

(FOR THE CANDIDATES ADMITTED  
DURING THE ACADEMIC YEAR 2023 ONLY)

23PMS3E1

REG.NO.:

**N.G.M. COLLEGE (AUTONOMOUS): POLLACHI**  
**END-OF-SEMESTER EXAMINATIONS: NOVEMBER-2024**  
**COURSE NAME: M.Sc.-MATHEMATICS**                      **MAXIMUM MARKS: 75**  
**SEMESTER: III**    **TIME: 3 HOURS**

**LATEX**

**SECTION – A**

**(10 X 1 = 10 MARKS)**

**ANSWER THE FOLLOWING QUESTIONS.**

**MULTIPLE CHOICE QUESTIONS.**

**(K1)**

1. The standard TEX program package contains \_\_\_\_\_ fonts in various design sizes.  
a. 75                      b. 73                      c. 71                      d. 72
2. To print the special characters as text, one must give a command consisting of \_\_\_\_\_ plus that character. |  
a. \$                      b. \                      c. %                      d. #
3. The simplest way to correct a wrongly divided word is to include a \_\_\_\_\_ command at the right place within the word.  
a. \>                      b. \=                      c. \-                      d. \\\
4. The tab command \_\_\_\_\_ always moves to the next logical tab stop.  
a. \\\                      b. \-                      c. \<                      d. \>
5. The command \, means \_\_\_\_\_ space.  
a. small                      b. medium                      c. large                      d. negative

**ANSWER THE FOLLOWING IN ONE (OR) TWO SENTENCES.**

**(K2)**

6. Define drivers in text processing format.
7. Define declarations.
8. Explain \mathindent.
9. Write atleast four two-letter font declarations used in LATEX 2.09
10. Write the environments to produce multiline mathematical formulas.

**SECTION – B**

**(5 X 5 = 25 MARKS)**

**ANSWER EITHER (a) OR (b) IN EACH OF THE FOLLOWING QUESTIONS. (K3)**

11. a) Explain classes and packages in LATEX 2.09 and LATEX 2  $\epsilon$   
**(OR)**  
b) Explain the compatibility with LATEX 2.09.
12. a) Describe the types of lengths.  
**(OR)**  
b) Explain the fragile commands.

**(CONTD.....2)**

13.a) Explain the packages which are used to adding features in LATEX file and also explain the style options.

(OR)

b) Explain Paragraph spacing and Paragraph indentation.

14.a) Explain all the declarations for changing the font size in LATEX.

(OR)

b) Explain the standard label in the list environment.

15.a) Explain the mathematical environments in LATEX.

(OR)

b) Describe the Math style parameters in LATEX.

**SECTION – C**

**(5 X 8 = 40 MARKS)**

**ANSWER EITHER (a) OR (b) IN EACH OF THE FOLLOWING QUESTIONS.**

**(K4 (Or) K5)**

16. a) Explain the TEX program, Plain TEX and LATEX on various computers.

(OR)

b) Explain the basics of a LATEX file: Structure of a LATEX document and LATEX processing modes.

17.a) Briefly explain command names and arguments.

(OR)

b) Illustrate all the special characters used in LATEX.

18. a) Describe the page style and within that explain

i). Heading declarations, ii). Page numbering.

(OR)

b) Briefly explain components involved in the table of contents.

19. a) Explain the concepts involved in the centering and indenting procedures.

(OR)

b) Explain the standard footnotes and non-standard footnotes.

20. a) Explain i.) Fraction, ii.) Roots, and iii.) Sums and integrals.

(OR)

b) Explain how to selecting font size in mathematical formulas.

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