

2.3.1 Students centric methods:

In our department faculties insist in facilitating student's thorough task based and process based learning as an important pedagogical practice.

Task based learning approach

In this method students are given insight about appearing for written test, competitive examination through a subject common aptitude. For facing face to face interviews and to perform various task during interview and to perform better after placement the students are exposure through role playing, public speaking, presentations etc. Through functional English for executives,

Process based learning.

Institutional training, project works and industrial visits will bring insight in to process based learning. The students get on spot familiarization with practical knowledge.

2.3.2 Self faced and individualized learning method

ICT enabled learning environment, with smart classrooms, interactive teaching- learning system, E-learning resources through NDLI and other library tools, Google classrooms, our department students are motivated in completion of job oriented courses ets, which will fetch good credit points in curriculum.

ICT tools empower both teachers and learners. They transform the teaching and learning processes from being highly teacher-dominated to becoming student-centric and this transformation results in increased learning gains for students, creating and allowing for opportunities for learners. In addition, they are cost-efficient and eliminate the usage of paper. Alongside minimizing cost, they also save time during class lectures enabling swift and dynamic transmission of content. They provide access to dynamic teaching and learning methods and facilitate easy student management. ICT is a powerful tool for educational change and reform. Appropriate use of ICT has helped the college raise the interest levels amongst the students and has helped connect learning to real-life situations. Students enjoy while learning and perform

better. Besides the chalk and talk method of teaching, the college makes intensive use of ICT-enabled tools, including online resources for effective teaching and learning process. The faculty use ICT-enabled classrooms with LCD projectors, Wi-Fi connectivity, software, PowerPoint presentations developed by teachers to expose the students to advanced knowledge and practical learning.

The faculty uses different methods of teaching based on the need of the learners and the subject taught. They use conventional methods like lecturing, which is teacher centered and other methods which are interactive, collaborative and ICT enabled such as Microsoft Teams, Google Classroom.

The institution is also using the IT enabled learning tools such as PPT, Video clippings, animations, video demonstrations from online sources apart from providing reading materials and lab manuals through emails and other methods for effective teaching-learning process. Apart from having a well-equipped ICT lab with internet facility, the students are provided with laptops to easily carry on their research and project work. Projectors are installed in all classrooms to incorporate new pedagogies in the teaching-learning process. Printing facility is available in all the labs. The students and faculty make use of email, group mails, and social networking tools for instantaneous communication and information dissemination.

Lesson Plan



KONGUNADU ARTS AND SCIENCE COLLEGE
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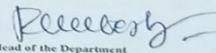
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03/11/2022	5	pulse ox-meter, autoanalyser	CHALK AND TALK		
04/11/2022	5	Pace makers	CHALK AND TALK		
05/11/2022	1	ultra sound imaging system-micro and macro	CHALK AND TALK		
10/11/2022	1	CT scan	CHALK AND TALK		
Unit					
11/11/2022	5				
17/11/2022	1				
18/11/2022	5				
21/11/2022	5				
25/11/2022	1				
26/11/2022	5				
28/11/2022	5				


Faculty Signature

Coordinator


Head of the Department



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8	06/10/2022	1	identification of cells using cell fractionation	CHALK AND TALK		
9	07/10/2022	5	identification of cells using flow cytometry	CHALK AND TALK		
0	10/10/2022	5	SEM	CHALK AND TALK		
1	14/10/2022	1	TEM	CHALK AND TALK		
2	17/10/2022	5	confocal microscopy and EDAX	CHALK AND TALK		
3	18/10/2022	5	Differential scanning calorimeter	CHALK AND TALK		
Unit 5						
4	26/10/2022	5	overview of diagnostic equipment	CHALK AND TALK		
5	27/10/2022	5	blood pressure monitor	CHALK AND TALK		
6	02/11/2022	1	electrocardioscope	CHALK AND TALK		



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3	19/09/2022	5	Principle, equipment and process of gradient electrophoresis, horizontal and vertical gel electrophoresis	CHALK AND TALK		
4	20/09/2022	5	Principle, equipment and process of isoelectric focussing	CHALK AND TALK		
5	26/09/2022	1	Principle, equipment and process of capillary electrophoresis	CHALK AND TALK		
6	27/09/2022	5	applications of electrophoresis in analyzing macromolecules	CHALK AND TALK		
Unit 4						
7	28/09/2022	5	overview of microscopy	PPT, CHALK AND TALK		



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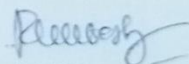
LESSON PLAN

ACADEMIC YEAR : 2023-2024
Faculty Name : S.MONISHA
Year/Semester/Section : II/AII
Degree & Branch : BIOCHEMISTRY
Subject Code & Name : 22PBC102 & CORE PAPER 2- BIOANALYTICAL TECHNIQUES

S.No	Date	Hours	Topic(s)	Delivery Methods	Links	Book Referred
Unit 1						
1	13/09/2022	5	Extraction, Pre-treatment, Stabilization and preparation methods of bio products for analysis	CHALK AND TALK		
2	16/09/2022	1	Principle, equipment and process, Agarose gel electrophoresis, gradient electrophoresis	CHALK AND TALK		


Faculty Signature

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LESSON PLAN

ACADEMIC YEAR : 2023-2024
Faculty Name : J ANITHA,
Year/Semester/Section : I/II/All
Degree & Branch : BIOCHEMISTRY
Subject Code & Name : 22PBC101 & CORE PAPER I - BIOMOLECULES AND BIOPOLYMERS

S.No	Date	Hours	Topic(s)	Delivery Methods	Links	Book Referred
Unit 3						
1	13/09/2022	4	Structural organization of protein:	CHALK AND TALK		
2	19/09/2022	1	Primary structure.	CHALK AND TALK		
3	21/09/2022	4	Determination of protein structure:	CHALK AND TALK		
4	27/09/2022	1	Ramachandran plot.	CHALK AND TALK		
5	29/09/2022	4	Polypeptide synthesis.	CHALK AND TALK		
6	07/10/2022	1	Pauling and Corey model for fibrous proteins	CHALK AND TALK		

31-10-2023 12:51 PM 1 / 5

Faculty Signature

Coordinator

Head of the Department

S.NO	HOUR	PORTIONS TO BE COVERED	MODE OF INSTRUCTIONS/DELIVERY (CHALK & TALK/PPT /FLIPPED CLASS etc
1	15 hrs	Unit I Cancer: Introduction, Normal cells and tissues, Control of growth in normal Tissues, Tumour growth, the process of carcinogenesis*, Genes involved in carcinogenesis, Factors influencing the development of cancers. Risk factors for cancer: Tobacco, infections, dietary-related factors, reproductive and hormonal factors, radiation, occupational carcinogens, medical carcinogens (non-radiation), environmental pollution, genetic predisposition, mutagens and mutational spectra in relation to cancer types.	CHALK & TALK, PPT
2	15 hrs	Unit II Epidemiology, Etiology, pathology, Clinical Features, Diagnosis and Evaluation, Management of breast, oral, cervical, gastric, lung and skin cancer. Role of tumour suppressor genes (Rb, p53, NF1, BRCA 1 & 2) in cancer prevention and the mechanism leading to loss of function.	CHALK & TALK, PPT
3	15 hrs	Unit III Cancer cell cycle: Introduction, cell cycle events in normal and neoplastic cells, restriction point control and its loss, initiation of DNA replication, completion of DNA replication, checkpoint responses to DNA damage in G1 and S phase, from G2 to mitotic metaphase, checkpoints controlling mitotic entry, centrosome duplication and the maintenance of ploidy, the metaphase- anaphase transition and exit from mitosis, cell cycle proteins as prognostic markers and drug targets.	CHALK & TALK, PPT

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LESSON PLAN

Department of Biochemistry (PG and Research)

Batch : II MSc Biochemistry

Semester : IV

Name of the Staff: Dr S MONISHA

Name of the Subject: Non Major Elective – Cancer Biology

		inhibitors of H+K + ATP-ase pump. Antihypertensive drugs: Overview, mechanism of controlling blood pressure, treatment strategies. Action, therapeutics uses, kinetics, adverse effects of β -adreno receptor-blocking agents and ACE inhibitors. Anticorona drugs.	
4	15 hrs	Unit IV Treatment of neurodegenerative diseases: Overview, neurotransmission in CNS, synaptic potentials, overview and drugs used for Alzheimer disease and Parkinson disease. Mechanism of action, therapeutic uses, kinetics and adverse effects of Hypnotic drug (barbiturates). Anesthetics: patient factors in selection of anesthesia, induction, maintenance and recovery from anesthesia, features, potency, uptake, distribution, action and adverse effects of inhalation anesthetics. *Intravenous and local anesthetics.	CHALK & TALK, PPT
5	15 hrs	Unit V Anticancer drugs: overview and principles of chemotherapy, treatment strategies, treatment regimens and scheduling, limitations of chemotherapy. Mechanism of action, therapeutic uses, pharmacokinetics and adverse effects of antimetabolites (Methotrexate and 5-fluorouracil), antibiotics (Dactinomycin and Bleomycin), alkylating agents (Cyclophosphamide), microtubule inhibitor (Vincristine and Vinblastine), steroid hormones and their antagonist (Tamoxifen), monoclonal antibody (Rituximab) and interferons.	CHALK & TALK, PPT

Signature of the Staff

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S.NO	HOUR	PORTIONS TO BE COVERED	MODE OF INSTRUCTIONS/DELIVERY (CHALK & TALK/PPT /FLIPPED CLASS etc
1	15 hrs	Unit I Pharmacology: Classification of drugs, sources and preparation; natural source, synthetic drugs, drug preparation: crude drug, pure drug compounds, pharmaceutical preparations. Routes of drug administration: sublingual, buccal, oral, rectal, intravenous, intramuscular, subcutaneous, transdermal, inhalational and topical administration. Pharmacokinetics: Overview, drug absorption, drug distribution, drug biotransformation (role, formation and phases), drug excretion: quantitative pharmacokinetics, drug-plasma concentration curve, bioavailability, volume of distribution, drug clearance. Single dose pharmacokinetics, continuous and multiple dose kinetics, dosage calculations.	CHALK & TALK, PPT
2	15 hrs	Unit II Pharmacodynamics: Definition. Drug receptors: Types, classification, drugreceptor interaction (binding and affinity, signal transduction, efficacy, receptor regulation and drug tolerance). Dose-response relationships (gradal and quantal). Drug development and safety: Drug discovery and characterization, preclinical studies, clinical trials, drug Safety and efficacy laws, drug abuse prevention laws, Adverse effects of drugs, Factors affecting drug safety and efficacy. Antidepressant drugs: Overview and mechanism. Mechanism of action, therapeutic uses, kinetics and adverse effects of tricyclic antidepressants and monoamine oxidase inhibitors.	CHALK & TALK, PPT
3	15hrs	Unit III Pharmacokinetics: Mechanism of action, therapeutic uses, pharmacokinetics and adverse effects of Anti-inflammatory drugs -aspirin and colchicine, Anti-peptic ulcer drugs -H2 receptor antagonists and	CHALK & TALK, PPT

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LESSON PLAN

Department of Biochemistry (PG and Research)

Batch: I MSc Biochemistry 2021-2024

Semester : II

Name of the Staff: Dr S MONISHA

Name of the Subject: Core Paper 8–Drug Biochemistry

S.NO	HOUR	PORTIONS TO BE COVERED	MODE OF INSTRUCTIONS/DELIVERY (CHALK & TALK/PPT /FLIPPED CLASS etc
1.	5hrs	Preparation of plant tissue culture media and sterilization	Hands on class
2.	5hrs	Preparation of plant tissue culture media and sterilization	Demo
3.	5hrs	Estimation of chlorophyll	Hands on class
4.	5hrs	Estimation of flavonoids and total phenols	Hands on class
5.	5hrs	Maintenance of microbial cultures	Hands on class
6.	5hrs	Isolation and biochemical identification of bacteria from soil	Hands on class
7.	5hrs	Motility test	Hands on class
8.	5hrs	Bacterial growth curve	Hands on class
9.	5hrs	Antibiotic susceptibility test by Kirby-Bauer method	Hands on class
10.	5hrs	Isolation of Genomic DNA from onion and Agarose gel electrophoresis	Hands on class
11.	5hrs	Isolation of Plasmid DNA from bacteria	Hands on class
12.	5hrs	Extraction of total RNA	Hands on class
13.	5hrs	Estimation of RNA by orcinol method	Hands on class
14.	5hrs	Estimation of DNA by Diphenylamine method	Hands on class
15.	5hrs	Animal housekeeping, care, feed preparation and breeding of common laboratory animal-mice	Demo

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LESSON PLAN

Department of Biochemistry (PG and Research)

Batch: I MSc Biochemistry 2021-2024

Semester : II

Name of the Staff: Dr S MONISHA

Name of the Subject: Core Practical 2 –Lab in Plant Biochemistry, Microbiology, Genetics and Molecular Biology



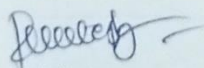
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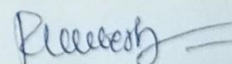


6	30/09/2022	1	Homoglycans: Structure, occurrence, properties and biological functions	CHALK AND TALK		
7	10/10/2022	1	starch,	CHALK AND TALK		
8	12/10/2022	1	cellulose,	CHALK AND TALK		
9	18/10/2022	1	glycogen and chitin.	CHALK AND TALK		
10	20/10/2022	1	Heteroglycans: Structure, occurrence, properties and biological functions	CHALK AND TALK		
11	27/10/2022	1	functions of glycosaminoglycans	CHALK AND TALK		
12	31/10/2022	1	Structure and biological role of peptidoglycans	CHALK AND TALK		
Unit 2						

31-10-2023 12:52 PM 2/4


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Head of the Department



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LESSON PLAN

ACADEMIC YEAR 2023-2024
Faculty Name R. VENKATESH,
Year/Semester/Section I/II/All
Degree & Branch BIOCHEMISTRY
Subject Code & Name 22PBC101 & CORE PAPER 1 - BIOMOLECULES AND BIOPOLYMERS

S.No	Date	Hours	Topic(s)	Delivery Methods	Links	Book Referred
Unit 1						
1	12/09/2022	1	Carbohydrates: Structure, occurrence, properties and biological functions	CHALK AND TALK		
2	14/09/2022	1	Monosaccharides,	CHALK AND TALK		
3	20/09/2022	1	Disaccharides,	CHALK AND TALK		
4	22/09/2022	1	O-linked and N-linked oligosaccharides	CHALK AND TALK		
5	28/09/2022	1	Polysaccharides:	CHALK AND TALK		

31-10-2023 12:52 PM 1 / 4

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Head of the Department

2.3.3.1: Number of mentors:

Number of students assigned to each mentor:

Year	2022-23
Name of mentor	Dr J Anitha
Number of mentors	5

Year	2022-23
Name of mentor	Dr S Monisha
Number of mentors	4

Year	2022-23
Name of mentor	Dr P.Gowtham
Number of mentors	2

2.6.1 Programme outcome

PSO1: Understanding of structure and metabolism of macromolecules, regulation and disorders of metabolic pathways.

PSO2: Investigate the impact of science in society and plan to pursue research

PSO3: Gain proficiency in laboratory techniques in both biochemistry and molecular biology and be able to apply the scientific method to the processes of experimentation and Hypothesis testing.

PSO4: Understand the application of biochemistry in clinical laboratory.

PSO5: Acquire thorough knowledge in biochemical techniques, immunology, physiology, molecular biology, genetic engineering and biotechnology.

In general the PG biochemistry programme outcome (PO) will presume the question and will give capability to evaluate, solve the problems and widen the integrate knowledge and perspective. The course outcome will also inculcate the

students knowledge to understand that communication comprises attentiveness and listening, reading and comprehension, to communicate and collect information through oral and written formats and also to apply contemporary research methods, skills and techniques in a scientific discipline.

The programme specific outcome (PSOs) has been discussed and designed in such way that the programme will be the one of the outstanding outcome for the division of medicine to contribute in both national and international levels. The outcomes in pursuance were to investigate the impact of science in society and plan to pursue research, to understand the application of biochemistry in clinical laboratory, to acquire thorough knowledge in biochemical techniques, immunology, physiology, molecular biology, genetic engineering and biotechnology and also to gain proficiency in laboratory techniques in both biochemistry and molecular biology and be able to apply the scientific method to the processes of experimentation and Hypothesis testing. Similarly the course outcome (CO) also designed in such a way to analyze and study the chemical and biochemical methods in biochemistry so that the students will be able to enter into drug design and pharmacogenetics field.

2.6.2 Attainment of Programme Outcomes and Course Outcomes as evaluated by the institution:

Kongunadu Arts and Science College (Autonomous)

Coimbatore 641 029

Attainment of Programme Outcomes

PG Programmes (2021 batch)

Department: Biochemistry (PG and Research)

Academic year: 2022-2023 (Even)

Course: C.P.9 Immunology

Class Strength=22	CIA I	CIA 2	ESE
No of CO's	5	5	5
Threshold	50	50	50
Target %	60	60	60
No. of students scored <40	4	3	0
No. of students scored 40-59	18	19	1
No. of students scored 60-79	0	0	9
No. of students scored >=80	0	0	11

Course: C.P.10 Genetic Engineering

Class Strength=22	CIA I	CIA 2	ESE
No of CO's	5	5	5
Threshold	50	50	50
Target %	60	60	60
No. of students scored <40	6	5	1
No. of students scored 40-59	16	17	3
No. of students scored 60-79	0	1	11
No. of students scored >=80	0	0	7

Course: C.Pr.1 Lab in Immunology, Genetic engineering and Clinical Biochemistry

Class Strength=22	CIA I	CIA 2	ESE
No of CO's	5	5	5
Threshold	50	50	50
Target %	60	60	60
No. of students scored <40	0	0	0
No. of students scored 40-59	0	0	0
No. of students scored 60-79	22	22	0
No. of students scored ≥80	0	0	22

Course: E.P.1 Non- Major elective-I

Class Strength=22	CIA I	CIA 2	ESE
No of CO's	5	5	5
Threshold	50	50	50
Target %	60	60	60
No. of students scored <40	7	4	6
No. of students scored 40-59	12	10	11
No. of students scored 60-79	3	8	5
No. of students scored ≥80	0	0	0

Course: C.P.11 Clinical Biochemistry

Class Strength=22	CIA I	CIA 2	ESE
No of CO's	5	5	5
Threshold	50	50	50
Target %	60	60	60
No. of students scored <40	5	2	0
No. of students scored 40-59	16	18	1
No. of students scored 60-79	1	2	11
No. of students scored ≥80	0	0	10

Course: C.P.12 Hormonal Biochemistry

Class Strength=22	CIA I	CIA 2	ESE
No of CO's	5	5	5
Threshold	50	50	50
Target %	60	60	60
No. of students scored <40	1	2	0
No. of students scored 40-59	19	18	1
No. of students scored 60-79	2	2	19
No. of students scored ≥80	0	0	3

Course: C.P.13 Biostatistics and Research methodology

Class Strength=22	CIA I	CIA 2	ESE
No of CO's	5	5	5
Threshold	50	50	50
Target %	60	60	60
No. of students scored <40	5	0	0
No. of students scored 40-59	16	14	6
No. of students scored 60-79	1	8	16
No. of students scored ≥80	0	0	6

Course: E.P.1 Non- Major elective-I

Class Strength=22	CIA I	CIA 2	ESE
No of CO's	5	5	5
Threshold	50	50	50
Target %	60	60	60
No. of students scored <40	4	2	0
No. of students scored 40-59	14	19	13
No. of students scored 60-79	4	1	13
No. of students scored ≥80	0	0	2

Final Programme Outcome Attainment

Course	CIA 1 Target	CIA2 Target	POA % = 25 % of I CIA* + 25 % of II CIA* + 50 % of ESE*	Target	Attainment (yes or No)
C.P.9 Immunology	81.81	95.4	20.45+23.85+50.00=94.30	60	yes

(21PBC309)					
C.P.10 Genetic Engineering (21PBC310)	72.2	81.81	$18.05+20.45+47.725=86.225$	60	yes
C.Pr.1 Lab in Immunology, Genetic engineering and Clinical Biochemistry (21PBC3CN)	100	100	$25+25+50=100$	60	yes
E.P.1 Non-Major elective-I (21PBC3N1)	69.18	81.81	$17.295+20.45+45.45=83.195$	60	yes
C.P.11 Clinical Biochemistry (21PBC311)	77.27	90.90	$19.31+22.72+47.725=89.755$	60	yes
C.P.12 Hormonal Biochemistry (21PBC412)	90.90	86.36	$22.725+21.59+50.0=94.31$	60	yes
C.P.13 Biostatistics and Research methodology	83.21	86.36	$20.80+21.59+50.0=92.39$	60	yes

(21PBC413)					
E.P.1 Non-Major elective-I (21PBC4N2)	68.18	72.72	$17.04+18.18+49.18=84.4$	60	yes

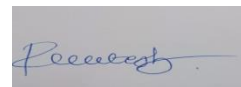
*Percentage of Students who have scored above 40

Course	Internal	POA % = 50 % of Internal *+ 50% of ESE*	Target	Attainment (yes or No)
C.P.9 Immunology (21PBC309)	14	$31.81+50.00=81.81$	60	yes
C.P.10 Genetic Engineering (21PBC310)	15	$34.09+47.725=81.815$	60	yes
C.Pr.1 Lab in Immunology, Genetic engineering and Clinical Biochemistry (21PBC3CN)	21	$50+50=100$	60	yes
E.P.1 Non-Major elective-I	10	$22.72+45.45=68.17$	60	yes

(21PBC3N1)				
C.P.11 Clinical Biochemistry (21PBC311)	9	$20.45+47.725=67.7$	60	yes
C.P.12 Hormonal Biochemistry (21PBC412)	9	$20.45+50.0=70.45$	60	yes
C.P.13 Biostatistics and Research methodology (21PBC413)	13	$29.54+50.0=79.54$	60	yes
E.P.1 Non-Major elective-I (21PBC4N2)	10	$22.72+49.18=71.9$	60	yes

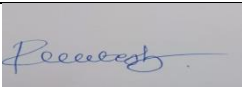
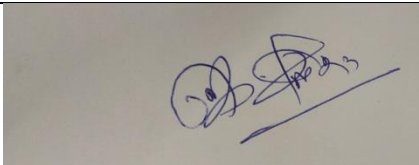
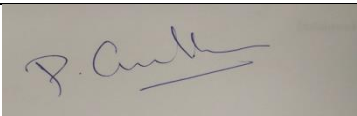
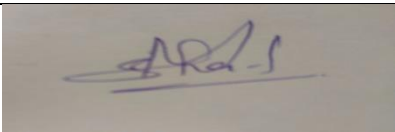
Course	POA % = 100% of ESE*	Target	Attainment (yes or No)
C.P.9 Immunology (21PBC309)	100	60	yes

C.P.10 Genetic Engineering (21PBC310)	95.45	60	yes
C.Pr.1 Lab in Immunology, Genetic engineering and Clinical Biochemistry (21PBC3CN)	100	60	yes
E.P.1 Non- Major elective-I (21PBC3N1)	90.9	60	yes
C.P.11 Clinical Biochemistry (21PBC311)	95.45	60	yes
C.P.12 Hormonal Biochemistry (21PBC412)	100	60	yes
C.P.13 Biostatistics and Research methodology (21PBC413)	100	60	yes
E.P.1 Non- Major elective-I (21PBC4N2)	98.36	60	yes



Signature of the Faculty

Signature of HoD

Faculty Name	Signature
Dr R Venkatesh	
Dr J Anitha	
Dr P Gowtham	
Dr S Monisha	

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Attainment of Programme Outcomes

PG Programmes

Department: Biochemistry (PG and Research)

Academic year: 2022-2023 (ODD)

Course: C.P.1 Biomolecules

Class Strength=28	CIA I	CIA 2	ESE
No of CO's	5	5	5
Threshold	50	50	50
Target %	60	60	60
No. of students scored <40	4	4	0
No. of students scored 40-59	24	24	1
No. of students scored 60-79	0	0	22
No. of students scored ≥80	0	0	5

Course: C.P.2 Bioanalytical techniques

Class Strength=28	CIA I	CIA 2	ESE
No of CO's	5	5	5
Threshold	50	50	50
Target %	60	60	60
No. of students scored <40	9	9	0
No. of students scored 40-59	18	18	2
No. of students scored 60-79	1	1	26
No. of students scored ≥80	0	0	0

Course: C.P.3 Enzymes and Enzyme technology

Class Strength=28	CIA I	CIA 2	ESE
No of CO's	5	5	5
Threshold	50	50	50
Target %	60	60	60
No. of students scored <40	2	2	0
No. of students scored 40-59	24	24	1
No. of students scored 60-79	2	2	25
No. of students scored ≥80	0	0	2

Course: C.P.4 Cellular Biochemistry

Class Strength=28	CIA I	CIA 2	ESE
No of CO's	5	5	5
Threshold	50	50	50
Target %	60	60	60
No. of students scored <40	1	1	
No. of students scored 40-59	23	23	21
No. of students scored 60-79	1	1	7
No. of students scored ≥80			

Course: C.Pr.1 Lab in Biomolecules, Bioinstrumentation ,Enzymology and cell Biology

Class Strength=28	CIA I	CIA 2	ESE
No of CO's	5	5	5
Threshold	50	50	50
Target %	60	60	60
No. of students scored <40	4	4	0
No. of students scored 40-59	13	13	0
No. of students scored 60-79	11	11	2
No. of students scored ≥80	0	0	26

Course: E.P.1 Major elective-I

Class Strength=28	CIA I	CIA 2	ESE
No of CO's	5	5	5
Threshold	50	50	50
Target %	60	60	60
No. of students scored <40	3	3	0

No. of students scored 40-59	21	21	21
No. of students scored 60-79	4	4	4
No. of students scored ≥ 80	0	0	0

Course: C.P.5 Plant Biochemistry and Biotechnology

Class Strength=28	CIA I	CIA 2	ESE
No of CO's	5	5	5
Threshold	50	50	50
Target %	60	60	60
No. of students scored <40		0	
No. of students scored 40-59	22	22	12
No. of students scored 60-79	6	6	10
No. of students scored ≥ 80			6

Course: C.P.6 Metabolism and metabolic regulations

Class Strength=28	CIA I	CIA 2	ESE
No of CO's	5	5	5
Threshold	50	50	50
Target %	60	60	60
No. of students scored <40	5	5	2
No. of students scored 40-59	15	15	6
No. of students scored 60-79	6	6	15
No. of students scored ≥ 80	0	0	5

Course: C.P.7 Genetics and molecular biology

Class Strength=28	CIA I	CIA 2	ESE
No of CO's	5	5	5
Threshold	50	50	50
Target %	60	60	60
No. of students scored <40	1	1	0
No. of students scored 40-59	19	19	13
No. of students scored 60-79	9	9	13
No. of students scored ≥ 80	0	0	2

Course: C.P. 8 Drug Biochemistry

Class Strength=28	CIA I	CIA 2	ESE
No of CO's	5	5	5
Threshold	50	50	50
Target %	60	60	60
No. of students scored <40	6	6	1
No. of students scored 40-59	10	10	10
No. of students scored 60-79	12	12	10
No. of students scored ≥80	0	0	7

Course: Course: C.Pr.2 Lab in plant biochemistry, genetics and molecular biology

Class Strength=28	CIA I	CIA 2	ESE
No of CO's	5	5	5
Threshold	50	50	50
Target %	60	60	60
No. of students scored <40	0	0	0
No. of students scored 40-59	15	15	0
No. of students scored 60-79	10	10	0
No. of students scored ≥80	3	3	28

Course: EP 2 Major elective II

Class Strength=28	CIA I	CIA 2	ESE
No of CO's	5	5	5
Threshold	50	50	50
Target %	60	60	60
No. of students scored <40	5	5	0
No. of students scored 40-59	15	15	8
No. of students scored 60-79	6	6	15
No. of students scored ≥80	0	0	5

Final Programme Outcome Attainment

Course	CIA 1 Target	CIA2 Target	POA % = 25 % of I CIA* + 25 % of II CIA* + 50% of ESE*	Target	Attainment (yes or No)

C.P.1 Biomolecules and biopolymers (22PBC101)	85.71	85.71	$21.42+21.42+48=90.84$	60	yes
C.P.2 Bioanalytical techniques (22PBC102)	67.85	67.85	$16.96+16.96+50=83.92$	60	yes
C.P.3 Enzymes and Enzyme technology (22PBC103)	92.85	92.85	$23.21+23.21+50=96.42$	60	yes
C.P.4 Cellular Biochemistry (22PBC104)	89.28	89.28	$22.32+22.32+50=94.64$	60	yes
C.Pr.1 Lab in Biomolecules, Bioinstrumentation ,Enzymology and cell Biology (22PBC1CL)	85.71	85.71	$21.42+21.42+50=92.84$	60	yes
E.P.1 Major elective-I (22PBC1E1)	89.28	89.28	$22.32+22.32+37.5=82.4$	60	yes
C.P.5 Plant Biochemistry and Biotechnology (22PBC205)	100	100	$25+25+50=100$	60	yes
C.P.6 Metabolism and metabolic regulations (22PBC206)	75	75	$18.75+18.75+46=83.5$	60	yes

C.P.7 Molecular biology (22PBC207)	96.42	96.42	$24.10+24.10+50=98.2$	60	yes
C.P. 8 Drug Biochemistry (22PBC208)	78.57	78.57	$19.64+19.64+48.21=87.49$	60	yes
C.Pr.2 Lab in plant biochemistry, genetics and molecular biology (22PBC2CM)	100	100	$25+25+50=100$	60	yes
E.P.2 Major elective-II (22PBC2E2)	75	75	$18.75+18.75+50=87.5$	60	yes

*Percentage of Students who have scored above 40

Course	Internal	POA % = 50 % of Internal *+ 50% of ESE*	Target	Attainment (yes or No)
C.P.1 Biomolecules and biopolymers (22PBC101)	23	$41.07+48=89.07$	60	yes
C.P.2 Bioanalytical techniques (22PBC102)	21	$37.5+50=87.5$	60	yes
C.P.3 Enzymes and Enzyme technology (22PBC103)	21	$37.5+50=87.5$	60	yes

C.P.4 Cellular Biochemistry (22PBC104)	21	$37.5+50=87.5$	60	yes
C.Pr.1 Lab in Biomolecules, Bioinstrumentation ,Enzymology and cell Biology (22PBC1CL)	28	$50+50=100$	60	yes
E.P.1 Major elective-I (22PBC1E1)	20	$35.1+37.5=72.6$	60	yes
C.P.5 Plant Biochemistry and Biotechnology (22PBC205)	28	$50+50=100$	60	yes
C.P.6 Metabolism and metabolic regulations (22PBC206)	23	$41.07+46=87.07$	60	yes
C.P.7 Molecular biology (22PBC207)	22	$39.2+50=89.2$	60	yes
C.P. 8 Drug Biochemistry (22PBC208)	23	$41.07+48.21-89.28$	60	yes
C.Pr.2 Lab in plant biochemistry, genetics and molecular biology (22PBC2CM)	28	$50+50=100$	60	yes

E.P.2 Major elective-II (22PBC2E2)	21	37.5+50=87.5	60	yes
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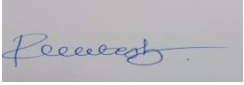
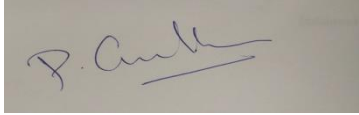
Course	POA % = 100% of ESE*	Target	Attainm ent (yes or No)
C.P.1 Biomolecules and biopolymers (22PBC101)	96	60	yes
C.P.2 Bioanalytical techniques (22PBC102)	100	60	yes
C.P.3 Enzymes and Enzyme technology (22PBC103)	100	60	yes
C.P.4 Cellular Biochemistry (22PBC104)	100	60	yes
C.Pr.1 Lab in Biomolecules, Bioinstrumentation ,Enzymology and cell Biology (22PBC1CL)	100	60	yes
E.P.1 Major elective-I (22PBC1E1)	75	60	yes
C.P.5 Plant	100	60	yes

Biochemistry and Biotechnology (22PBC205)			
C.P.6 Metabolism and metabolic regulations (22PBC206)	92	60	yes
C.P.7 Molecular biology (22PBC207)	100	60	yes
C.P. 8 Drug Biochemistry (22PBC208)	96.42	60	yes
C.Pr.2 Lab in plant biochemistry, genetics and molecular biology (22PBC2CM)	100	60	yes
E.P.2 Major elective-II (22PBC2E2)	100	60	yes

Signature of the Faculty

Signature of HoD

Faculty Name	Signature
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Dr R Venkatesh	
Dr J Anitha	
Dr P Gowtham	
Dr S Monisha	