



# Dr. N.G.P. ARTS AND SCIENCE COLLEGE

(An Autonomous Institution, Affiliated to Bharathiar University, Coimbatore)  
(Approved by Government of Tamil Nadu & Accredited by NAAC with A++ Grade (3<sup>rd</sup> Cycle - 3.64 CGPA)  
Dr. N.G.P. - Kalapatti Road, Coimbatore - 641 048, Tamil Nadu, India  
Web : www.drngpasc.ac.in | Email : info@drngpasc.ac.in | Phone : +91-422-2369100

BoS

13<sup>th</sup>

## MINUTES OF THE THIRTEENTH BOARD OF STUDIES MEETING

Faculty: Biosciences

Board: Clinical Laboratory Technology

The Meeting of Board of Studies (BoS) was held as given below:

<b>Name of the Body</b>	<b>Board of Studies</b>
<b>Department</b>	<b>Clinical Laboratory Technology</b>
<b>Meeting No.</b>	<b>13</b>
<b>Date and Time</b>	<b>05.08.2022, 10.00 a.m.</b>
<b>Venue</b>	<b>Board Room</b>
<b>Members Attended</b>	<b>The details are given in the ANNEXURE -I</b>

Item	AGENDA
01	Discussion on UG Curriculum for AY 2022-23 and onwards adopting R4 guidelines
02	Discussion on UG syllabi for Part III - Core Courses for first semester 2022-23 Batch
03	Discussion on syllabus for Part III - Inter Disciplinary Course (IDC) offered by Department of Information Technology
04	Discussion on syllabus for Part III - Inter Disciplinary Course (IDC) offered to Department of Microbiology
05	Discussion on Part I (Tamil/Hindi/French/Malayalam) offered by Language department for 2022-23 Batch
06	Discussion on Part II (English) offered by English department for 2022-23 Batch
07	Discussion on Part IV (AECC) Environmental Studies for 2022-23 Batch offered by Department of Microbiology
08	Discussion on credits for Part V Extension Activity for 2022-23 Batch
09	Discussion on PG Diploma program offered by Department of Clinical Laboratory Technology to other departments for 2022-23 Batch
10	Discussion on Value Added Certificate Courses (VACC)
11	Any other matter

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## MINUTES OF THE THIRTEENTH BOARD OF STUDIES MEETING

Faculty: Biosciences

Board: Clinical Laboratory Technology

The Chairman of BoS welcomed all the Panel members for the meeting. The items listed in the agenda were taken for discussion.

The following are the minutes of the meeting:

<b>Item - 01</b>	<b>Discussion on UG Curriculum for AY 2022-23 and onwards adopting R4 guidelines</b>
<b>Discussion</b>	The UG Curriculum for AY 2022-23 was presented for discussion.
<b>Resolution</b>	The Board unanimously approved the curriculum.
<b>Item - 02</b>	<b>Discussion on UG syllabi for Part III - Core Courses for first semester 2022-23 Batch</b>
<b>Discussion</b>	<p><b>223CL1A1CA: Human Anatomy and Physiology (New Course)</b> Dr.Muthusami suggested to include the topics Neurotransmitters, Acetyl choline and dopamine Functions, Spinal cord, myelinated and non-myelinated nerve in Unit I to identify the related metabolic disorders or diseases.</p> <p>Dr.Gayathri Devi suggested to include the Function of the Heart, Blood vessels, capillary system in Unit II</p> <p>Dr.Karthikeyan suggested to include function of lungs and function of lungs in Unit III and in Unit IV to gain basic knowledge in physiology.</p> <p>Dr.Ragunathan suggested to include function of lymphatic system ,thymus, spleen and lymph node and Principles of karyotyping in Unit V to know the basic lymphoid organs in immune system.</p> <p><b>223CL1A1CB: General Biochemistry (New Course)</b> Dr.Karthikeyan recommended to incorporate Linear and cyclic structures of monosaccharides in Unit II and Alpha, beta and quaternary structure of proteins in Unit III.</p> <p>Mr.Vasanth Kumar suggested to include Glucose,Fructose,Galactose and Mannose , disaccharides – Lactose, Maltose, Sucrose and polysaccharides.- Starch and Glycogen to gain knowledge basics of biomolecules in Unit II.</p> <p>Dr.Gayathri Devi and Dr.Muthusami suggested to include deficiency of fat and water soluble vitamins in Unit IV and Enzyme- classification, characteristic features and factors affecting its activity , Endocrine System , Hormones in unit V</p>





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	<p>to impart basic knowledge of enzymes as its applications will be studied under Clinical Enzymology in 6<sup>th</sup> Semester.</p> <p><b>223CL1A1CP: Biochemistry (Practical Course)</b> Dr.Muthusami suggested to include Measurement of Normality, Molarity and Molality as problem to be solved in practicals to gain more practical knowledge in reagent preparation.</p>
<b>Resolution</b>	The Board unanimously approved the syllabi for the above three courses
<b>Item-03</b>	<b>Discussion on syllabus for Part III - Inter Disciplinary Course (IDC) offered to Department of Microbiology</b>
<b>Discussion</b>	<p><b>223CL1A1IA: Biochemistry (New Course)</b> Mr.Vasanth Kumar and Dr.Gayathri Devi suggested to include Protein denaturation in Unit III, DNA denaturation, renaturation and Concepts of enzymes, classification, characteristic features and applications in Unit IV to impart basic knowledge on structural configuration.</p> <p>Dr.Karthikeyan Fat soluble - Vitamin A, D, E, and K and water soluble vitamins ,vitamin B complex ,vitamin C to impart detailed knowledge in vitamins and its importance.</p>
<b>Resolution</b>	The Board unanimously approved the above syllabus
<b>Item - 04</b>	<b>Discussion on syllabus for Part III - Inter Disciplinary Course (IDC) offered by Department of Information Technology</b>
<b>Discussion</b>	<p><b>224IT1A1IA - Basics of Information Technology</b> The syllabus approved by the Board of Studies in Information Technology was placed for endorsement.</p>
<b>Resolution</b>	The Board unanimously approved the above syllabus
<b>Item - 05</b>	<b>Discussion on Part I (Tamil/Hindi/French/Malayalam) offered by Language department for 2022-23 Batch</b>
<b>Discussion</b>	<p><b>221TL1A1TA/ 221TL1A1HA /221TL1A1FA /221TL1A1MA: Part I:Tamil-I: Ikkala Illakiyam / Hindi-I: Modern Literature/French-I: Grammar, Translation and Civilization/ Malayalam - I: Modern Literature respectively</b> The unified syllabus approved by the Board of Studies in Languages were placed for endorsement.</p>
<b>Resolution</b>	The Board unanimously approved the syllabi.
<b>Item -06</b>	<b>Discussion on Part II (English) offered by English department for 2022-23 Batch</b>
<b>Discussion</b>	<p><b>221EL1A1EA : Part II: Professional English I (New Course)</b> The unified syllabus approved by the Board of Studies in English was placed for endorsement.</p>
<b>Resolution</b>	The Board unanimously approved the syllabus

Cont...





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<b>Item -07</b>	<b>Discussion on Part IV (AECC) Environmental Studies for 2022-23 Batch offered by Department of Microbiology</b>
<b>Discussion</b>	<b>223MB1A1AA: Environmental Studies (New Course)</b> The unified syllabus approved by the Board of Studies in Microbiology was placed for endorsement.
<b>Resolution</b>	The Board unanimously approved the syllabus
<b>Item-08</b>	<b>Discussion on credits for Part V Extension Activity for 2022-23 Batch</b>
<b>Discussion</b>	One credit to be awarded for participation in Extension activity like YRC/NCC/NSS/ RRC/Yoga/Sports/Clubs
<b>Resolution</b>	The Board members approved one credit for Extension activity
<b>Item-09</b>	<b>Discussion on PG Diploma program offered by Department of Clinical Laboratory Technology to other departments for 2022-23 Batch</b>
<b>Discussion</b>	Board members suggested to retain the same for the program for 2022-23 Batch
<b>Resolution</b>	The Board unanimously approved the syllabus
<b>Item-10</b>	<b>Discussion on Value Added Certificate Courses (VACC)</b>
<b>Discussion</b>	The course titled Basic Laboratory Tests to be offered by internal faculty for 2022-23 batch was discussed
<b>Resolution</b>	The Board unanimously approved the syllabus
<b>Item -11</b>	<b>Any other matter</b>
<b>Discussion</b>	The board members discussed and recommended a Panel of Examiners
<b>Resolution</b>	The Board approved the Panel of Examiners

The Chairman of Board of Studies (BoS) thanked all the members for their active participation and providing their valuable suggestions.

Date: 05.08.2022

  
(Dr. S. Kokila)

BoS Chairman/HoD  
Department of Clinical Laboratory Technology  
Dr. N. G. P. Arts and Science College  
Coimbatore - 641 048





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## Syllabus Revision

Faculty: Biosciences

Board: Clinical Laboratory Technology

Semester: I

Course Code/ Name: 223CL1A1CA, HUMAN ANATOMY AND PHYSIOLOGY

Unit	Existing	Changes
I	<b>General Anatomy</b> :Introduction to anatomical terms and organization of the human body. Tissues –Definitions, Types, characteristics, classification, location, functions and formation. Blood – morphology, composition, functions. Peripheral Nervous system and Central Nervous system: Anatomy, Functions. Structure of neuron, neurotransmitters, nerve impulse. Brief account of resting membrane potential, action potential and conduction of nerve impulse, and exocrine & Endocrine- an overview and functions.	Neurotransmitters ,Acetyl choline and Dopamine, Functions, Spinal cord, myelinated and non-myelinated nerve
II	<b>Cardiovascular System</b> : Structure of the Heart, Structure of arterial, venous system and Definitions of cardiac output, stroke volume, principles of measurements of cardiac output. Normal values of blood pressure, heart rate and their regulation in brief.	Function of the Heart, Blood vessels, capillary system
III	<b>Respiratory System &amp; Gastroenterology system</b> : Parts- Nasal cavity and Paranasal air sinuses, trachea, Structure of lungs, Diaphragm and Pleura. Principles of respiration, respiratory muscles, lung volumes and capacities, collection and composition of inspired alveolar and expired airs. Transport of oxygen and carbondioxide. Digestive System: Parts, Structure of Tongue, Salivary glands, stomach, Intestines, Liver, Pancreas. functions of G.I secretions, principles of secretion and movements of GIT.	Function of lungs.
IV	<b>Excretory system &amp; Reproductive system</b> : Parts, structure of Kidney, Ureters, Urinary Bladder and Urethra, Structure of Nephron, measurement and regulation of GFR, mechanism of urine formation. Clearance tests- urea & creatinine. Reproductive System: Parts of the system. Gross structure of both male and female reproductive organs.	Function of Nephron.
V	<b>Lymphatic System</b> : Gross and microscopic structure of lymphatic tissue. Special Senses: Structure of Skin, Eye, Nose, Tongue (Auditory and Olfactory apparatus). Anatomical Techniques: Embalming of human cadaver, Museum Techniques.	Function of Lymphatic System, Thymus, Spleen and Lymph Node, Principles of Karyotyping.

PERCENTAGE OF SYLLABUS REVISED: 21 %

COURSE FOCUS ON: Skill Development, Employability

- |  |  |
|--|--|
| <input checked="" type="checkbox"/> Skill Development      | <input type="checkbox"/> Entrepreneurial Development |
| <input checked="" type="checkbox"/> Employability          | <input type="checkbox"/> Innovation                  |
| <input type="checkbox"/> Intellectual Property Right (IPR) |  |





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## Syllabus Revision

Faculty: Biosciences

Board: Clinical Laboratory Technology

Semester: I

Course Code/ Name: 223CL1A1CB, GENERAL BIOCHEMISTRY


Unit	Existing	Changes
I	<b>Cell structure and function</b> : An overview of cells and their molecular composition:- prokaryotic and eukaryotic cells and their comparison , Function of cells. Cell organelles and their functions: Cell membrane, Endoplasmic reticulum, Golgi apparatus, lysosomes, peroxisomes and glyoxysomes. Mitochondria, Cytoskeleton and Nucleus.	NIL
II	<b>Carbohydrates and Lipids</b> : Carbohydrates: Classification, Properties, biological significance and functions of monosaccharides, disaccharides and polysaccharides.- Starch and Glycogen Lipids: Definition; classification, significance and functions of lipids-simple, compound and derived lipids. Steroids- functions.	Linear and cyclic Structure of monosaccharides, Glucose, Fructose, Galactose and Mannose , disaccharides - Lactose, Maltose, Sucrose and polysaccharides.- Starch and Glycogen.
III	<b>Amino acids and Proteins</b> : Amino acids: Definitions, classification of essential and non-essential amino acids. Classification of proteins, Peptide linkage, Structure of proteins- primary, secondary and tertiary. Properties of peptides and proteins, Examples: albumin, globulins. Protein denaturation.	Alpha Helix, Beta-Pleated sheets, Quaternary structure.
IV	<b>Nucleic acids and Vitamins</b> : Structure of purines and pyrimidines; nucleotides and nucleosides, DNA. Double helical structure, A, B & Z forms of DNA; DNA denaturation and renaturation, functions. RNA: Types and functions. Vitamins: Definition, classification, Sources physiological functions of water and fat soluble vitamins. Minerals: Mineral requirement, essential macro and micro minerals:- Sources and functions	Deficiency of water and fat soluble vitamins.
V	<b>Enzymes and Hormones</b> : Names of endocrine glands & their secretions, functions of various hormones-hypothalamus, Pituitary, thyroid, adrenal, male and female reproductive hormones. Brief account of these hormonal disorders.	Enzymes: International classification of enzymes. Factors affecting enzyme activity. Endocrine System - Hormones.

PERCENTAGE OF SYLLABUS REVISED: 24%

COURSE FOCUS ON: Skill Development and Employability

- |  |  |
|--|--|
| <input checked="" type="checkbox"/> Skill Development      | <input type="checkbox"/> Entrepreneurial Development |
| <input checked="" type="checkbox"/> Employability          | <input type="checkbox"/> Innovation                  |
| <input type="checkbox"/> Intellectual Property Right (IPR) |  |



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### Syllabus Revision

**Faculty: Biosciences**

**Board: Clinical Laboratory Technology**

**Semester: I**

**Course Code/ Name: 223CL1A1IA, IDC: BIOCHEMISTRY**

Unit	Existing	Changes
I	<b>Carbohydrate:</b> Carbohydrate – classification, structure, properties & chemical reactions of monosaccharide – Glucose, Fructose, Galactose, Mannose, Arabinose. Disaccharides – Maltose, Lactose and Sucrose. Polysaccharides – Homo polysaccharides – Starch, Glycogen and Cellulose & Hetero polysaccharides – Hyaluronic acid, Heparin, Chondroitin sulphate. Biological importance of sugar derivatives – glycosaminoglycan, proteoglycan & glycoprotein and Bacterial cell wall polysaccharides.	NIL
II	<b>Lipids:</b> Definition classification of lipids, physiochemical properties. Storage lipids – fatty acids – types. Structural lipids – phospholipids, glycolipids & sphingolipids. Structure & Biological role of cholesterol.	NIL
III	<b>Aminoacids &amp; Proteins:</b> Classification of amino acids, general properties, Non protein amino acids. Peptide bond – structure & conformation, Protein classification, Physiochemical properties of proteins. Organization of protein Structure – Primary, Secondary Tertiary, Quaternary structure.	<b>Protein denaturation.</b>
IV	<b>Nucleic acids:</b> Structures of Purines, Pyrimidines, Nucleoside & Nucleotides. Properties of nucleic acids. DNA - Double helical structure – Isoform. RNA – Types structure & function.	<b>DNA denaturation and renaturation. Enzymes - Concepts of enzymes, Classification, Characteristic features and Applications.</b>
V	<b>Micronutrients:</b> Minerals in biological system & their importance – Iron, Calcium, Phosphorous, Iodine, Copper, Zinc. Vitamins – Definition, classification: Fat soluble and Water Soluble vitamins - Sources, functions and deficiencies. Hormones involved in regulatory metabolism: Insulin, Glucagon and thyroid.	<b>Fat soluble - Vitamin A, D, E, and K and Water Soluble vitamins –Vitamin B Complex Vitamin C</b>

**PERCENTAGE OF SYLLABUS REVISED: 20%**

**COURSE FOCUS ON: Skill Development & Employability**

- |  |  |
|--|--|
| <input checked="" type="checkbox"/> Skill Development      | <input type="checkbox"/> Entrepreneurial Development |
| <input checked="" type="checkbox"/> Employability          | <input type="checkbox"/> Innovation                  |
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## Syllabus Revision

Faculty: Biosciences

Board: Clinical Laboratory Technology

Semester: I

Course Code/ Name: Biochemistry: 223CL1A1CP

Existing	Changes
<ol style="list-style-type: none"><li>1. Qualitative analysis of Monosaccharides – Pentose – Arabinose</li><li>2. Qualitative analysis of Hexoses - Glucose, Fructose</li><li>3. Qualitative analysis of Disaccharides - Sucrose, Maltose and Lactose</li><li>4. Qualitative analysis of Polysaccharide – Starch</li><li>5. Qualitative analysis of Histidine</li><li>6. Qualitative analysis of Tyrosine</li><li>7. Qualitative analysis of Tryptophan</li><li>8. Qualitative analysis of Arginine</li><li>9. Estimation of Acid Number</li><li>10. Estimation of Iodine Number</li><li>11. Estimation of Saponification Number</li><li>12. Protein estimation by Lowry's method</li></ol>	<ol style="list-style-type: none"><li>1. Measurement of Normality, Molarity and Molality.</li></ol>

Note: End Semester Practical Examination requires completion of 10 experiments out of 13.

PERCENTAGE OF SYLLABUS REVISED: 15%

COURSE FOCUS ON:

- |  |  |
|--|--|
| <input checked="" type="checkbox"/> Skill Development      | <input type="checkbox"/> Entrepreneurial Development |
| <input checked="" type="checkbox"/> Employability          | <input type="checkbox"/> Innovation                  |
| <input type="checkbox"/> Intellectual Property Right (IPR) |  |







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## Syllabus Revision

Faculty : Biosciences

Board: Clinical Laboratory Technology

Semester: I

Course Code/ Name: 221TL1A1TA / PART - I - TAMIL - I: IKKALA ILAKKIYAM

Unit	Existing	Changes
I	1. உயிர்-பெற்ற தழிழர்-பாட்டு - பாரதியார் 2. படி - பாரதிதாசன் 3. சோரடப்-புறப்பட்டு - தமிழ்-ஒளி 4. தமிழ்க் கொலை புரியாதீர் - புலவர் குழந்தை 5. திரைத்தமிழ்: அ)சுமமா கிடந்த நிலத்தை - எனத் தொடங்கும் பாடல் - பட்டுக்கோட்டை கல்யாண சுந்தரனார். ஆ) சமரசம் உலாவும் இடமுமே - எனத் தொடங்கும் பாடல் - மருதகாசி. இ) உன்னை அறிந்தால் - எனத் தொடங்கும் பாடல் - கன்னதாசன்.	இலக்கிய வரலாறு - மறுமலர்ச்சி கவிஞர்களின் தமிழ்ப்பணிகள் பாரததேசம் - பாரதியார் நாடெழின் பெருமை - நாமக்கல் கவிஞர் திரைத் தமிழ் : விஞ்ஞானத்தை வளர்க்கப் போறண்டி - உடுமலை நாராயணகவி
II	1. கடமையைச் செய் - மீரா 2. அம்மாவின்-பொய்கள் - ஞானக்கந்தன் 3. செஞ்சுப்பு-செடி - மு.மேத்தா 4. சிங்கவால்-ஞாங்கின்-மரணம் - சிற்பி 5. சுடல்கோள்-2004 - முத்தமிழ்-விழும்பி 6. கரிகிறது தாய்ப்பால் - ஆசார் தமிழ்நாடன் 7. ஐந்தாம் வகுப்பு 'அ' பிரிவு - நா. முத்துக்குமார் 8. ஹைகூ. கவிதைகள் - 15 கவிதைகள்	இலக்கிய வரலாறு - புதுக்கவிதையின் தோற்றமும் வளர்ச்சியும் ஒப்பிலாத சமுதாயம் - அப்துல் ரகுமான் கன்னிமாடம் - மு.மேத்தா மலையாளக் காற்று - சிற்பி
III	1. ஒரு கதையும்-கொஞ்சம்-கள்ளிப்பாலும் - தாமரை 2. நீரில் அலையும் முகம் - அ. வெண்ணிலா 3. தொட்டிச்-செடி - இளம்பிறை 4. ஏனிந்த வித்தியாசங்கள் - மல்லிகா	தொலைந்து போனேன் - தாமரை தற்காதல் - பொன்னி வைரமுத்து புதைபுண்ட வசிக்கை - சுசந்தி சுப்ரமணியன்
IV	1. வேப்பமரம் - ந.சிச்சுமரத்தி 2. அக்ஷை - புதுமைப்பித்தன் 3. ஒருபிடி-சோறு - ஜெயகாந்தன் 4. காய்ச்சமரம் - சி.ராஜநாராயணன் 5. நீராணி - பாபா 6. குதிரை-மசால்-தூத்தா - ச.வேணுகோபால்	இலக்கிய வரலாறு - சிறுகதையின் தோற்றமும் வளர்ச்சியும் கனகாம்பரம் - கு.ப.ராஜகோபாலன் ஆற்றங்கரைப் பின்னையார் - புதுமைப்பித்தன் பொம்மை - ஜெயகாந்தன் காட்டில் ஒரு மான் - அம்பை வேட்டை - சூர்யகாந்தன்
V	அ. இலக்கியவரலாறு 1. மறுமலர்ச்சி கவிஞர்களின் தமிழ்ப்பணிகள் 2. புதுக்கவிதையின் தோற்றமும் வளர்ச்சியும் 3. சிறுகதையின் தோற்றமும் வளர்ச்சியும் ஆ.இலக்கணம்:1.வல்லினம் மிகும், மிகா இடங்கள் (ஒற்றுப்பிழை நீக்கி எழுதுதல்) 2. ர,ற,ல, ழ, ள,ண, ந,ன வேறுபாடு (ஒலிப்பு நெறி , சொற்பொருள் வேறுபாடு அறிதல்) இ. படைப்பாக்கப் பயிற்சி 1. கவிதை, சிறுகதை எழுதுதல்	இலக்கிய வரலாற்றுப் பகுதி அந்தந்த அலகுகளுக்குத் தகுந்தாற் போல் மாற்றி அமைக்கப்பட்டுள்ளது.

PERCENTAGE OF SYLLABUS REVISED:

44 %

COURSE FOCUS ON:

Skill Development

Entrepreneurial Development

Employability

Innovation

Intellectual Property Right (IPR)





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BoS

13<sup>th</sup>

## Syllabus Revision

Faculty: Biosciences

Board: Clinical Laboratory Technology

Semester : I

Course Code/ Name: 221TL1A1HA/ PART – I - HINDI – I : MODERN LITERATURE

Unit	Existing	Changes
I	गद्य - नूतन गद्य संग्रह (जय प्रकाश) पाठ 1- रजिया पाठ 2- मक्रील पाठ 3- बहता पानी निर्मला पाठ 4- राष्ट्रपिता महात्मा गाँधी	-
II	कहानी कुंज- डॉ वी.पी. 'अमिताभ'(पाठ 1-4)	-
III	व्याकरण : शब्द विचार ( संज्ञा, सर्वनाम, कर्मक, विशेषण)	व्याकरण : शब्द विचार ( संज्ञा, सर्वनाम, विशेषण)
IV	अनुच्छेद लेखन	-
V	अनुवाद अभ्यास-III (केवल अंग्रेजी से हिन्दी में) (पाठ 1 to 10)	-

PERCENTAGE OF SYLLABUS REVISED: 25 %

COURSE FOCUS ON:

- |  |   |
|--|---|
| <input checked="" type="checkbox"/> Skill Development      | <input checked="" type="checkbox"/> Entrepreneurial Development |
| <input checked="" type="checkbox"/> Employability          | <input checked="" type="checkbox"/> Innovation                  |
| <input type="checkbox"/> Intellectual Property Right (IPR) |   |





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13<sup>th</sup>

## Syllabus Revision

Faculty: Biosciences

Board: Clinical Laboratory Technology

Semester : I

Course Code/ Name: 221TL1A1FA / PART – I - FRENCH – I : Grammar, Translation and Civilization

Unit	Existing			Changes		
I	<b>Objectifs de Communication</b> <ul style="list-style-type: none"> <li>• Saluer</li> <li>• Enter en contact avec quelqu'un.</li> <li>• Se presenter.</li> <li>• S'excuser</li> </ul>	<b>Tâche</b> En cours de cuisine, premiers contacts avec les membres d'un groupe	<b>Activités de réception et de production orale</b> <ul style="list-style-type: none"> <li>• Comprendre des personnes qui se saluent.</li> <li>• Échanger pour entrer en contact, se présenter, saluer, s'excuser.</li> <li>• Communiquer avec <i>tu</i> ou <i>vous</i>.</li> <li>• Comprendre les consignes de classe</li> <li>• Épeler son nom et son prénom. Computer jusqu'à 10.</li> </ul>	-		
II	<b>Objectifs de Communication</b> <ul style="list-style-type: none"> <li>• Demander de se presenter.</li> <li>• Présenter quelqu'un.</li> </ul>	<b>Tâche</b> Dans la classe de français, se presenter et remplir une fiche pour le professeur.	<b>Activités de réception et de production orale</b> <ul style="list-style-type: none"> <li>• Comprendre les informations essentielles dans un échange en milieu professionnel.</li> <li>• Échanger pour se presenter et présenter quelqu'un.</li> </ul>	-		
III	<b>Objectifs de Communication</b> <ul style="list-style-type: none"> <li>• Exprimer ses goûts.</li> </ul>	<b>Tâche</b> Dans un café, participer à une soirée de rencontres rapides et remplir de taches d'appréciation.	<b>Activités de réception et de production orale</b> <ul style="list-style-type: none"> <li>• Dans une soirée de rencontres rapid comprendre des personnes qui échantent sur elles et sur leurs goût</li> <li>• Comprendre une personne qui parler des goûts de quelqu'un d'autre.</li> </ul>	-		
IV	<b>Objectifs de Communication</b> <ul style="list-style-type: none"> <li>• Présenter quelqu'un</li> </ul>	<b>Tâche</b> Dans un café, participer à une soirée de rencontres rapides et remplir de taches d'appréciation	<b>Activités de réception et de production orale</b> <ul style="list-style-type: none"> <li>• Exprimer ses goûts.</li> <li>• Comprendre une demande laissée sur un répondeur téléphonique.</li> <li>• Parler de ses projets de week-end.</li> </ul>	Demander à quelqu'un de faire quelque chose. Demander poliment. Parler d'actions passées.	Organiser un programme d'activités pour accueillir une personne importante.	Comprendre une personne demande un service à quelqu'un. Demander à quelqu'un de faire quelque chose. Imaginer et raconter au passé à partir de situations dessinées.
	Autoévaluation du module I Page 40 – Préparation au DELF A1 page 42			Tu veux bien? Page 46		
V	Demander à quelqu'un de faire quelque chose. Demander poliment. Parler d'actions passées.	Organiser un programme d'activités pour accueillir une personne importante.	Comprendre une personne demande un service à quelqu'un. Demander à quelqu'un de faire quelque chose. Imaginer et raconter au passé à partir de situations dessinées.	Make in Own Sentences		
Tu veux bien? Page 46						

PERCENTAGE OF SYLLABUS REVISED : 25 %

COURSE FOCUS ON:

- |  |   |
|--|---|
| <input checked="" type="checkbox"/> Skill Development      | <input checked="" type="checkbox"/> Entrepreneurial Development |
| <input checked="" type="checkbox"/> Employability          | <input checked="" type="checkbox"/> Innovation                  |
| <input type="checkbox"/> Intellectual Property Right (IPR) |   |





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## Syllabus Revision

Faculty: Biosciences

Board: Clinical Laboratory Technology

Semester : I

Course Code/ Name: 221TL1A1MA / PART - I - MALAYALAM - I : MODERN LITERATURE

Unit	Existing	Changes
I	Novel : Alahayude penmakkaal	Novel : Pathummayude Adu
II	Novel : Alahayude penmakkaal	Novel : Pathummayude Adu
III	Short Story : Nalinakanthi	-
IV	Short Story : Nalinakanthi	-
V	Composition & Translation	Expansion of ideas, General Essay and Translation

PERCENTAGE OF SYLLABUS REVISED: 50%

COURSE FOCUS ON:

- |  |   |
|--|---|
| <input checked="" type="checkbox"/> Skill Development      | <input checked="" type="checkbox"/> Entrepreneurial Development |
| <input checked="" type="checkbox"/> Employability          | <input checked="" type="checkbox"/> Innovation                  |
| <input type="checkbox"/> Intellectual Property Right (IPR) |   |





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13<sup>th</sup>

## Syllabus Revision

Faculty: Biosciences

Board: Clinical Laboratory Technology

Semester: I

Course Code/ Name: 221EL1A1EA- Core Course: Professional English I

PERCENTAGE OF SYLLABUS REVISED: 100%

COURSE FOCUS ON:

- |                                     |                                    |                                     |                             |
|-------------------------------------|------------------------------------|-------------------------------------|-----------------------------|
| <input checked="" type="checkbox"/> | Skill Development                  | <input checked="" type="checkbox"/> | Entrepreneurial Development |
| <input checked="" type="checkbox"/> | Employability                      | <input type="checkbox"/>            | Innovation                  |
| <input type="checkbox"/>            | Intellectual Property Rights (IPR) |                                     |                             |





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13<sup>th</sup>

## Syllabus Revision

Faculty: Biosciences

Board: Clinical Laboratory Technology

Semester: I

Course Code/ Name: 223MB1A1AA – Environmental studies

Unit	Existing	Changes
I	Introduction to Environmental studies & Ecosystems: Multidisciplinary nature of environmental studies; components of environment – atmosphere, hydrosphere, lithosphere and biosphere. Scope and importance; Concept of sustainability and sustainable development. Ecosystem - Structure and function of ecosystem; Energy flow in an ecosystem: food chain, food web and ecological succession. Case studies of the following ecosystems: Forest ecosystem, Grassland ecosystem, Desert ecosystem, Aquatic ecosystems (ponds, streams, lakes, rivers, oceans, estuaries).	
II	Natural Resources: Renewable and Non-renewable Resources: Land Resources and land use change; Land degradation, soil erosion and desertification. Deforestation: Causes and impacts due to mining, dam building on environment, forests, biodiversity and tribal populations. Water: Use and overexploitation of surface and ground water, floods, droughts, conflicts over water (international & inter-state). Heating of earth and circulation of air; air mass formation and precipitation. Energy resources: Renewable and non-renewable energy sources, use of alternate energy sources, growing energy needs, case studies.	
III	Biodiversity and Conservation: Levels of biological diversity: genetic, species and ecosystem diversity; Biogeography zones of India; Biodiversity patterns and global biodiversity hot spots. India as a mega-biodiversity nation; Endangered and endemic species of India. Threats to biodiversity: habitat loss, poaching of wildlife, man-wildlife conflicts, biological invasions; Conservation of biodiversity: In-situ and Ex-situ conservation of biodiversity. Ecosystem and biodiversity services: Ecological, economic, social, ethical, aesthetic and informational value.	
IV	Environmental Pollution, Environmental Policies & Practices: Environmental pollution: types, causes, effects and controls; Air, water, soil, chemical and noise pollution. Nuclear hazards and human health risks. Solid waste management: Control measures of urban and industrial waste. Pollution case studies. Climate change, global warming, ozone layer depletion, acid rain and impacts on human communities and agriculture. Environment Laws: Environment Protection Act; Prevention & Control of Pollution Act – Air & Water. Wildlife Protection Act; Forest Conservation Act; International agreements: Montreal and Kyoto protocols and conservation on Biological Diversity (CBD). The Chemical Weapons Convention (CWC). Nature reserves, tribal population and rights, and human, wildlife conflicts in Indian context.	
V	Human Communities and the Environment & Field Work : Human population and growth: Impacts on environment, human health and welfare. Carbon-foot-print. Resettlement and rehabilitation of project affected persons; case studies. Disaster management: floods, earthquakes, cyclones and landslides. Environmental movements: Chipko, Silent valley, Bishnois of Rajasthan. Environmental ethics: Role of Indian and other religions and cultures in environmental conservation. Environmental communication and public awareness case studies (e.g., CNG vehicles in Delhi). Visit to an area to document environmental assets; river/forest/flora/fauna, etc. Visit to a local polluted site – Urban/Rural/Industrial/Agricultural. Study of common plants, insects, birds and basic principles of identification. Study of simple ecosystems-pond, river, Delhi Ridge, etc.	Population explosion – Family Welfare Programmes Role of Information Technology in Environment and human health. Role of the Colleges, Teachers and Students in village adoption towards clean, green and make in villages in various aspects.

PERCENTAGE OF SYLLABUS REVISED:

33 %

COURSE FOCUS ON:



Skill Development



Entrepreneurial Development



Employability



Innovation



Intellectual Property Rights (IPR)





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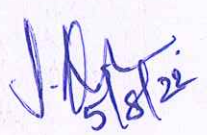

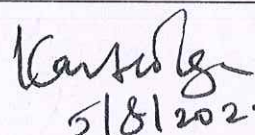



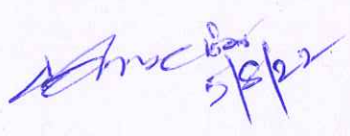
APPROVAL

AY 2022-23

### ATTENDANCE OF THE THIRTEENTH BOARD OF STUDIES MEETING

Faculty: Biosciences

Board: Clinical Lab Technology

S. No.	Name	Position	Signature
1	Dr.S.Kokila Assistant Professor & Head Department of Clinical Lab Technology Dr. N. G. P. Arts and Science College, Coimbatore	Chairman	 5/8/22
2	Dr.K.R.Muthusami Chief Biochemist, Deptment of Biochemistry KMCH Institute of Laboratory Medicine KMCH, Coimbatore - 641 048.	Member (Subject Expert) VC Nominee	 5/8/2022
3	Dr. T.M. Kartikeyan Professor, Department of Pathology KMCH Institute of Health Sciences & Research, Coimbatore - 641 014.	Member (Subject Expert)	 5/8/2022
4	Dr. S.Gayathri Devi Professor, Department of Biochemistry Biotechnology & Bioinformatics Avinashilingam University Coimbatore - 641043	Member (Subject Expert)	
5	Dr.R.Ragunathan Director, Centre for Bioscience and Nanoscience Research Coimbatore - 641021	Member (Industry Expert)	 5/8/22
6	M. Vasanth Kumar Assistant Professor, Department of Criminology , CMS College of Science and Commerce ,Coimbatore .	Alumni	 5/8/22
7	Dr.A. Adhiselvam Associate Professor & Head i/c Department of Information Technology Dr. N. G. P. Arts and Science College, Coimbatore	Co-opted Member	 5/8/22

8	Ms.M. Vinitha III B.Sc. CLT Dr.N.G.P. Arts and science College	Student Representatives	<i>ry.V - f</i>
9	Dr.C.Hemalatha Assistant Professor Dept of CLT Dr.N.G.P.Arts and science College	Member	<i>Hemalatha 5/8/22</i>
10	Dr.M.Thiruselvi Assistant Professor Dept of CLT Dr.N.G.P.Arts and science College	Member	<i>Thiruselvi 5/8/22</i>
11	Dr.S.Sasikala Assistant Professor Dept of CLT Dr.N.G.P.Arts and science College	Member	<i>Sasikala 5/8/22</i>
12	Dr.K.Anbalagan Assistant Professor Dept of CLT Dr.N.G.P.Arts and science College	Member	<i>S. Anbalagan 5/8/22</i>

*J. Anbalagan  
5/8/22*

BoS Chairman/HoD  
Department of Clinical Laboratory Technology  
Dr. N. G. P. Arts and Science College  
Coimbatore - 641 048

