

2024

**Skill Enhancement Course
LATEX**

Paper Code : SEC0206803

Time : 1 Hour 30 Minutes

Full Marks : 30



(The figures in the margin indicate the full marks for the questions)

1. Answer any *five* of the following questions : 1×5=5
- What is LateX? Give some editors for latex.
 - What do you mean by Preamble?
 - Write the latex codes for union and intersection.
 - What is beamer?
 - Which document class is used for preparing presentation in LateX.
 - Which package is used for creating graphics in LateX document?
 - Which package is used for creating mathematical equations in LateX document?
2. Answer any *five* questions of the following : 2×5=10
- What are the advantages of using LateX?
 - Write the LateX codes for creating–

$$\int_{-\infty}^{\infty} e^{-x^2} dx = \sqrt{\pi}$$

c) What is the purpose of the command `\author{}` and `\title{}` in LaTeX.

d) Find the error in the following code :

```

\documentclass{article}
\begin{document}
\title{MyPage}
\maketitle
\begin{section}
{ This is my page; }
\end{document}

```

e) What is the advantage of using PSTricks?

3. Answer any *three* of the following :

a) Write a LaTeX document containing the following matrices :

$$A = \begin{bmatrix} 1 & 2 \\ 3 & 4 \end{bmatrix} \text{ and } B = \begin{bmatrix} 1 & 0 \\ \alpha & 2\epsilon \end{bmatrix}$$

b) "Let γ_1, γ_2 be piecewise smooth curves in a domain D in C. Show that

$$\int_{\gamma_1 \cup \gamma_2} f dx = \int_{\gamma_1} f dx + \int_{\gamma_2} f dx$$

Write the above statement in LaTeX.

c) What is PSTricks? Draw a circle, square and a triangle in LaTeX.

d) Write the LaTeX code to create the following using table environment

Name	Gender	Date
Driha Jain	Female	20-01-2020
Longbir Engti	Male	19-05-2022
Ram Das	Male	01-01-2021

e) Write a LaTeX code to prepare a presentation containing four slides about any topic of Mathematics.

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5x3=15