NGM COLLEGE (AUTONOMOUS): POLLACHI
END – OF – SEMESTER EXAMINATIONS : DECEMBER - 2022
M.Sc.-MATHEMATICS   MAXIMUM MARKS: 70
III SEMESTER   TIME: 3 HOURS

LATEX

SECTION – A   **(10 X 1 = 10 MARKS)**

ANSWER THE FOLLOWING QUESTIONS.   **(K1)**
MULTIPLE CHOICE QUESTIONS.

1. Text formatting program such as TEX is only concerned with ---------page.
   a) First   b) second   c) third   d) last

2. _____ is a command that changes the values of certain parameter without immediately printing any text.
   a) Declaration   b) body   c) class   d) preamble

3. The ------------------ package is widely used for generating bibliography, because of its Flexible interface for most of the available bibliographic styles.
   a) Math   b) bib   c) nat bib   d) none of these.

4. What is the command to declare the larger font size?
   a) \large   b) \Large   c) LARGE   d) huge

5. A linear BVP homogeneous or non-homogeneous is called a regular BVP if A and B are finite and for all t in [A, B].
   (a) $a(t) = 0$ (b) $a(t) = \infty$ (c) $a(t) \neq 0$ (d) $a(t) = -\infty$.

ANSWER THE FOLLOWING IN ONE (OR) TWO SENTENCES.   **(K2)**

6. When will the text mode be converted into math mode?

7. How many kinds of dashes are used in LATEX and what are they?

8. Explain page style.

9. How many are the environments for producing formatted lists?

10. Write the source code for creating the output $\frac{a}{x-y}$.

SECTION B   **(5 X 4 = 20 MARKS)**

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

11. a) Explain the text commands of LATEX.
                           (OR)
    b) Explain preamble.

ETHICAL PAPER

12. a)   What are the fixed lengths in latex?

(OR)

   b)   What are the reserved characters in LATEX? Explain briefly.

13. a)   Write a syntax for title page.

(OR)

   b)   Write down the LATEX command for the following words in a single line such that between the two words with equal amount of spaces. Explain the corresponding LATEX command.
   Convener, Director, Principal, Secretary.

14. a)   Explain about standard footnotes and non-standard footnotes.

(OR)

   b)   Explain Footnotes and marginal notes.

15. a)   State any five binary operations with explanation.

(OR)

   b)   Write down a LATEX command for the following output.
       i) $\leq$ is reflexive
       ii) $\leq$ is symmetric
       iii) $\leq$ is transitive

SECTION - C   (4 X 10 = 40 MARKS)

ANSWER ANY FOUR OUT OF SIX QUESTIONS
(16th QUESTION IS COMPULSORY AND ANSWER ANY THREE QUESTIONS FROM Qn. No. 17 to 21) K4 & K5

16.   Explain LATEX processing modes.   (K4)

17.   Explain basics of LATEX elaborately.   (K4)

18.   How the Special Characters will be displayed using LATEX commands.   (K4)

19.   Write syntax for page format with page layout parameters.   (K4)

20.   Write down the LATEX command for the following output.

   $\Sigma\ Q_i,\ \int\ f(x)dx,\ \cup_{n=1}\ \ \max_{1\leq i\leq n} x_i, \text{Sup}_{x\in A}\ f(x).$ (K5)

21.   Discuss the command that to be used to display side-by-side formula.   (K4)

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