NTR Government Degree College for Women-Mahabubnagar

Department of Mathematics

Academic Year: 2021-2022

Best Practices: "Math Type"

For the academic year 2021-22 the department of mathematics is planned to implement the "Math Type" concept as a best practice to the students of 3rd year MPC T/m and the faculty of maths.

In this programm Dr T. Vijayalaxmi Asst Prof. dept of mathematics, introduce and practice the students and faculty how to type the mathematical equations and formule by using the "Math Type". It is useful to the faculty in preparation of question paper, Quiz.etc..

It is goeing to implemented in the month of DEC 2021. and the schedule is as follows

I week — Introduction
II week — Practice
III week — Practice
IV week — Sample test.

on 1/12/21

I-Week:→ In this week complete introduction were given to the registered students and faculty about all symbols like $\leq, \pi, \int \frac{\partial}{\partial x}, \phi, \forall \leq, \geq$

Math Type is a graphical editor for mathematical equations, allowing entry with mouse or keyboard

It is a software application created by Design science that allows the creation of mathematical notion for incleusion in desktop and web application

II & III Week:

→ In the 2nd and 3rd week equations and formulas were practised by the students and staff.

To start the Math Type first select math Type as preferred equation editor by going to Pages menu, preferences, then in Equation in Equation preferences selecting to use math Type. To insert equation, go to instert. Equations then type equation in dialog box that appears. When finished close box, and equation will appear in pages document.

by Following the above procedure students practised all type equations such as algebraic, exponential, trigonometric and Ordinary, Partial Differential Equation.

IV - Week!

Finally we conducted a small test in the computer science Lab. on "Math Type".

① P̲ T. Rajeshwari
② Gᴛᴍ G.J. Muralilanth
③ Rᵈ ch. Ravali

(Dr T. Vijayalaxmi)
Head Dept. of Mathematics

PRINCIPAL
N.T.R.G.D.C.(W)
Mahabubnagar.

Name : CH RAVALI

Designation: LECTURER (MATHEMATICS)

1) Sphere Equation : $x^2+y^2+z^2+2ux+2vy+2wz+d=0$
2) Mass, Energy Equation : $E=mc^2$
3) General form of Parabola Equation : $y^2=4ax$
4) $u = \cot^{-1}\left(\dfrac{x+y}{x^2+y^2}\right)$

Submitted

Name : **KALEEDA BEGUM**
Roll No : **20033030468063**
Class : **BSc –II nd Year**

1) $\bar{y}$ is the Linear combination of $\{v_1, v_2 \ldots v_n\}$ then

$\bar{y} = a_1\bar{v_1} + 0_2\bar{v_2} + \ldots\ldots\ldots + an\,\bar{v_n}$

2) General form of ellipse equation : $\dfrac{x^2}{a^2} + \dfrac{y^2}{b^2} = 1$

3) Einstein's Theory of special Realtivity: $E=mc^2$.

4) Wave Equation : $\dfrac{\partial^2 u}{\partial t^2} = C^2 \dfrac{\partial^2}{\partial x^2}$

Name : A SHALINI

Roll No : 20033030468010

Class : BSc –II nd Year

1) $\sec^2\theta - \tan^2\theta = 1$

2) $\frac{d}{dx}(x^n) = nx^{n-1}$

3) Bernoulli's Equation $\frac{dy}{dx} + py = Q \cdot y^n$

4) Circle Equation at the Point (h,k)

$(x-h)^2 + (y-k)^2 = r^2$

G.J. MURALI KANTH

Lecturer in Mathematics, N.T.R GOVT DEGREE COLLEGE, Mahaboob nagar

$1. \sin^2 x + \cos^2 x = 1$

$2. (1+x)^n = 1 + nx + \frac{n(n+1)}{2}x^2 + \ldots$

$3. (a+b)^3 = a^3 + b^3 + 3ab(a+b)$

$4. \frac{d}{dx}(x^n) = nx^{n-1}$

$5. \int \frac{1}{x}dx = \log x + c$

G.J. MURALI KANTH

Lecturer in Mathematics, N.T.R GOVT DEGREE COLLEGE, Mahaboob nagar

1. The roots of the equation $ax^2 + bx + c = 0$ are $x = \dfrac{-b \pm \sqrt{b^2 - 4ac}}{2a}$

2. $(a+b)^n = nc_0 a^n + nc_1 a^{n-1} b + \dots + nc_r a^{n-r} b^r + \dots + nc_n b^n$

3. $(a+b)(a-b) = a^2 - b^2$

4. $\sin(A+B) = \sin A \cos B + \cos A \sin B$

5. $\int x^n dx = \dfrac{x^{n+1}}{n+1} + c$

submitted
GgMuralikanth

Name : Bhagya Rekha.

Roll No : 2003-3030-467-003

Class : BSc –II nd Year

1) Plane Equation : $\dfrac{x^2}{a^2} = \dfrac{y^2}{b^2} + \dfrac{z^2}{c^2} = 1$

2) $u = x^2 + y^2$ then $\dfrac{\partial u}{\partial x} = 2x$

3) Linear Equation : $\dfrac{dy}{dx} + Py = Q$

4) $\sin^2 \theta + \cos^2 \theta = 1$

G.J. MURALI KANTH

Lecturer in Mathematics, N.T.R GOVT DEGREE COLLEGE, Mahaboob nagar

1. $\sec^2 x - \tan^2 x = 1$

2. $nc_r = \dfrac{n!}{r!(n-r)!}$

3. $\displaystyle\int_a^b f'(x)dx = f(b) - f(a)$

4. $e^{\log x} = x$

5. $\displaystyle\lim_{x \to 0} \frac{\sin x}{x} = 1$

Name : P. Kavitha.

Roll No : 2103-3030-468-132

Class : **BSc –II nd Year**

1) Circle Equation : $x^2+y^2+2gx+2fy+c=0$

2) First order, First Degree Differential Equation $\dfrac{dy}{dx} = f(x, y)$

3) Plane equation : $ax+by+cz+d=0$

4) $\displaystyle\int x^n.dx = \frac{x^{n+1}}{n+1}$

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