Lecture Plan

Name of the College: Government College of Arts, Science and Commerce, Sanquelim-Goa

Name of Faculty: Rohit R. Redkar Subject: Mathematics

Paper code: MAT-241 Technical Typesetting

Academic year: 2025-26

Using Latex Program: B.Sc.

Semester: III Total Lectures: 60

Division: -

Course Objectives: To make students competent in using LaTeX for typesetting any technical document and making impressive presentations.

- 1) To Create and typeset a LaTeX document.
- 2) To Build documents containing Mathematics.
- 3) To experiment with pictures and graphics in LaTeX.
- 4) To Prepare impressive beamer presentations and typeset question papers using the exam class.

Student Learning Outcome: Student will be able to

- 1) Create and typeset a LaTeX document.
- 2) Build documents containing Mathematics.
- 3) Experiment with pictures and graphics in LaTeX.
- 4) Prepare impressive beamer presentations and typeset question papers using the exam class.

Month	Lecture From	Lecture To	No. of lectures allotted	Topic, Subtopic to be covered	Exercise/ Assignment	ICT Tools	Reference books
July	30/06/2025	05/07/2025	4	Basics of Latex, TexStudio, MikTex, Overleaf, Typing a basic document in LaTeX – trying out the effect of spaces, line breaks, empty lines		Smart Board	LATEX Tutorials A PRIMER Indian TEX Users Group
	07/07/2025	12/07/2025	4	Writing special characters in text, adjusting fonts, shapes and styles, adding watermark, sectioning and paragraphs.		Smart Board	LATEX Tutorials A PRIMER Indian TEX Users Group
	14/07/2025	19/07/2025	4	Exploring simple documents – customizing margins, page numbers, quotations, horizontal lines, using vspace and hspace, flushleft/flushright commands, enumeration and itemize environments		Smart Board	LATEX Tutorials A PRIMER Indian TEX Users Group
	21/07/2025	26/07/2025	4	Understanding the various document classes such as article/report/thesis/book and experimenting with each class to understand the output.		Smart Board	LATEX Tutorials A PRIMER Indian TEX Users Group
July August	28/07/2025	02/08/2025	4	Customizing tables, minipage environment, inserting graphics		Smart Board	LATEX Tutorials A PRIMER Indian TEX Users Group
August	04/08/2025	09/08/2025	4	Typesetting accents and Greek symbols, Basic mathematical		Smart Board	LATEX Tutorials A PRIMER Indian TEX

				typesetting, Working with Subscript/Superscript, Fractions, Roots, Ellipsis, Mathematical operators, Special characters, Arrays, Delimiters.			Users Group
	11/08/2025	16/08/2025	4 Independ enceDay	Using equation environment, breaking/appropriately writing long equations, typing equations with cases, spaces in math mode, text in math mode	ISA	Smart Board	LATEX Tutorials A PRIMER Indian TEX Users Group
	18/08/2025	23/08/2025	4	Typing of matrices, infinite series, continued fractions, and boxed equations, and the like.		Smart Board	LATEX Tutorials A PRIMER Indian TEX Users Group
	25/08/2025	30/08/2025	0 Chaturthi Break 26/08/25 To 01/09/25				
September	02/09/2025	06/09/2025	4	Using the theorem environment to typeset definitions, remarks, lemmas, theorems, corollaries, etc, Cross referencing – using tag commands, hyperref environment, adding hyperlinks to text.		Smart Board	LATEX Tutorials A PRIMER Indian TEX Users Group
	08/09/2025	13/09/2025	4	Creating bibliographic database and exploring various bibliographic environments to create bibliography.		Smart Board	LATEX Tutorials A PRIMER Indian TEX Users Group

				Generating the Table of Contents.			
	15/09/2025	20/09/2025	4	Making presentations using Beamer in LaTeX.		Smart Board	LATEX Tutorials A PRIMER Indian TEX Users Group
	22/09/2025	27/09/2025	4	Making use of the exam class to prepare question papers in LaTeX.		Smart Board	Using the exam document class Philip Hirschhorn
September October	29/09/2025	04/10/2025	0 Gandhi Jayanti / Dussehra				
October	06/10/2025	11/10/2025	4	Revision	ISA		
	13/10/2025	18/10/2025	4	Practical Exam			

* Assessment Rubrics

Component	Max Marks
ISA 1	5
ISA 2	5
Practical	40
Project	Nil
Semester End	
Exam	Nil