# P.G   DEPARTMENT OF PHYSICS (S.F)

# DEVA MATHA COLLEGE, KURAVILANGAD

### Affiliated to Mahatma Gandhi University, Kottayam



## REPORT

## ON

## ADD-ON COURSE

## Basic Latex

## Conducted for II PG Students

## Academic Year 2021-22

LaTeX is a document preparation system. It is an open-source system that provides numerous facilities for typesetting of the document. It helps in structuring page layout, listing and auto-numbering of sections, tables, figures, generatinga table of contents, managing cross-referencing, citing, and indexing. It is widely used for publishing in many scientific fields like mathematics, statistics, computer science, engineering, chemistry, physics, economics, linguis-tics. It is most often used for technical or scientific documents but it can be used for almost any form of publishing.

Benefits of LATEX

LATEX is an alternative to text editing software like MS Word. It enables to format and typeset complex documents. It helps to write complex mathematical equation, generate tables and prepare list with ease in the desired format. It also helps to structure or format article, document or journal paper and cite references as required by the journal. It is very useful in writing mathematical documents, journal papers and books. Learning LaTeX helps the students and gives them an upper hand in writing research papers, journals, etc. with ease.

## SYLLABUS

**Instructional Hours: 30 hours**

## Objectives

LATEX, an add on course, conducted by P.G Department of Physics gives an introduction to the documentation software LATEX. This course includes basics in writing a document in LATEX and teaches the basic commands for creating the contents of the documents. The course is conducted for Undergraduate and Postgraduate students and is covered in 30 hours with assignments and projects. The course prepares the students to create mathematical documents and helps them to write their final project in LATEX.

# 1 Module 1- Introduction to LATEX                    10 hours

Introduction what is LATEX, history of LATEX, benefits, virtues of open source, separation of form and content, portability, comparing LATEX with other word processor software, installation, introduction to over-leaf Document Structure Document class, page style, page numbering, formatting lengths, parts of a document, creating title - sections - labeling - table of contents, dividing the document. Typesetting text Font effects, coloured text, font sizes, lists, special characters. Practical sessions in LaTeX

## 2 .Module 2- LATEX for Education and Research                10 hours

Introduction Outline for a project report, basic structure of a scientific paper, starting a document in LATEX. Macros Packages, math mode, Latin abbreviations, references for figures- tables- equations- and sections, comments. Document class Book, report, article, thesis, question papers, syllabus. Organization of LATEX files Figures in separate folders, figures: resolution, position, caption, multiple images, videos, tables, algorithms. Practical sessions in LaTeX

## 3. Module 3- LATEX for Communication and Presentation       10 hours

Introduction Methods of communication and presentations : letters, oral and poster presentations, advan-tages of LATEX,Beamer Templates, slide setup, packages, themes, Practical sessions in LaTeX

## Course Outcomes

After the completion of the course the students will be able to

- Identify and understand LATEX as a document preparation system

- Create and design documents in LaTeX and presentations in Beamer

- Handle different types of documents

- Organize documents into different sections, subsections, etc..

- Handle complex mathematical formulae in document

- Expertise in Cross-referencing, bibliography, and Indexing

- Create presentations in beamer
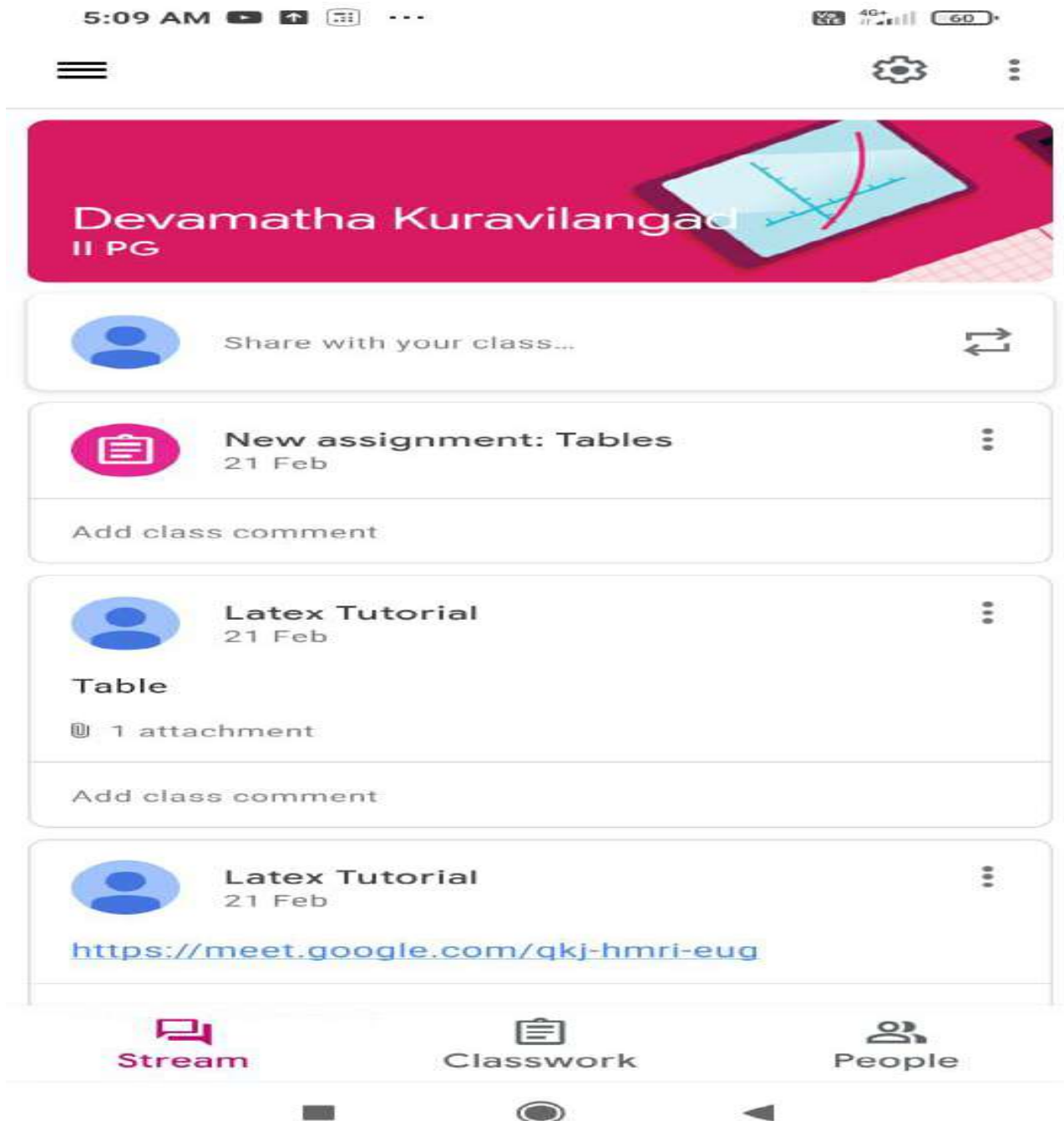
- Make posters using LATEX

## Reference:

• LATEX: A Document Preparation System : User's Guide and Reference Manual, Leslie Lamport,

Duane Bibby, Addison-Wesley, 1994, Michigan

• Math Into LATEX: An Introduction to LATEX and AMS-LATEX, George Gratzer, Birkhauser Boston,

## Resource Person

1. Dr. Anju Babu

Programme Instructor

**Photos of Conducted Live session**

# Attendence Sheet

| Name | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ADITHYA R KRISHNAN | x | x | x | x | x | Ab | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x |
| ALEENA DOMINIC | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x |
| ANJALY VINOD | Ab | Ab | Ab | Ab | Ab | Ab | Ab | x | x | x | x | x | x | x | x | x | x | x | Ab | x | x | Ab | Ab | x | x | x | x | x |
| ANJITHA DAVIS | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x |
| ANSE MARIA TOMY | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x |
| ASHA THOMAS | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x |
| ASWATHI M | x | x | x | Ab | x | x | x | x | x | x | x | x | x | Ab | x | x | x | x | Ab | Ab | Ab | x | Ab | x | x | x | x | x |
| DARVIN DEVASIA | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x |
| DINTO JOY | x | Ab | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x |
| DINU TONY | x | x | x | Ab | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x |
| FEBINA FATHIMA A V N | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x |
| NANDHINI PR | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x |
| NIVIN DEVASIA | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x |

| Name | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RADHIKA A V | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x |
| SANDRA ANTONY | x | x | x | x | x | x | Ab | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x |
| SOORAJ J K S | x | x | x | x | Ab | x | x | x | x | x | x | x | x | x | x | x | x | x | x | Ab | x | x | x | Ab | x | x | x | x | x | x |
| NANDHINI PR | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x |
| SWATHY SASIKUMAR | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x |
| THASLEENA M | x | x | x | Ab | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | Ab | x | Ab | x | x | x | x | x | x | x | x |
| VISHNUPRIYA R HEGDEN | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x |
| ALEENA JOSE | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | x | Ab | x | x | x | x | x | x | x | x | x | x |

# MARK SHEET EXAM CONDUCTED ON 28/03/2022

| S.N | NAME | GRADE SHEET |
|---|---|---|
| 1 | **ADITHYA R KRISHNAN** | A+ |
| 2 | **ALEENA DOMINIC** | A+ |
| 3 | **ANJALY VINOD** | A+ |
| 4 | **ANJITHA DAVIS** | A+ |
| 5 | **ANSE MARIA TOMY** | B+ |
| 6 | **ASHA THOMAS** | A+ |
| 7 | **ASWATHI M** | A+ |
| 8 | **DARVIN DEVASIA** | A |
| 9 | **DINTO JOY** | A+ |
| 10 | **DINU TONY** | A+ |
| 11 | **FEBINA FATHIMA V N** | A+ |
| 12 | **NANDHINI PR** | B+ |
| 13 | **NIVIN DEVASIA** | A+ |
| 14 | **RADHIKA V** | A+ |
| 15 | **SANDRA ANTONY** | A+ |
| 16 | **SOORAJ K S** | A+ |
| 17 | **SREERAJ E** | A |
| 18 | **SWATHY SASIKUMAR** | A |
| 19 | **THASLEENA M** | A+ |
| 20 | **VISHNUPRIYA R HEGDEN** | A+ |
| 21 | **ALEENA JOSE** | A+ |

Sample Certificate

**DEVA MATHA COLLEGE, KURAVILANGAD**
Re-Accredited by NAAC with 'A' Grade
Website:www.devamatha.ac.in, E-Mail:principaldmck@gmail.com

**CERTIFICATE**

This is to certify that _____
has successfully completed the Certificate course titled

conducted by PG Department of Physics, Deva Matha College, Kuravilangad
from February 6 – March 26, 2022 with _____ Grade.

KURAVILANGAD
28-03-2022

DR.ANJU BABU
COURSE CO-ORDINATOR

DR.BRINCY MATHEW
GENERAL CO-ORDINATOR

DR.SUNIL C MATHEW
PRINCIPAL

## Feedback & Students List

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Adithya R Krishnan | II MSc Physics, 20PG101 | Excellent | Excellent | Excellent | Strongly agree | Strongly agree | Strongly agree |
| Aleena Jose | Msc physics 104 | Very good | Very good | Very good | Agree | Strongly agree | Agree |
| Febina Fathima V N | 2nd PG Physics, 113 | Very good | Excellent | Very good | Strongly agree | Strongly agree | Agree |
| Radhika V | 2nd pg physics ,116 | Excellent | Excellent | Excellent | Strongly agree | Strongly agree | Strongly agree |
| Aleena Dominic | Msc physics, 102 | Very good | Very good | Excellent | Agree | Strongly agree | Agree |
| Anjitha Davis | Msc Physics 106 | Very good | Very good | Very good | Agree | Agree | Agree |
| Sooraj K S | MSc Physics, 20PG118 | Excellent | Excellent | Excellent | Strongly agree | Strongly agree | Strongly agree |
| Dinu Tony | MSc.Physics, 112 | Excellent | Excellent | Excellent | Strongly agree | Strongly agree | Strongly agree |
| SREERAJ E | MSc physics 119 | Excellent | Very good | Very good | Agree | Strongly agree | Strongly agree |

| | | | | | Strongly agree | |
|---|---|---|---|---|---|---|---|
| Sandra Antony | 117 | Good | Good | Good | Neutral | Strongly agree | Neutral |
| Nandhini PR | 2nd pg 114 | Good | Good | Good | Agree | Agree | Agree |
| Swathy Sasikumar | 2-M.sc Physics,20pg120 | Very good | Very good | Very good | Agree | Agree | Agree |
| Vishnupriya R Hegden | 2nd Msc Physics , 20PG123 | Excellent | Excellent | Excellent | Strongly agree | Strongly agree | Strongly agree |
| Nivin Devasia | 2 nd P G Physics -115 | Very good | Very good | Very good | Agree | Agree | Agree |
| Anjaly Vinod | 2nd MSc physics 20PG105 | Very good | Very good | Very good | Strongly agree | Strongly agree | Strongly agree |
| Dinto Joy | 2nd M.Sc.Physics, 20PG111 | Excellent | Excellent | Excellent | Strongly agree | Strongly agree | Strongly agree |
| Darvin Devasia | 2 PG Physics ,110 | Very good | Very good | Excellent | Strongly agree | Strongly agree | Agree |
| Asha Thomas | Msc physics ,108 | Very good | Very good | Very good | Strongly agree | Strongly agree | Agree |
| ANSE MARIA TOMY | 2 ND PG PHYSICS 20PG107 | Excellent | Excellent | Excellent | Strongly agree | Strongly agree | Strongly agree |
| | | | | | | | |

**Department course coordinator**

Principal
Deva Matha College
Kuravilangad - 686 633