

FOUR YEAR UNDER GRADUATE PROGRAM(2024-28)

DEPARTMENT OF MATHEMATICS

COURSE CURRICULUM -2024-25

Part A: Introduction			
Program: Bachelor in Science (Certificate/Diploma/Degree/Honors)		SEMESTER-II/IV/V/VI	Session: 2024-2025
1	Course Code	MASEC-1	
2	Course Title	Introduction to LATEX	
3	Course Type	Skill Enhancement Course (SEC)	
4	Pre-requisite (if, any)	Basic understanding of document editing, familiarity with markup languages, and willingness to learn LaTeX syntax and formatting conventions.	
5	Course Learning Outcome (CLO)	This Course will enable the students to: <ul style="list-style-type: none"> ➤ Make different Alignments in a document and an Application for a job. ➤ Generate Bio-Data, and Table Structures. ➤ Create Mathematical Statements using LaTeX. ➤ Prepare Articles and Inserting Pictures. ➤ Prepare Question paper and PowerPoint presentation in LaTeX format. 	
6	Credit Value	2 Credits (1C + 1C)	<i>Credit = 15 Hours – Theoretical learning and = 30 Hours Laboratory or Field learning/Training</i>
7	Total Marks	Max. Marks: 50	Min Passing Marks: 20

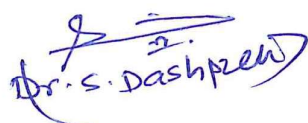
Part B: Content of the Course		
Total No. of Teaching-learning Periods:		
Theory – 15 Periods (15 Hrs) and Lab. or Field learning/Training 30 Periods (30 Hours)		
Unit	Topics (Course contents)	No. of Period
I	Basics: Introduction to LaTeX, Text, Symbols and Commands, Document layout and organization, displayed text. Mathematical formulas, Graphics inclusion and color. Floating tables and figures, User customizations. Beyond the Basics: Document management, Postscript and PDF, Beamer, Frames, Bibliographic data bases and BiBTeX, Presentation material.	15
II	Practicals Based on- 1.Introduction to TeX and LaTeX- Creating and typesetting a simple LaTeX document, 2.Adding basic information to documents- Environments, Footnotes, Sectioning, Displayed material. 3.Accents and symbols- Mathematical typesetting (elementary and advanced): Subscript/ Superscript, Fractions, Roots, Ellipsis.	30

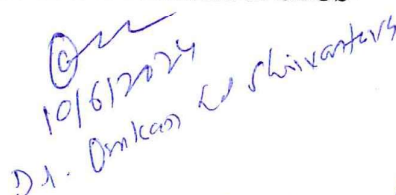
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	<p>4. Mathematical symbols- Arrays, Delimiters, Multiline formulas,</p> <p>5. Putting one thing above another- Spacing and changing style in math mode.</p> <p>6. Pictures and graphics in LaTeX- Simple pictures using PSTricks, Plotting of functions.</p> <p>7. Beamer, Frames- Setting up beamer document, Enhancing beamer presentation</p> <p>8. Bibliographic data bases and BiBTeX- Create and manage bibliographic references using BiBTeX</p>	
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Part C - Learning Resource		
Text Books, Reference Books, Other Resources		
Text Books Recommended-		
1. Murugan Swaminathan, Latex For Beginners, Publisher: Notion Press		
Reference Books Recommended		
2. Dilip Datta, Latex in 24 Hours A Practical Guide for Scientific Writing, Springer		
E-resources:		
Free Online LaTeX Editor- https://www.overleaf.com/		
PART -D: Assessment and Evaluation		
Suggested Continuous Evaluation Methods:		
Maximum Marks: 50 Marks		
Continuous Internal Assessment (CIA): 15 Marks		
End Semester Exam (ESE): 35 Marks		
Continuous Internal Assessment (CIA): (By Course Coordinator)	Internal Test / Quiz-(2): 10 & 10 Assignment/Seminar + Attendance - 05 Total Marks - 15	Better marks out of the two Test / Quiz + obtained marks in Assignment shall be considered against 15 Marks
End Semester Exam (ESE):	Laboratory / Field Skill Performance: On spot Assessment A. Performed the Task based on learned skill - 20 Marks B. Spotting based on tools (written) - 10 Marks C. Viva-voce (based on principle/technology) - 05 Marks	Managed by Coordinator as per skilling

Name and signature of convener & members of CBOS-


Dr. S. Dashpreet


19/6/2024
Dr. Anil Kumar


Dr. Rakesh

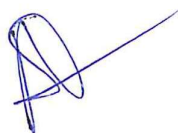

Dr. Ak


Dr. P. K. Sahu


Dr. Anil


Dr. Anil


Dr. Anil


Dr. Anil


Dr. Anil