunter syndrome, Sanfilippo syndrome and Maroteaux-Lamy syndrome.
	23PBC20 7	C.P.7 Molecular Biology	Unit V- Include Regulation of gene expression in eukaryotes- Response elements, DNA-binding motifs, steroid receptors, association of methylation and histone acetylation with gene expression.
6.	23PBC20 8	C.P.8 Drug Biochemistry	Unit -I-include ADME & toxicity prediction of drug

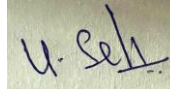
7.	23PBC31 0	C.P.10 Genetic Engineering	Unit III-include Sequencing techniques: High throughput sequencing and shotgun sequencing. PCR and RT-PCR. Complementary DNA (cDNA). Human Genome Project (HGP) - features. Positional cloning. Identifying disease genes and Gene therapy
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Signature of the Board members

Name	Name	Designation	Signature
	Chair person Dr.V.Selvi	Associate Professor & Head of the Department	
	Members of the Faculty of PG 1. Dr R Venkatesh	Assistant Professor	
	2.Dr J Anitha	Assistant Professor	
	3. Dr P Gowtham	Assistant Professor	
	Dr S Monisha	Assistant Professor	
	Members of Faculty of the Department (UG) 1.Dr.Indira A. Jayraaj	Associate Professor	

	2.Dr.R.T.Narendhirakannan	Assistant Professor	
	3.Dr. K.Nirubama	Assistant Professor	
	4.Dr.M.Santhoshkumar	Assistant Professor	
	University Nominee Dr. B.Raghavan	Associate Professor & Head PSG College of Arts and Science College Avinashi Road Aerodrome Post Coimbatore 641014 Mobile: 9942059503 Mail Id: ragav13psg@gmail.com	Retired from service
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	2.Dr. N.Vijayakumar	Assistant Professor Annamalai University Annamalai Nagar Chidambaram 608002 Mobile: 9542574258 Mail Id: nvbiochem@yahoo.co.in	

	<p>Alumni Member Dr.T.Sathishkumar</p>	<p>Assistant Professor III Kumaraguru College of Technology Coimbatore 641049 Mobile: 9940851782 Mail Id: sathishkumar,t,bt@kct.ac.i n</p>	
	<p>Industrial Member Mr.V.Balaji</p>	<p>Managing Director Gaaleon Pharmaceuticals Balaji Gardens G.N.Mills Post Coimbatore 641029 Mobile :9443504405 Mail Id: galabio07@reddifmail.co m</p>	
	<p>Student Nominee (PG) S. Preethi</p>	<p>I MSc Biochemistry, Kongunadu Arts and Science College, Coimbatore 641029</p>	
	<p>Student Nominee (UG) H.Fameetha Sherin (201BC004)</p>	<p>III BSc Biochemistry, Kongunadu Arts and Science College, Coimbatore 641029</p>	



Signature of the Chairperson