Annexure – I

CREDIT FRAMEWORK STRUCTURE

Semester		I	II	III	IV	V	VI	VII	VIII	Total Credits
Basic Science Course	BSC/ESC	7	7	-	-	-	-	-	-	14
Engineering Science Course		6	6	-	-	-	-	-	-	12
Program Core Course (PCC)	Program Courses	2	2	13	10	7	4	6		44
Program Elective Course (PEC)		-	-	-	-	4	6	6	4	20
Multidisciplinary Minor (MDM)	Multidisciplinary Courses	-	-	2	3	3	3	3	-	14
Open Elective (OE) Other than a particular program		-	-	-	-	2	3	3	-	08
Vocational and Skill Enhancement Course (VSEC)	Skill Courses	-	2	1	1	2	2	-	-	08
Ability Enhancement Course (AEC -01, AEC-02)	Humanities Social Science and Management (HSSM)	1	1	-	-	2	-	-	-	04
Entrepreneurship/Economics/Management Courses		-	-	2	2	-	-	-	-	04
Indian Knowledge System (IKS)		2	-	-	-	-	-	-	-	02
Value Education Course (VEC)		-	-	2	2	-	-	-	-	04
Research Methodology	Experiential Learning Courses	-	-	-	-	-	-	-	4	04
Comm. Engg. Project (CEP)/ Field Project (FP)		-	-	-	2	-	-	-	-	02
Project		-	-	-	-	-	2	2	-	04
Internship/OJT		-	-	-	-	-	-	-	12	12
Co-curricular Courses (CC)	Liberal Learning Courses	2	2	-	-	-	-	-	-	04
Total Credits (Major)		20	20	20	20	20	20	20	20	160

Chairman - BoS	Dean – Academics	July 2026 Date of Release	NEP 4.0 Version	Applicable for 2026-27

ST. VINCENT PALLOTTI COLLEGE OF ENGINEERING & TECHNOLOGY, NAGPUR

(An autonomous institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

B. Tech. Scheme of Examination & Syllabus 2026-27

Computer Science and Engineering (Data Science)

GROUP I: SEMESTER I

SrNo	Course Category	CourseCode	Course Title	Hours per Week			Credits	Maximum Marks				Minimum Passing Marks	No of Hours for ESE
				L	T	P		Mid-Sem Examination	Continual Assessment	End Sem Examination	Total		
1.	BSC	**26DS101T**	Engineering Chemistry	**2**	**-**	**-**	**2**	**10**	**10**	**30**	**50**	**23**	**1.5**
2.	BSC	**26DS101P**	Engineering Chemistry Lab	**-**	**-**	**2**	**1**	**-**	**25**	**25**	**50**	**25**	**-**
3.	BSC	**26DS102T**	Linear Algebra and Calculus	**3**	**-**	**-**	**3**	**20**	**20**	**60**	**100**	**45**	**3**
4.	BSC	**26DS102P**	Linear Algebra and Calculus Lab	**-**	**-**	**2**	**1**	**-**	**25**	**25**	**50**	**25**	**-**
5.	ESC	**26DS103T**	Logic building using C	**2**	**-**	**-**	**2**	**10**	**10**	**30**	**50**	**23**	**1.5**
6.	ESC	**26DS103P**	Logic building using C Lab	**-**	**-**	**2**	**1**	**-**	**25**	**25**	**50**	**25**	**-**
7.	ESC	**26DS104T**	Digital Electronics	**2**	**-**	**-**	**2**	**10**	**10**	**30**	**50**	**23**	**1.5**
8.	ESC	**26DS104P**	Digital Electronics Lab	**-**	**-**	**2**	**1**	**-**	**25**	**25**	**50**	**25**	**-**
9.	PCC	**26DS105P**	Data Science workshop – I Lab	**-**	**-**	**4**	**2**	**-**	**25**	**25**	**50**	**25**	**-**
10.	AEC	**26DS106P**	Business Communication Skills – I Lab	**-**	**-**	**2**	**1**	**-**	**25**	**25**	**50**	**25**	**-**
11.	IKS	**26DS107T**	Indian Knowledge Systems #	**2**	**-**	**-**	**2**	**10**	**10**	**30**	**50**	**23**	**1.5**
12.	CC	**26DS108P**	Co-curricular Courses - I	**-**	**-**	**4**	**2**	**-**	**50**	**-**	**50**	**25**	**-**
Total				**11**	**-**	**18**	**20**	**60**	**260**	**330**	**650**	**-**	**-**

Chairman - BoS	Dean – Academics	July 2026	NEP 4.0	Applicable for 2026-27
		Date of Release	Version	

FIRST SEMESTER

Course Code	Course Name	Th	Tu	Pr	Credits	Evaluation			
						MSE	CA	ESE	Total
26DS101T	Engineering Chemistry	2	-	-	2	10	10	30	50

Course Objectives	Course Outcomes
This course is intended 1. To acquaint the students with the basic phenomenon, concepts, knowledge and understanding of the fundamental principles of chemistry. 2. To develop necessary skills and abilities to succeed in engineering education, research, Industry, environment and social context.	**Students will be able to** 1. Develop innovative ideas for use of advanced materials in sustainable development. 2. Evaluate the role of nanotechnology in industrial applications such as energy storage, medicine, electronics, and environmental remediation. 3. Apply the Basic concepts of Electrochemistry in engineering 4. Evaluate the performance and advantages of Li-Ion battery, fuel cell and photochemical cell in terms of efficiency, working mechanism, and applications. 5. Apply the concept of e-waste management and analyze its environmental impact

Unit I Advanced Material **[10 Hrs]**

Introduction-Need for Development, Biodegradable polymers- PLA, PCL - Synthesis, Properties and Applications, Conducting Polymers Polypyrole, PANI Synthesis, Properties and Applications, Liquid Crystal Polymers- Types, Properties and Applications, Composite Materia Constituents- Matrix & Reinforcement, Classification of composite, Advantages & Industrial Applications of Composite materials, Nanomaterials Definition, Carbon Nanotubes, Industrial Applications of Nanotechnology

Unit II Electrochemical Phenomenon & Battery Technology **[10 Hrs]**

Introduction- brief idea about Electrochemical & Galvanic series, Electrolytic & Electrochemical Cell,
Battery- Primary, Secondary & Reserve batteries- Advantages & Applications,
Li Ion Battery, H_2O_2 Fuel Cell, Photochemical Cell - Construction, Working, Advantages & Applications. Electrolysis of water to produce hydroge

Unit III Chemistry of Electronic waste **[10 Hrs]**

Introduction. E- Waste; composition and generation. Types of E-waste, E waste hazardous properties, Effects of pollutant (E-waste) on human healt and surrounding environment, Basic principles of E waste management, Component of E waste management- Domestic e-waste disposal, E-wast Control measures- Reduction of waste at source, Segregation & Recycling, Sustainable material recovery & its applications

Text Books

S.N	Title	Authors	Edition	Publisher
1	Text Book of Engineering Chemistry	S.S. Dara,	New	S. Chand and Company Ltd. New Delhi.
2	Textbook of Engineering Chemistry	P.C. Jain and Monica Jain	Sixth	Dhanpat Rai and Sons, New Delhi.
3	E-waste Recycling and Management	Anish Khan, Inamuddin, Abdullah M. Ansiri	Ist	Springer

Reference Books

S.N	Title	Authors	Edition	Publisher
1	A Text book of Engineering Chemistry	Shashi Chawla	Ist	DhanpatRai& Sons, New Delhi
2	Applied Chemistry	N. Krishnamurthy:P. Vallinavagam. And K. Jeysubramanian	Ist	TMH

SEMESTER I

Course Code	Course Name	Th	Tu	Pr	Credits	Evaluation		
						CA	ESE	Total
26DS101P	Engineering Chemistry Lab	-	-	2	1	25	25	50

Course Objectives	Course Outcomes
1. To Make the students aware about various techniques available for Analysis of Material. 2. To Impart the skill of handling chemicals and apparatus.	1. Prepare chemical compounds, materials, and standard solutions using conventional laboratory techniques and demonstrate good laboratory practices. 2. Utilize electrochemical and conductometric methods for the quantitative estimation of chemical substances such as acids and metals. 3. Analyze industrial effluents to determine the concentration of pollutants using quantitative chemical analysis methods 4. Interpret water quality parameters and estimate metal concentrations through virtual simulations and demonstration-based experiments.

Expt. No.	Experiments based on Performance (Any SIX)
1	Synthesis urea Formaldehyde resin
2	Synthesis of Conducting polymer (Polyaniline).
3	Determination of heavy metal from industrial effluent by complexometry method.
4	Determination of heavy metal from industrial effluent by colorimeter
5	Preparation of Natural fibre reinforcement Composite material
6	Determination of strength of the given acid Conductometrically
7	Determine electrochemical equivalent of Cu metal using Faradays law
8	Preparation of different solutions (Molar, Normal & Percent solution)
	Virtual Experiment - Any ONE
9	Determination of Hardness from Tap water/ Well water/ Sea water
10	Determination of Alkalinity of Water Sample using Warder method
	Demonstration - Any ONE
11	Determination of turbidity from industrial effluent.
12	Determination of pH by using different methods.
	Activity - Any ONE
1	Visit to e-waste recycling plant
2	Study of Air /Water Pollution Level at different Sites in Nagpur City.
3	Study of nearby industrial chemicals and safety measures

Text Books

S.N	Title	Authors	Edition	Publisher
1	A Textbook on experiment and calculation in engineering chemistry	S.S. Dara	9th	S.Chand

Reference Books

S.N	Title	Authors	Edition	Publisher
1	Applied Chemistry theory and practical	O.P. Virmani and A.K. Narular	Ist	New Age International
2	Laboratory Manual on Engineering Chemistry	Dr. Subdharani	Ist	Dhanpat Rai Publishing

Chairman - BoS	Dean – Academics	July 2026	NEP 4.0	Applicable for 2026-27
		Date of Release	Version	

FIRST SEMESTER

Course Code	Course Name	Th	Tu	Pr	Credits	Evaluation			
						MSE	CA	ESE	Total
26DS102T	Linear Algebra and Calculus	3	-	-	3	20	20	60	100

Course Objectives	Course Outcomes
This course is intended to 1. Develop students' conceptual understanding and computational skills in Matrix Algebra and Differential Equations for solving mathematical problems. 2. Enable learners to apply Multivariate and Vector Calculus for analyzing functions of several variables and modeling physical phenomena.	**Students will be able to** 1. Apply matrix concepts to solve and analyze linear systems. 2. Analyze and solve engineering problems involving eigenvalues, eigenvectors, and functions of matrices. 3. Solve multivariate calculus problems involving partial derivatives, Jacobians, and optimization. 4. Apply first order and higher order differential equations to solve problems in engineering. 5. Evaluate vector calculus operations and their physical applications.
Unit I	**[9Hrs]**
Matrix Algebra: Introduction to matrices, Rank of a matrix, Consistency of system of linear equations, Linear and orthogonal transformations, Linear dependence of vectors.	
Unit II	**[9Hrs]**
Matrices: Characteristics equation, Cayley- Hamilton Theorem**,** Eigen values and Eigen vectors, Reduction to diagonal form, Reduction of quadratic form to canonical form by orthogonal transformation, Sylvester's theorem.	
Unit III	**[9Hrs]**
Multivariate Calculus: Functions of several variables and their partial derivatives, Chain rule and total differential coefficient, Jacobians and its properties, Maxima –Minima of functions of two variables, Lagrange's method of undetermined multipliers.	
Unit IV	**[9Hrs]**
Differential Equations: First order and first degree differential equations: Linear, Higher order differential equations with constant coefficients, Method of variation of parameters, Cauchy's homogeneous linear equation, Applications of differential equations.	
Unit V	**[9Hrs]**
Vector Calculus: Vector differentiation, Gradient, Directional derivatives, Divergence and Curl with their physical interpretation Solenoidal and Irrotational motions, Scalar potential, Line integral & Work done.	

Text Books

S.N	Title	Authors	Edition	Publisher
1	Higher Engineering Mathematics	B. S. Grewal	38th	Khanna Publishers, New Delhi.
2	Higher Engineering Mathematics	H. K. Das & Er. Rajnish Verma	1st	S. Chand & CO. Pvt. Ltd., New Delhi

Reference Books

S.N	Title	Authors	Edition	Publisher
1	Higher Engineering Mathematics	B.V. Ramana,	11th reprint, 2010.	Tata McGraw Hill New Delhi
2	A Text Book of Engineering Mathematics	Peter O' Neil	8^{th}	Thomson Asia Pvt. Ltd., Singapore.

Chairman - BoS	Dean – Academics	July 2026 Date of Release	NEP 4.0 Version	Applicable for 2026-27

FIRST SEMESTER

Course Code	Course Name	Th	Tu	Pr	Credits	Evaluation		
						CA	ESE	Total
26DS102P	Linear Algebra and Calculus Lab	--	--	2	1	25	25	50

Course Objectives	Course Outcomes
This Course is intended to: 1. To develop students' computational proficiency in solving problems related to linear algebra, calculus, and differential equations using SageMath with an emphasis on symbolic computation and numerical methods. 2. To enable students to apply SageMath for solving and visualizing problems in vector calculus through effective use of graphical and analytical tools.	**Students will be able to:** 1. Apply fundamental matrix operations and solve systems of linear equations using Sage Math. 2. Apply concepts of linear algebra to compute eigenvalues and eigenvectors of matrices using SageMath. 3. Evaluate partial derivatives of multivariable functions and solve first and higher-order ordinary differential equations using SageMath. 4. Analyze and visualize vector calculus operations including gradient, divergence, curl, and evaluate line and surface integrals using SageMath.

List of Experiments:-

Experiment No.	List of Experiment
1	To Implement basic matrix operations using SageMath's symbolic computation tools.
2	To check the consistency of a system of linear equations using augmented matrices and SageMath.
3	To solve systems of linear equations using various within the SageMath environment.
4	To determine eigenvalues and eigenvectors of matrices using built-in SageMath functions.
5	To implement and validate the Cayley-Hamilton Theorem with the aid of SageMath.
6	To compute partial derivatives of various orders for multivariable functions using SageMath.
7	To solve first-order and higher-order differential using SageMath's differential equation solvers.
8	To find maxima and minima of functions of two variables using partial derivatives and the second derivative test implemented in SageMath.
9	To compute and visualize vector differential operations using SageMath.
10	To compute vector integrals in SageMath.

Text Books

S.N	Title	Authors	Edition	Publisher
1	Computational Mathematics with SageMath	Paul Zimmermann	1st	SIAM Publications Library.
2	Basics of SageMath : Mathematics(Practicals)	Varun Kumar	1st	Amazon KDP

Reference Books

S.N	Title	Authors	Edition	Publisher
1	Mathematics-SageMath Software System	Indrajeet Varhadpande & Dr. Kirti Sahu	1st	Himalaya Publication
2	Applied Mathematics Using SageMath	Dr. Kirti Sahu & Dr. Sajid Anwar	1st	Himalaya Publication

FIRST SEMESTER

Course Code	Course Name	Th	Tu	Pr	Credits	Evaluation			
						MSE	CA	ESE	Total
26DS103T	Logic building using C	2	-	-	2	10	10	30	50

Course Objectives	Course Outcomes
This course is intended 1. To enable students to design algorithms and flowcharts for solving basic computational problems systematically. 2. To develop students' ability to apply control structures and arrays for logical problem-solving 3. To equip students to integrate advanced C programming concepts	**Students will be able to** 1. Design algorithms and flowcharts to solve simple computational problems. 2. Apply control structures to enhance logical thinking and implement one-dimensional and two-dimensional arrays for efficient data handling. 3. Integrate the concepts of strings, functions, recursion, pointers, and structures in C programming for problem-solving.

Unit I	**[10 Hrs]**
Introduction to Programming & Logic Building-What is Programming language, Problem Solving technique **Algorithms and Flowcharts:** Characteristics, Advantages and Disadvantages of algorithms, Characteristics of flowcharts, flowchart symbols, Advantages and Disadvantages of flowcharts. **Introduction to C Language:** Structure of a C program C Character Set, Identifiers, Keywords, Data Types, Constants, Variables, Declarations, Expressions, Statements, and Symbolic Constants.	
Unit II	**[10 Hrs]**
Operators and Expressions: Arithmetic Operators, Unary Operators, Relational and Logical Operators, Decision Control Statement-if, if-else, Nested if-else statement, Switch case, Loops and Writing and evaluation of conditionals and consequent branching. **Introduction to Array** : Need for arrays, Definition and syntax of 1D arrays, Memory layout and indexing, Initialization methods, **1D Array Operations:** Traversal (printing elements), Input and output using loops, **2D Array**: Declaration and initialization.	
Unit III	**[10 Hrs]**
Introduction to strings: Basic string operations (strlen, strcpy, etc.) **Functions:** User defined and Library Functions, Parameter passing in functions, call by value, Passing arrays to functions: call by reference, Recursion. Introduction to Structures and Pointers	

Text Books

S.N	Title	Authors	Edition	Publisher
1	Programming in ANSI C	E. Balguruswamy	1	Tata Mc-Graw Hill
2	Programming Techniques Through 'C'	M. G. Venkateshmurthy	1	Pearson
3	Let Us 'C'	Yashwant P. Kanetkar	1	BPB

Reference Books

S.N	Title	Authors	Edition	Publisher
1	The Complete Reference C	Herbert Schildt	4	Tata Mc-Graw Hill
2	The 'C' programming language	Kernighan and Ritchie	1	Prentice Hall

Chairman - BoS	Dean – Academics	July 2026	NEP 4.0	Applicable for 2026-27
		Date of Release	Version	

FIRST SEMESTER

Course Code	Course Name	Th	Tu	Pr	Credits	Evaluation		
						CA	ESE	Total
25DS103P	Logic building using C Lab	-	-	2	1	25	25	50

Course Objectives	Course Outcomes
This course is intended 1. To provide hands-on experience in writing C programs for solving real-world computational problems. 2. To strengthen logical thinking through the use of control structures, functions, and modular programming. 3. To familiarize students with advanced concepts like structures, arrays, and parameter passing techniques in C.	**Students will be able to** 1. Implement programs using arithmetic operations and control structures to solve computational problems. 2. Develop programs using functions, including parameter passing techniques and recursion. 3. Apply structures and arrays to organize and manage data effectively in C programs.

Expt. No.	Title of the experiment
1	To develop a program for performing basic arithmetic operations using operators.
2	To design a program to calculate the electricity bill based on units consumed and rate per unit.
3	To implement a program to determine the maximum of three numbers using decision control statements.
4	To create patterns using conditional and looping statements to enhance logical thinking.
5	To develop a calculator program using the switch-case statement for multiple operations.
6	To demonstrate swapping of values using both call by value and call by reference techniques.
7	To implement functions by writing a program to calculate the factorial of a number.
8	To apply structures by creating a program to store and display student information.

Text Books

S.N	Title	Authors	Edition	Publisher
1	Programming With C	Byron S. Gottfried	2	Schaum Series
2	How to solve it by Computer	R.G. Dromey	1	Pearson Education

Reference Books

S. N	Title	Authors	Edition	Publisher
1	Programming and Problem Solving	M. Sprankle	2	Pearson Education

FIRST SEMESTER

Course Code	Course Name	Th	Tu	Pr	Credits	Evaluation			
						MSE	CA	ESE	Total
26DS104T	Digital Electronics	2	-	-	2	10	10	30	50

Course Objectives	Course Outcomes
This course is intended 1. To acquire the basic knowledge of digital logic levels 2. Application of knowledge to understand digital electronics circuits. 3. To impart how to design Digital Circuits.	**Students will be able to** 1. Represent numerical values in various number systems 2. Analyze and design the knowledge of: logic gates, boolean algebra, karnaugh map. 3. Analyze and design digital combinational circuits , sequential digital circuits.

Unit I	**[10Hrs]**
Number systems & codes: Binary Number base conversion, Octal & hexadecimal numbers, complements, signed binary numbers, binary codes-BCD codes, gray codes, ASCII Character Code, Codes	
Unit II	**[10Hrs]**
Introduction to Boolean Algebra , Basic Logic gates: Canonical & standard form, Karnaugh Maps (K-Maps), Combinational Logic: Combinational Circuits; Introduction to Binary Adder-subtractor, Multiplexers and demultiplexers	
Unit III	**[10Hrs]**
Decoders, Encoders, Sequential Circuits Sequential Logic Circuits: RS, Clocked RS, D, JK, Master Slave JK, T Flip-Flops and conversion of Flip-Flops	

Text Books

S.N	Title	Authors	Edition	Publisher
1.	Digital Design	M. Morris Mano, Michael D. Ciletti	5	Pearson Education
2.	Digital Electronics: Principles, Devices and Applications	Anil K. Maini	2	John Wiley & Sons, Ltd

Reference Books

S. N	Title	Authors	Edition	Publisher
1.	Digital Fundamentals –A Systems Approach	Thomas L. Floyd	1	Pearson
2.	Fundamentals of Digital Circuits	Anand Kumar	4	PHI Learning Pvt. Ltd

FIRST SEMESTER

Course Code	Course Name	Th	Tu	Pr	Credits	Evaluation		
						CA	ESE	Total
26DS104P	Digital Electronics Lab	-	-	2	1	25	25	50

Course Objectives	Course Outcomes
This course is intended 1. To introduce the basic concepts and laws involved in the Boolean algebra and logic families and digital circuits. 2. To familiarize with the different logic gates, and 3. Combinational and sequential circuits utilized in the different digital circuits and systems.	**Students will be able to** 1. Understand the Combinational Circuits using Logic Gates. 2. Design Arithmetic and Logical Circuits. 3. Demonstrate understanding of flip-flops & Sequential circuits

Expt. No.	Title of the experiment
1	To verify the truth table of different logic gates.
2	Implement and verify the NAND & NOR gates as universal gates
3	To verify De-Morgan's theorems.
4	Construct and verify the truth tables for Half Adder and Full Adder circuits.
5	Verify the truth table of one bit and two bit comparator using logic gates
6	Examine and validate the truth tables for Multiplexers and Demultiplexers.
7	Assess and verify the truth tables for different types of flip-flops.
8	Seat belt warning system using basic AND & NOT gates

Text Books

S.N	Title	Authors	Edition	Publisher
1	Digital Integrated Electronics	Herbert Taub	1	McGraw Hill.
2	Digital Logic and Computer Design	Morris Mano	2	PHI

Reference Books

S. N	Title	Authors	Edition	Publisher
1.	Digital Electronics Logic and System	James Bingnell, Robert Donovan	1	McGraw Hill.

FIRST SEMESTER

Course Code	Course Name	Th	Tu	Pr	Credits	Evaluation		
						CA	ESE	Total
26DS105P	Data Science Workshop – I Lab	-	-	4	2	25	25	50

Course Objectives	Course Outcomes
This course is intended 1. Perform Basic of Excel. 2. Implement Basics and advance functions for calculation. 3. Demonstrate how to organize raw data using Excel. 4. Design and implement Statistical Analysis using Excel. 5. Develop Advance Excel for descriptive and predictive analysis.	**Students will be able to** **1.** Learn a foundational understanding of Excel, including data entry, formatting, and navigation. **2.** Able to perform basic arithmetic operations and use fundamental Excel functions **3.** Learn to organize raw data by sorting, filtering, and using Excel's data validation tools.. **4.** Students will be able to visualize data using charts, graphs.

Expt. No.	Title of the experiment
	Basic Excel
1	Introduction to MS Excel files, Workbooks, Worksheets, Columns and Rows.
2	To Implement different functions in Excel.
3	To perform data analysis using Pie Charts, Bar Chart, Column Chart, Line and Column Chart.
4	To perform Data Validation on number, Date, Time, Text and list
	Advanced Excel
5	Using what if Analysis Tools i)Goal seek ii)Scenario Manager iii)Data table
6	To create and format a pivot table in MS Excel.
7	To search for a value in one column or row based on a given value in another column using Vlookup and Hlookup in Excel.
8	Using Excel Functions Calculate the standard deviation, variance, co-variance of given Data

Text Books

S.N	Title	Authors	Edition	Publisher
1	Microsoft Excel 2019 Bible	Michael Alexander, Richard Kusleika, and John Walkenbach	1	Wiley
2	Excel 2019: The Missing Manual	Matthew MacDonald	1	O'Reilly Media

Reference Books

S. N	Title	Authors	Edition	Publisher
1.	Excel 2019 All-in-One For Dummies	Alexander Dmitrienko and David L. Poole	1	John Wiley & Sons
2.	Statistical Analysis: Microsoft Excel 2016	Peter Bruce and Andrew Bruce	1	Que Publishing

FIRST SEMESTER

Course Code	Course Name	Th	Tu	Pr	Credits	Evaluation		
						CA	ESE	Total
26DS106P	Business Communication Skills – I Lab	-	-	2	1	25	25	50

Course Objectives	Course Outcomes
To develop students' ability to apply, analyze, and evaluate LSRW skills in business and professional communication settings.	**Students will be able to:** 1. Apply effective pronunciation, grammar, and voice modulation in professional communication. 2. Analyze spoken and written texts using listening and reading comprehension skills for professional and competitive contexts. 3. Create clear and professional business correspondence using appropriate format, tone, and language. 4. Evaluate communication strategies to demonstrate confidence and clarity in structured presentations and group discussions.

Expt. No.	Title of the experiment
1	Pronunciation and Voice Modulation
2	Self-Introduction
3	Grammar
4	Business Correspondence
5	Reading Comprehension for Competitive Exam
6	Listening Skills (Speeches of great Personalities)
7	Presentation Skills
8	Group Discussion

Reference Books:

S. N	Title	Authors	Edition	Publisher
1	Communication Skills for Engineers	C. Muralikrishna & SunitaMIshra	2nd Edition, 2011	Pearson India Education Services
2	Communication Skills	Dr. L. Bisen, Dr. B. Agrawal & Dr. N. T. Kalyani	1st Edition, 2021	Himalaya Publishing House
3	Barron's IELTS Superpack	Lin Lougheed	2012	Barrons Educational Series