

Semester Lecture Plan

Name of the college: Government college of Arts Science and Commerce ,Sankhali						
Name of Faculty: Ms. Nirmiti Shankar Naik		Subject: Mathematics				
Paper code: MAT – 241 (Practical)		Program/Course: SY B.Sc.			Division:	
Academic year: 2024- 2025		Semester:III			Total Lectures: 60	
Course Objectives: To make students competent in using LaTeX for typesetting any technical document and making impressive presentations.						
Expected course Outcome: On successfully completing the course a student will have knowledge about: <ol style="list-style-type: none"> 1. Create and typeset a LaTeX document using different document classes. 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 						
Student learning outcome: The student will be able to, <ol style="list-style-type: none"> 1. Create and typeset a LaTeX document using. 2. Analyze and differentiate various document classes like articles, book, report etc. 3. Build documents containing Mathematics. 4. Experiment with pictures and graphics in LaTeX. 5. Prepare impressive beamer presentations and typeset question papers using the exam class 						
Month	Lectures From: To:	No. of lectu	Topic, Subtopic to be covered	Exercises/ assignment	ICT Tools	Reference books

			res allot ted				
July	15/07/2024	20/07/2024	4	Typing a basic document in LaTeX – trying out the effect of spaces, line breaks, empty lines, writing special characters in text, adjusting fonts, shapes and styles, etc.		Smart board, Computer, Software	L. Lamport : A Documentation Preparation System LATEX User's Guide and Reference Manual, Second Edition, Pearson, 2006
July	22/07/2024	27/07/2024	4	Exploring simple documents – customizing margins, page numbers, quotations, horizontal lines, using vspace and hspace and flushleft/flushright commands, enumeration and itemize environments		Smart board, Computer, Software	L. Lamport : A Documentation Preparation System LATEX User's Guide and Reference Manual, Second Edition, Pearson, 2006
July - August	29/07/2024	3/08/2024	4	Understanding the various document classes like article/report/thesis/book and experimenting with each class to understand the output		Smart board, Computer, Software	L. Lamport : A Documentation Preparation System LATEX User's Guide and Reference Manual, Second Edition, Pearson, 2006
August	5/08/2024	10/08/2024	5	Customizing tables, minipage environment. Typesetting accents and Greek symbols, Basic mathematical typesetting.		Smart board, Computer, Software	L. Lamport : A Documentation Preparation System LATEX User's Guide and Reference Manual, Second

							Edition, Pearson, 2006
August	12/08/2024	17/08/2024	4	Working with Subscript/Superscript, Fractions, Roots, Ellipsis, Mathematical operators, Special characters, Arrays, Delimiters		Smart board, Computer, Software	E. Krishnan : LaTeX Tutorials – A Primer, Indian TeX Users Group, 2003.
August	19/08/2024	24/08/2024	4	Using equation environment, breaking/appropriately writing long equations, typing equations with cases, spaces in math mode, text in math mode.		Smart board, Computer, Software	L. Lamport : A Documentation Preparation System LATEX User’s Guide and Reference Manual, Second Edition, Pearson, 2006
August	26/08/2024	31/08/2024	4	Typing of matrices, infinite series, continued fractions, and boxed equations, and the like.		Smart board, Chalkboard, Software	E. Krishnan : LaTeX Tutorials – A Primer, Indian TeX Users Group, 2003.
Septembe r	2/09/2024	5/09/2024	4	Using the theorem environment to typeset definitions, remarks, lemmas, theorems, corollaries, etc.		Smart board, Computer, Software	E. Krishnan : LaTeX Tutorials – A Primer, Indian TeX Users Group, 2003.

September	16/09/2024	21/09/2024	5	<p>Cross referencing – using tag commands, hyperref environment, adding hyperlinks to text.</p> <p>Graphics in LaTeX(Inserting images) using additional apps like geogebra, latexdraw etc .</p>		Smart board, Chalk board , Software	E. Krishnan : LaTeX Tutorials – A Primer, Indian TeX Users Group, 2003; L. Lamport : A Documentation Preparation System LATEX User’s Guide and Reference Manual, Second Edition, Pearson, 2006
September	23/09/2024	28/09/2024	5	<p>Creating bibliographic database and exploring various bibliographic environments to create bibliography. Generating the Table of Contents</p>		Smart board, Computer, Software	L. Lamport : A Documentation Preparation System LATEX User’s Guide and Reference Manual, Second Edition, Pearson, 2006
September- October	30/09/2024	5/10/2024	4	<p>Drawing simple pictures using PSTricks</p>		Smart board, Computer, Software	E. Krishnan : LaTeX Tutorials – A Primer, Indian TeX Users Group, 2003.
October	7/10/2024	12/10/2024	4	<p>Making presentations using Beamer in LaTeX.</p>		Smart board, Chalk board , Software	L. Lamport : A Documentation Preparation System LATEX User’s Guide and Reference Manual, Second

							Edition, Pearson, 2006
October	14/10/2024	19/10/2024	4	Making use of the exam class to prepare question papers in LaTeX.		Smart board, Chalk board , Software	L. Lamport : A Documentation Preparation System LATEX User's Guide and Reference Manual, Second Edition, Pearson, 2006

*** Assessment Rubrics**

Component	Max Marks
ISA 1	5
ISA 2	5
ISA 3	5
Project	-
Semester End Exam	40