



SRI MANAKULA VINAYAGAR
ENGINEERING COLLEGE
(AN AUTONOMOUS INSTITUTION)

DEPARTMENT OF MATHEMATICS
NATIONAL MATHEMATICS DAY
ACADEMIC YEAR 2025-2026


SRI MANAKULA VINAYAGAR
ENGINEERING COLLEGE
(AN AUTONOMOUS INSTITUTION)
Madagadipet, Puducherry - 605 107

DEPARTMENT OF MATHEMATICS
CELEBRATES

 **NATIONAL MATHEMATICS DAY**
on Monday, 22nd December 2025 at 10.00 am

Welcomes



Chief Guest
Dr. T. ASIR
Associate Professor
Department of Mathematics
Pondicherry University
Puducherry.

Venue : New Block, II-Floor, ECE - Seminar Hall

Organized by
Department of Mathematics
ALL ARE WELCOME

Content

S.No	Index	Page No
1.	National Mathematics Day 2024- Report	1
2.	Content	2
3.	Permission Letter	3
4.	Circular	4
5.	Program Details	5
6.	PPT,Poster presentation and Mathematical Modelling Event Details and Photo Gallery	6
7.	PPT,Poster presentation and Mathematical Modelling - Prize Winners List	10
8.	Mathematical Skill Test Details	12
9.	Mathematical Skill Test Question paper	13
10.	Mathematical Skill Test Sample Answer Script	14
11.	Mathematical Skill Test-Photo Gallery	15
12.	Mathematical Skill Test-- Prize Winners List	17
13.	Requisition Letter to Chief Guest	18
14.	National Mathematics Day invitation	19
15.	National Mathematics Day program Schedule	20
16.	National Mathematics Day Banner	21
17.	National Mathematics Day- Photos Gallery	22
18.	Sample Certificates	32
19.	Budget	35



Department of Mathematics

15.12.2025
Puducherry

From

Mrs.B.Kavitha
Head of the Department
Sri Manakula Vinayagar Engineering College
Madagadipet,
Puducherry -605 107.

To

The Director cum Principal
Sri Manakula Vinayagar Engineering College
Madagadipet,
Puducherry -605 107.

Subject: Permission to conduct National Mathematics Day -Reg

Respected Sir,

I wish to inform you that, the Department of Mathematics is planned to celebrate “**National Mathematics Day**” on December 22 to mark the birth anniversary of Srinivasa Ramanujan, a renowned Indian Mathematician. The invited Speaker is Dr.T.Asir Associate Professor ,Department of Mathematics,Pondicherry University Puducherry -605 107. In this regards we request you to give permission to conduct the event at ECE Seminar hall on December 23, 10.00 am to 12 pm and also provide Honorarium of Rs.3000 for the speaker . Please consider my request and do the needful sir.

Thanking You.

Yours Sincerely,



(Mrs. B.Kavitha)



Director cum Principal
(Dr.V.S.K.Venkatachalapathy)



CIRCULAR

SMVEC/MAT/2025-26/ 02

Date: 15.12.2025

We are happy to inform that, Every year, 22 December is observed as National Mathematics Day to mark the birth anniversary of Srinivasa Ramanujan, a renowned Indian Mathematician. Mathematics Day is marked to celebrate his works and recognize him as a legend in Mathematics. In this regard, MATH Club of SMVEC conducts Analytical Skill Test, Mathematical Model and Poster Presentation. All the interested students from B.Tech II Year and III Year are invited to participate in the events.

All the Heads are requested to kindly circulate the event details to your department students.

S.No	Event	Topic	Instructions	Date & Time	Remarks
1	Poster Presentation	Any Model related to Mathematics and Engineering	Display and Explain your model or Poster.	18.12.2025	Certificates provided to Best Poster and Best Mathematical Model
2	Mathematical Model			18.12.2025	
3	Analytical Skill Test	Engineering Mathematics	Bring A4 sheet Number of Questions: 25 Maximum Marks: 50 Duration: 2.00 hrs	19.12.2025	Certificates provided to the students those who secure more than 90%

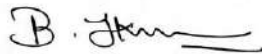
Overall Best Performance candidate will be Awarded - "Excellence in Analytical Skill Test"

Venue: Seminar Hall, 5th Floor, New Block.


Event Coordinators

1. Dr. S. Raja Kumar
2. Dr. T. Poovaragavan
3. Mr.s S.P. Lavanya
4. Mr.s M. Sugasini

Head of the Department


(Mrs.B.Kavitha)

Director cum Principal


(Dr.V.S.K.Venkatachalapathy)

Copy To

All HoDs



SRI MANAKULA VINAYAGAR
ENGINEERING COLLEGE
AN AUTONOMOUS INSTITUTION

Programme Details

S.No	Event	Topic	Instructions	Date & Time	Remarks
1	Poster Presentation & Mathematical Model	Any Model related to Mathematics and Engineering	Display and Explain your model or Poster .	18.12.2025 1.15 pm to 3.10pm	Certificates provided to Best Poster and Best Mathematical Model
2	Analytical Skill Test	Engineering Mathematics	Bring A4 sheet Number of Questions: 25 Maximum Marks : 50	19.12.2025 11.00 am to 12.30 pm	Certificates provided to the students those who secure more than 90%
3	National Mathematics Day Celebration	Ramanujan- An Inspiration to Engineers	-	22.12.2025	-



SRI MANAKULA VINAYAGAR
ENGINEERING COLLEGE
AN ATTENDMENT INSTITUTION

Event : 1

PPT,Poster Presentation &Mathematical Model

Date: 18.12.2025

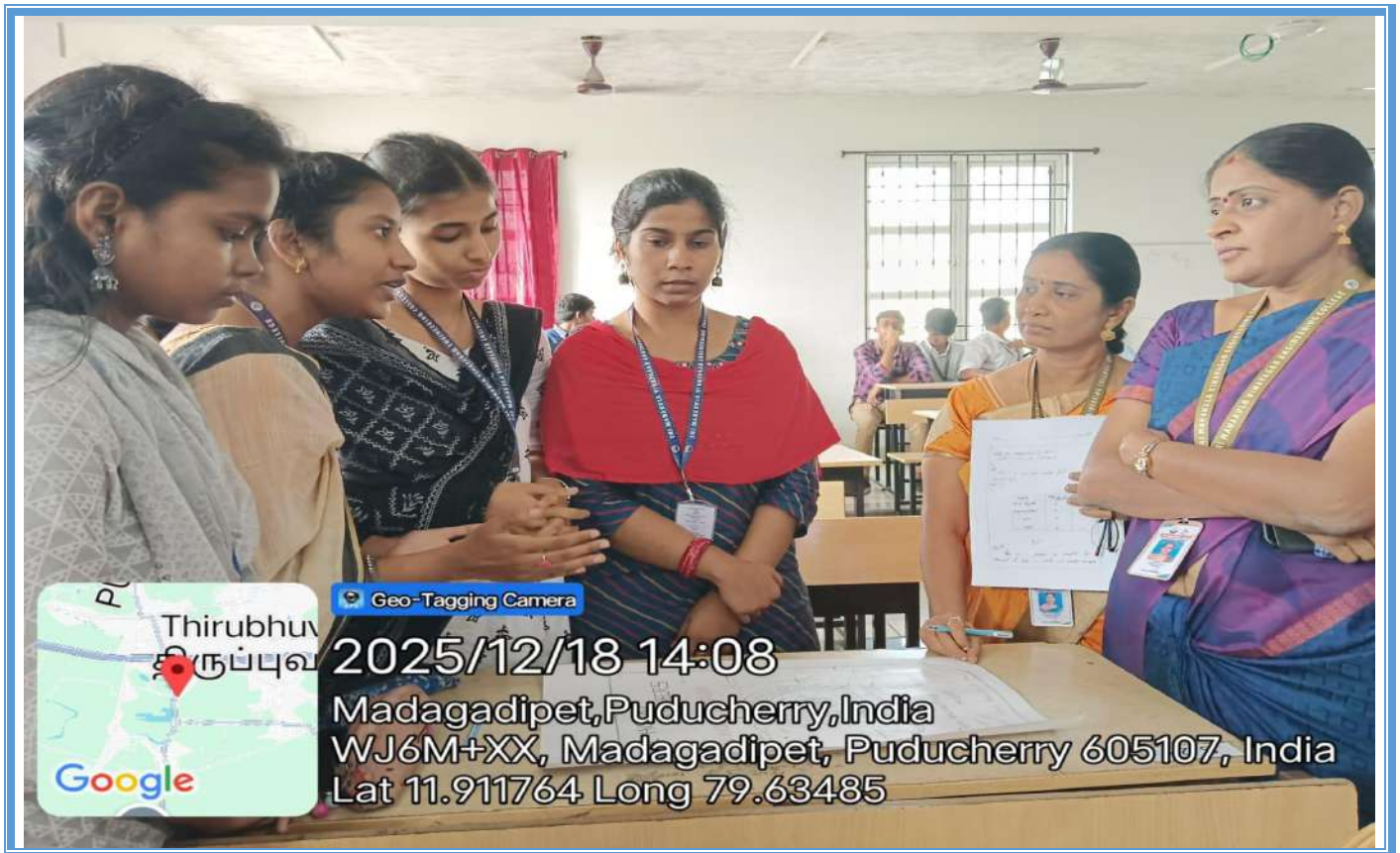
Time: 1.15 pm to 3.10pm

Topic: Any Model related to Mathematics and Engineering

The Total Number of Student Participated :84

PHOTOS GALLERY: MATHEMATICAL MODELLING ,PPT AND POSTER PRESENTATION







MATHEMATICAL MODELING OF SOCIAL MEDIA VIRALITY: A Multi-Component Framework

1. What is Virality

Rapid widespread dissemination with exponential-like growth. Characterized by either low or high reproduction numbers.

$$V(t) \propto A \cdot V(t-1)^B$$

(B > 1 and Strong Positive & Network Effects)

3. Graph Theory

$G = (V, E)$ (Nodes & Edges)

Degree Centrality: $C_D(v) = \frac{\deg(v)}{|V| - 1}$

Betweenness Centrality: $C_B(v) = \sum_{s \neq v \neq t} \frac{1}{\deg(s)\deg(t)}$ (Bridge influence)

4. Probability of spread

$P_{spread} = (1 - P)^{\deg(v)}$ (Basic Model, bridge considered)

Location of spreading path dependent by network topology, degree, and time.

Probability of infection: $P_{infection} = P \cdot (1 - P)^{\deg(v)}$

Global spread: $P_{global} = 1 - \prod_{v \in V} (1 - P_{infection}(v))$

2. How social media posts go viral

Content: Platform, Content ID, Virality

Network: Platform, Virality

Users: User, Virality

Algorithm: Virality

5. Contention Dynamics

$H(t) = H_0 \cdot e^{\lambda t}$

Phase I: Initial slow increase over time, with viral type sustained by retention rates.

6. SIR Model

SIR: $\frac{dS}{dt} = -\beta SI$, $\frac{dI}{dt} = \beta SI - \gamma I$, $\frac{dR}{dt} = \gamma I$

$R_0 = \frac{\beta S_0}{\gamma}$

7. Application

Content Recommendation (Real-World)

Marketing Strategy (Early Detection)

Trend Prediction (Social Media)

Virality Score: $\alpha / (\text{Network Structure} \cdot \text{Transmission Rate} \cdot \text{Energy State} \cdot \text{Social Network})$

Thirubhuvanur
திருப்புவன

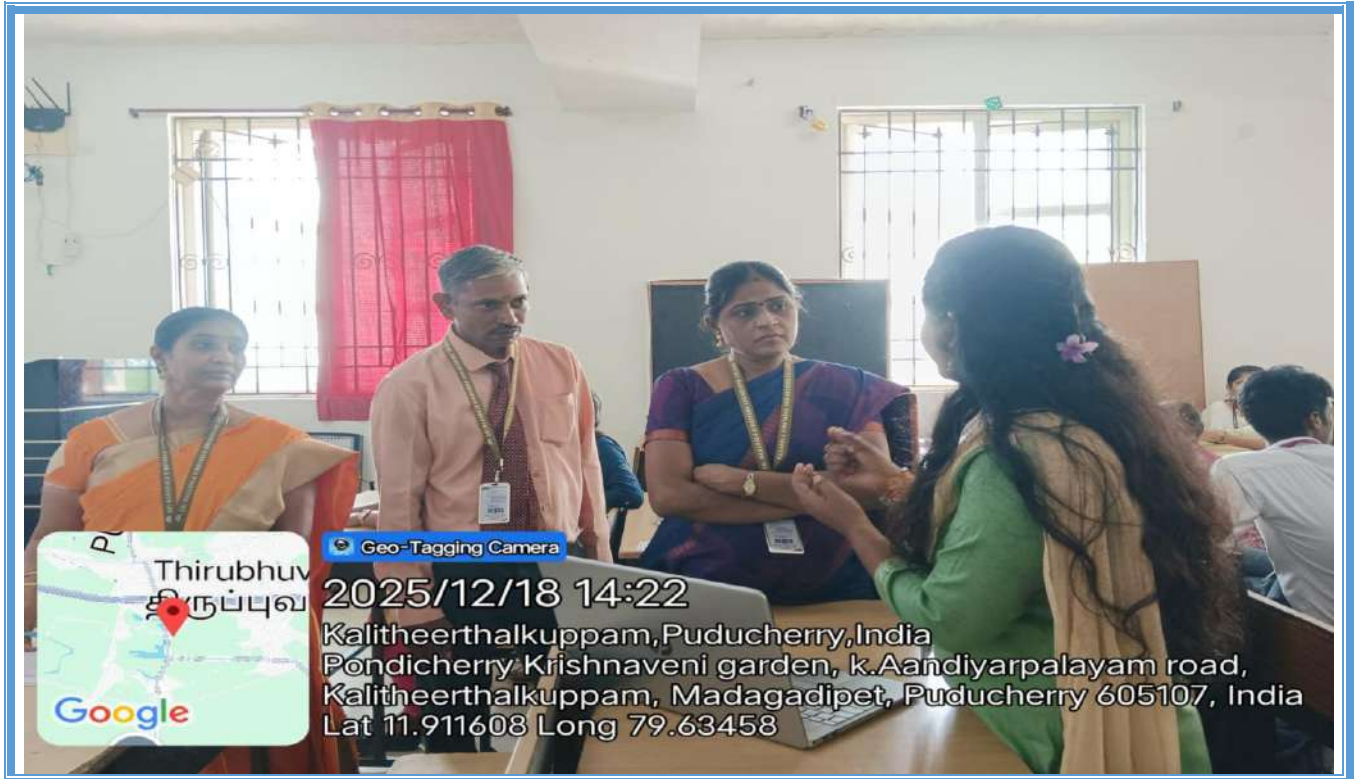
Geo-Tagging Camera

2025/12/18 14:11

Madagadipet, Puducherry, India

WJ6M+XX, Madagadipet, Puducherry 605107, India

Lat 11.911764 Long 79.63485





SRI MANAKULA VINAYAGAR
ENGINEERING COLLEGE
IN AN ASCENDING INSTITUTION

PPT PRESENTATION PRIZE WINNERS

S. No	Name	Department	Year	Prize
1	Mohana Priya R	CSE	II	I
2	Prathiba Senthilkumar	CSE	II	I
3	Soundharaya V	CSE	II	I
4	Nivedha R	AIDS	II	II
5	Sreeram M	ECE	II	II
6	Ruban.S	ECE	II	II
7	Surendhar.V	ECE	II	II
8	Surya Rovan S	ECE	II	II
9	Sathish Kumar M	CSEBS	II	II
10	Sitharth R	CSEBS	II	II
11	RishiKumar S	CSEBS	II	II
12	Sivadhashan C	CSEBS	II	II
13	Keerthadass	AIDS	II	III

POSTER PRESENTATION PRIZE WINNERS

S. No	Name	Department	Year	Prize
1	Harini M	IT	II	I
2	Kabitha.P	IT	II	I
3	Sanjai,V	IT	II	I
4	Ranjitha.M	IT	II	II
5	Sathyapriya L	BME	II	II
6	Sarnita.G	BME	II	II
7	Moogambai.A		II	II
8	Nadine Anthoni ammal		II	II
9	Pavithra.S.H		II	II
10	Dhivya.K		II	II
11	Vedanaga Priya.R	IT	II	III
12	Sugashani.S	IT	II	III

13	Rubi.S	IT	II	III
14	Subhashini M	IT	II	III
15	Harini K	CSEBS	II	III
16	Vinothini D	CSEBS	II	III
17	Parvadhani P	CSEBS	II	III
18	Harini J	CSEBS	II	III
19	Swetha.P	ICE	II	III
20	Keerthana.M	ICE	II	III
21	Afreen.N	ICE	II	III
22	Bhavadharani.R	ICE	II	III

MATHEMATICAL MODEL PRIZE WINNERS

S. No	Name	Department	Year	Prize
1	Devasenathipathi.R	CCE	II	I
2	Mahithapriya.S	CCE	II	I
3	Sri Harshini S	ECE	II	II
4	Subashini D	ECE	II	II
5	Sindhuja Lakshmi S	ECE	II	II
6	Rahul Raj .N	ECE	II	III
7	Karthikeyan.S	ECE	II	III
8	Gowtham R	ECE	II	III
9	Thirumarai Rajan S.R.	ECE	II	III



SRI MANAKULA VINAYAGAR
ENGINEERING COLLEGE
AN ATTENDMENT INSTITUTION

Event:2

Mathematical Skill Test

Date: 19.12.2025

Time: 11.00 am to 12.30 pm

Topic: Engineering Mathematics

The Total Number of Student Participated :164

MATHEMATICAL SKILL TEST MODEL QUESTION PAPER



SRI MANAKULA VINAYAGAR
ENGINEERING COLLEGE
(Approved by AICTE, New Delhi and Affiliated to Ponnaiyasa Memorial
University, Karaikal, New Delhi, Accredited by NAAC with 'A' Grade
MAFACIA/07/ET, PUDUCHERRY - 605 007



Department of Mathematics Mathematical Skill Test-2025

S.NO.	ANSWER ALL THE QUESTIONS	Answers
1	<p>Register Number _____</p> <p>Name of the Student _____</p> <p>Dept/Year/Sec _____ Date: _____</p> <p>Max. Marks: 50</p> <p>Instructions: i). Not allows to write anything in the question paper except in the answer column. ii). The rough work should be done separately A4-sheets iii). Use of calculators and mobile phones is strictly prohibited.</p>	
1	<p>Find $\lim_{x \rightarrow 0} \frac{\sin x}{x} =$</p> <p>a) 0 b) 1 c) ∞ d) -1</p>	
2	<p>Find the next number in the sequence: 2, 6, 12, 20, 30, ?</p> <p>a) 36 b) 40 c) 42 d) 48</p>	
3	<p>(i) Find the product of the eigen value of the matrix $\begin{pmatrix} 2 & 2 & 1 \\ 1 & 3 & 1 \\ 1 & 2 & 2 \end{pmatrix}$ is</p> <p>a) 4 b) 2 c) 5 d) 1</p> <p>(ii) Differentiation is used in physics to find velocity from</p> <p>a) Acceleration b) Force c) Displacement d) Momentum</p>	
4	<p>Find the eigen value of a matrix $A = \begin{pmatrix} 2 & 0 & -1 \\ 0 & 2 & -2 \\ 1 & -1 & 2 \end{pmatrix}$</p> <p>a) 0, 1, 3 b) 1, 1, 4 c) 1, 5, 2 d) 1, 2, 3</p>	
5	<p>(i) Evaluate $\int_0^1 \int_1^2 (x^2 + y^2) y \, dx \, dy$</p> <p>a) $\frac{2}{3}$ b) $\frac{1}{3}$ c) $\frac{17}{12}$ d) $\frac{2}{6}$</p> <p>(ii) Integration is used to find volume of solids using</p> <p>a) Green's theorem b) Gauss theorem c) Definite integrals d) Laplace transform</p>	
6	<p>(i) Find $\int e^{ax} \sin bx \, dx$</p>	

7	<p>a) $\frac{e^{ax}}{a^2+b^2} [a \sin bx - b \cos bx]$ b) $\frac{e^{ax}}{a^2+b^2} [a \sin bx + b \cos bx]$</p> <p>c) $\frac{e^{ax}}{a^2+b^2} [\sin bx - \cos bx]$ d) $\frac{e^{ax}}{a^2+b^2} [\sin bx + \cos bx]$</p> <p>(ii) $\int \frac{dx}{xy}$</p> <p>a) $\frac{\ln x}{y}$ b) $\frac{x}{y}$ c) $\frac{1}{xy}$ d) $\frac{1}{y}$</p> <p>(i) Change the order of integration $\int_1^2 \int_0^y xy \, dy \, dx$</p> <p>a) $\int_0^1 \int_1^2 xy \, dx \, dy - \int_0^1 \int_0^1 xy \, dx \, dy$ b) $\int_0^1 \int_0^2 xy \, dx \, dy - \int_0^1 \int_0^1 xy \, dx \, dy$</p> <p>c) $\int_0^1 \int_0^2 xy \, dx \, dy + \int_0^1 \int_0^1 xy \, dx \, dy$ d) $\int_0^1 \int_0^1 x^2 y \, dx \, dy$</p> <p>(ii) The area enclosed between two curves is calculated using</p> <p>a) Differentiation b) Limits c) Definite integrals d) Partial derivatives</p>	
8	<p>If $\vec{r} = x^2\hat{i} + y^2\hat{j} + z^2\hat{k}$, then find $\nabla \cdot \vec{r}$.</p> <p>a) -1 b) 2 c) 0 d) 3</p>	
9	<p>The stationary points of $f(x, y) = x^3 + 3xy^2 - 15x^2 - 15y^2 + 72x$</p> <p>a) (5, 1), (5, -1), (6, 0), (4, 0) b) (6, 1), (5, 0), (3, 0), (1, 2)</p> <p>c) (5, 5), (1, 1), (0, 0), (6, 6) d) (0, 0), (1, 1), (5, 0), (2, 1)</p>	
10	<p>(i) The solution of $(D^2 - 4D + 4)y = 0$</p> <p>a) $y = (Ax + B)e^x$ b) $y = (Ax + B)e^{2x}$</p> <p>c) $y = A \cos 2x + B \sin 2x$ d) none of this</p>	
11	<p>(i) The degree of the differential equation $\left[1 + \left(\frac{dy}{dx}\right)^2\right] = x \left(\frac{d^2y}{dx^2}\right)$ is</p> <p>a) 3 b) 2 c) 1 d) 2/3</p> <p>(ii) Solve $\int \sec x \tan x \, dx$</p> <p>a) $\sec x + c$ b) $\tan x + c$ c) $\log(\sec x + \tan x)$ d) $\csc x + c$</p>	
12	<p>The number of arbitrary constants in the general solution of differential equation of second order</p> <p>a) 1 b) 0 c) 2 d) 4</p>	
13	<p>If $Z = f(x, y)$, $x = r \cos \theta$, $y = r \sin \theta$ then find $\frac{\partial z}{\partial r}$</p> <p>a) $\sin \theta \frac{\partial z}{\partial x} + \cos \theta \frac{\partial z}{\partial y}$ b) $\cos \theta \frac{\partial z}{\partial x} + \sin \theta \frac{\partial z}{\partial y}$</p> <p>c) $\cos \theta \frac{\partial z}{\partial x} - \sin \theta \frac{\partial z}{\partial y}$ d) $\frac{\partial z}{\partial x} + \frac{\partial z}{\partial y}$</p>	

14	<p>If $f(x) = \begin{cases} kx^3, & 0 < x < 3 \\ 0, & \text{otherwise} \end{cases}$ is a probability density function then the value of k is</p> <p>a) $\frac{1}{5}$ b) $\frac{1}{6}$ c) $\frac{1}{9}$ d) $\frac{1}{12}$</p>	
15	<p>(i) A fair die is rolled twice. The probability that an odd number will follow an even number is _____</p> <p>a) $\frac{1}{2}$ b) $\frac{1}{6}$ c) $\frac{1}{3}$ d) $\frac{1}{4}$</p> <p>(ii) How many zeros are there in the binary representation of the decimal number 25^{10}</p> <p>a) 0 b) 1 c) 2 d) 3</p>	
16	<p>In 5 throws of a die, getting 1 or 2 is a success. The mean number of successes is</p> <p>a) $\frac{1}{5}$ b) $\frac{1}{2}$ c) $\frac{1}{3}$ d) $\frac{9}{5}$</p>	
17	<p>The mean of a normal distribution is 2 and its standard deviation is 2. Then the value of t and t are</p> <p>a) $\left(\frac{2}{\sqrt{2}}, \frac{2}{\sqrt{2}}\right)$ b) $\left(\frac{2\sqrt{2}}{2}, \frac{2}{2}\right)$ c) $\left(\frac{1}{\sqrt{2}}, \frac{1}{\sqrt{2}}\right)$ d) $\left(2\sqrt{\frac{1}{2}}, \frac{1}{2}\right)$</p>	
18	<p>A box contains 3 red and 4 white balls. 7 balls are drawn at random, then the probability of getting 2 white balls is</p> <p>a) $\frac{1}{21}$ b) $\frac{16}{21}$ c) $\frac{4}{28}$ d) $\frac{3}{10}$</p>	
19	<p>If 2 cards are drawn from a well shuffled pack of 52 cards, the probability that they are of the same suit is</p> <p>a) $\frac{1}{2}$ b) $\frac{25}{52}$ c) $\frac{24}{52}$ d) $\frac{25}{162}$</p>	
20	<p>If $P(A) = \frac{1}{4}$, $P(B) = \frac{1}{3}$ and $P(A \cap B) = \frac{1}{12}$, then $P(A \cup B)$ is</p> <p>a) $\frac{1}{3}$ b) $\frac{1}{4}$ c) $\frac{1}{6}$ d) $\frac{1}{9}$</p>	
21	<p>A box contains 2 black balls. Two balls are randomly picked one after another from the box, without replacement. The probability for both balls being red is</p> <p>a) $\frac{1}{6}$ b) $\frac{1}{3}$ c) $\frac{11}{36}$ d) 0</p>	
22	<p>(i) Consider the following system of equations in three real variables X_1, X_2 and X_3</p> $\begin{aligned} 2x_1 - x_2 + 3x_3 &= 1 \\ 3x_1 - 2x_2 - 5x_3 &= 2 \\ -x_1 - 4x_2 + x_3 &= 3 \end{aligned}$ <p>This system of equations has</p> <p>a) No solutions</p>	

23	<p>(i) Find the sum of the eigen value of the matrix $\begin{pmatrix} 1 & 2 & -6 \\ 1 & 2 & 0 \\ 2 & 4 & 2 \end{pmatrix}$ is</p> <p>a) 0 b) 2 c) 4 d) 5</p> <p>(ii) How many triangles are present?</p> <p>▲ ▲▲ ▲▲▲ ▲▲▲▲</p> <p>a) 4 b) 11 c) 20 d) 14</p>	
24	<p>(i) Which of the following is used to solve a system of linear equations?</p> <p>a) Differentiation b) Integration c) Matrices d) Limits</p> <p>(ii) How many rectangles are present?</p> <p>+++++ + + + + + + +++++</p> <p>a) 4 b) 11 c) 20 d) 14</p>	
25	<p>(i) Find the value of m such that $(3x - 2y + z)^2 + (4 + ay - z)^2 + (z - y + 2x)^2$ is solenoidal.</p> <p>a) m = -5 b) m = 2 c) m = 5 d) m = 0</p> <p>(ii) How many squares can be formed using the dots?</p> <p>•••• •••• •••• ••••</p> <p>a) 4 b) 11 c) 12 d) 14</p>	

ANSWER SCRIPT OF THE STUDENT

Email ID: bsech ECE 240681@Sunec.ac.in



SRI MANAKULA VINAYAGAR
ENGINEERING COLLEGE
(Approved by AICTE, New Delhi and Affiliated to Poonjivastu University)
(Accredited by NBA-AICTE, New Delhi, Association of MAAC with 'AC' Grade)
MADANAPALLE, PUDUCHERRY - 605 107



Department of Mathematics
Mathematical Skill Test-2025

Register Number	24UEC150		
Name of the Student	RAVITHARAN.M		
Dept./Year/Sec	ECE / II / C	Date: 14/10/25	Max. Marks: 50
Instructions: (i) Not allows to write anything in the question paper except in the answer column. (ii) The rough work should be done separately A4-sheets (iii) Use of calculators and mobile phones is strictly prohibited.			
S.NO.	ANSWER ALL THE QUESTIONS	Answers	
1	$\lim_{x \rightarrow 0} \frac{\sin x}{x} =$ a) 0 b) 1 c) ∞ d) -1	(b) 1	
2	Find the next number in the sequence: 2, 6, 12, 20, 30, ? a) 36 b) 40 c) 42 d) 48	(c)	
3	(i) Find the product of the eigen value of the matrix $\begin{pmatrix} 2 & 2 & 1 \\ 1 & 3 & 1 \\ 1 & 2 & 2 \end{pmatrix}$ is a) 4 b) 2 c) 5 d) 8 (ii) Differentiation is used in physics to find velocity from a) Acceleration b) Force c) Displacement d) Momentum	(i) (c) (ii) (c)	
4	Find the eigen value of a matrix $A = \begin{pmatrix} 2 & 0 & -1 \\ 0 & 2 & -2 \\ 1 & -1 & 2 \end{pmatrix}$ a) 0, 1, 3 b) 1, 1, 4 c) 1, 5, 2 d) 1, 2, 3	(b)	
5	(i) Evaluate $\int_0^1 \int_0^1 (x^2 + y^2) y \, dx \, dy$ a) $\frac{2}{3}$ b) $\frac{1}{3}$ c) $\frac{17}{12}$ d) $\frac{2}{6}$ (ii) Integration is used to find volume of solids using a) Green's theorem b) Gauss theorem c) Definite integrals d) Laplace transform	(i) (c) (ii) (c)	
6	(i) Find $\int e^{ax} \sin bx \, dx$		

36/50

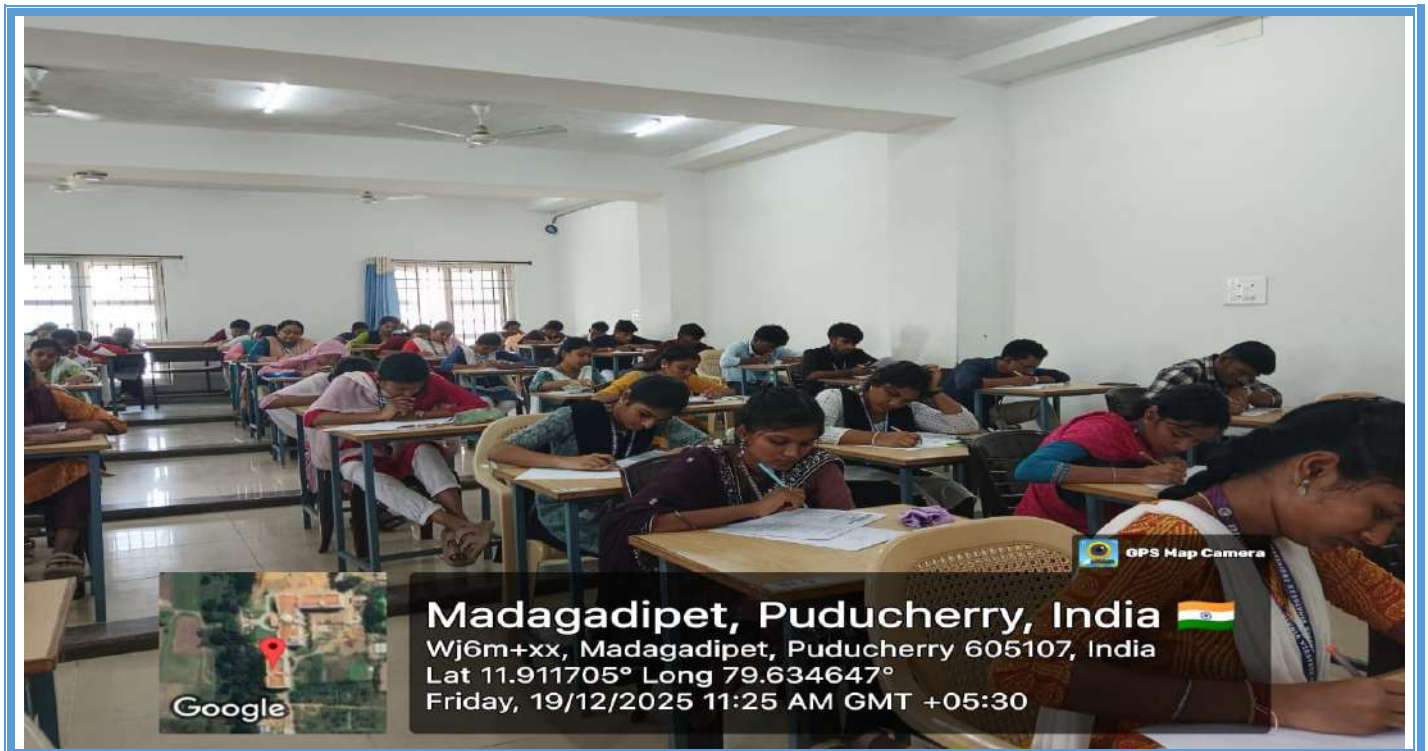
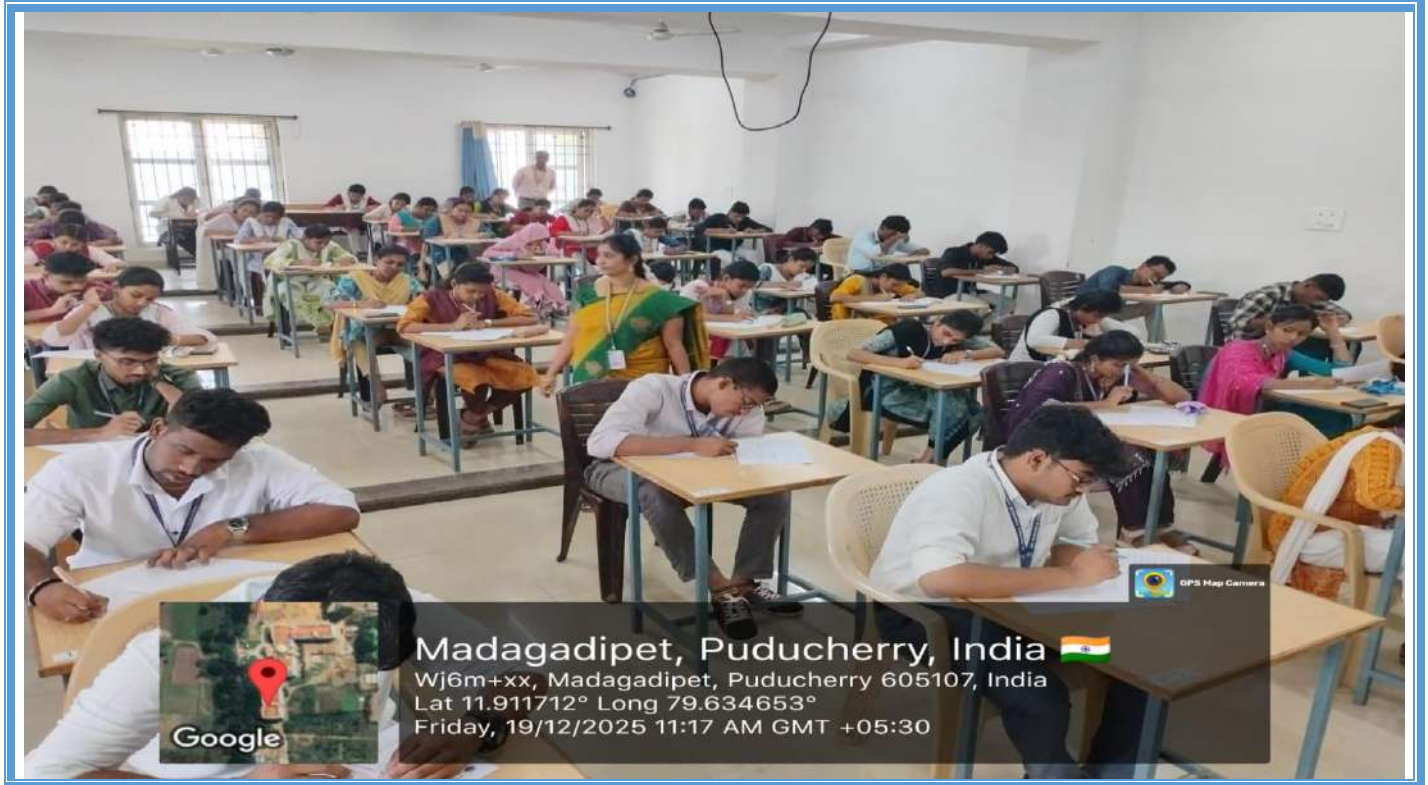
7	a) $\frac{e^{ax}}{a^2+b^2} [\sin bx - b \cos bx]$ b) $\frac{e^{ax}}{a^2+b^2} [\cos bx + b \sin bx]$ c) $\frac{e^{ax}}{a^2+b^2} [\sin bx - \cos bx]$ d) $\frac{e^{ax}}{a^2+b^2} [\sin bx + \cos bx]$ (ii) $\int_1^2 \int_1^2 \frac{dxdy}{xy}$ a) $\frac{49}{18}$ b) $\frac{9}{18}$ c) $\frac{1}{18}$ d) $\frac{1}{9}$	(i) (a) (ii) (c)
8	If $\vec{F} = x^2\hat{i} + y^2\hat{j} + z^2\hat{k}$, then find $\nabla \times \vec{F}$. a) -1 b) 2 c) 3 d) 4	(c)
9	The stationary points of $f(x, y) = x^2 + 3xy^2 - 15x^2 - 15y^2 + 72x$ a) (5, 1), (5, -1), (6, 0), (4, 0) b) (6, 1), (5, 0), (3, 0), (1, 2) c) (5, 5), (1, 1), (0, 0), (6, 6) d) (0, 0), (1, 1), (5, 0), (2, 1)	(d)
10	(i) The solution of $(D^2 - 4D + 4)y = 0$ a) $y = (Ax + B)e^{2x}$ b) $y = (Ax + B)e^{-2x}$ c) $y = A \cos 2x + B \sin 2x$ d) none of this	(b)
11	(i) The degree of the differential equation $\left[1 + \left(\frac{dy}{dx}\right)^2\right]^{3/2} = x \left(\frac{d^2y}{dx^2}\right)$ is a) 3 b) 2 c) 1 d) 2/3 (ii) Solve $\int \sec x \tan x \, dx$ a) $\sec x + c$ b) $\tan x + c$ c) $\log(\sec x + \tan x) + c$ d) $\csc x + c$	(i) (b) (ii) (a)
12	The number of arbitrary constants in the general solution of differential equation of second order a) 1 b) 0 c) 2 d) 4	(c)
13	If $Z = f(x, y)$, $x = r \cos \theta$, $y = r \sin \theta$ then find $\frac{\partial Z}{\partial r}$ a) $\sin \theta \frac{\partial Z}{\partial x} + \cos \theta \frac{\partial Z}{\partial y}$ b) $\cos \theta \frac{\partial Z}{\partial x} + \sin \theta \frac{\partial Z}{\partial y}$ c) $\cos \theta \frac{\partial Z}{\partial x} + \sin \theta \frac{\partial Z}{\partial y}$ d) $\frac{\partial Z}{\partial x} + \frac{\partial Z}{\partial y}$	(c)

14	If $f(x) = \begin{cases} kx^2, & 0 < x < 3 \\ 0, & \text{elsewhere} \end{cases}$ is a probability density function then the value of k is (a) $\frac{1}{3}$ (b) $\frac{1}{6}$ (c) $\frac{1}{9}$ (d) $\frac{1}{12}$	(c)
15	(i) A fair dice is rolled twice. The probability that an odd number will follow an even number is (a) 1/2 (b) 1/6 (c) 1/3 (d) 1/4 (ii) How many zeros are there in the binary representation of the decimal number 187?	(i) (d) (ii) (a)
16	In 5 throws of a die, getting 1 or 2 is a success. The mean number of successes is (a) $\frac{5}{3}$ (b) $\frac{5}{2}$ (c) $\frac{5}{9}$ (d) $\frac{9}{5}$	(a)
17	The mean of a binomial distribution is 5 and its standard deviation is 2. Then the value of n and p are (a) $\left(\frac{4}{5}, \frac{25}{5}\right)$ (b) $\left(25, \frac{4}{5}\right)$ (c) $\left(\frac{1}{5}, 25\right)$ (d) $\left(25, \frac{1}{5}\right)$	(b)
18	A box contains 6 red and 4 white balls. If 3 balls are drawn at random, then the probability of getting 2 white balls is (a) $\frac{1}{20}$ (b) $\frac{18}{25}$ (c) $\frac{4}{25}$ (d) $\frac{3}{10}$	(c)
19	If 2 cards are drawn from a well shuffled pack of 52 cards, the probability that they are of the same colour is (a) $\frac{1}{2}$ (b) $\frac{26}{51}$ (c) $\frac{25}{51}$ (d) $\frac{25}{102}$	(b)
20	If $P(A) = 0.4$, $P(B) = 0.5$ and $P(A \cap B) = 0.2$, then $P(A \cup B)$ is (a) 0.5 (b) 0.6 (c) 0.7 (d) 0.9	(c)
21	A box contains 5 black balls. Two balls are randomly picked one after another from the box, without replacement. The probability for both balls being red is (a) $\frac{1}{10}$ (b) $\frac{1}{2}$ (c) $\frac{10}{98}$ (d) 0	(d)
22	(i) Consider the following system of equations in three real variables X_1, X_2, X_3 $2x_1 - x_2 + 3x_3 = 1$ $3x_1 - 2x_2 + 5x_3 = 2$ $-x_1 - 4x_2 + x_3 = 3$ This system of equations has (a) No solutions	(a)

23	(i) Find the sum of the eigen value of the matrix $\begin{pmatrix} 1 & 2 & -8 \\ 1 & 2 & 0 \\ 2 & 4 & 2 \end{pmatrix}$ is a) 0 b) 2 c) 4 d) 5 (ii) How many triangles are present? 	(i) (c) (ii) (b)
24	(i) Which of the following is used to solve a system of linear equations? a) Differentiation b) Integration c) Matrices d) Limits (ii) How many rectangles are present? 	(i) (c) (ii) (a)
25	(i) Find the value of m such that $(3x - 2y + z)^2 + (4 + ay - z)^2 + (x - y + 2z)^2$ is scleroidal. a) m = -5 b) m = 2 c) m = 5 d) m = 0 (ii) How many squares can be formed using the dots? 	(i) (c) (ii) (a)

PHOTOS GALLERY: MATHEMATICAL SKILL TEST







SRI MANAKULA VINAYAGAR
ENGINEERING COLLEGE
FOR ADVANCED INSTITUTIONS

MATHEMATICAL SKILL TEST PRIZE WINNERS

S. No	Name	Department	Year	Prize
1	Ravikiran	ECE	II	I
2	Vengatkarthikeyan,M	IT	II	I
3	SuryaRoven.S	ECE	II	I
4	Nakshatra.R	IT	II	I
5	Meenakshi,G	ECE	II	I
6	Dhivakar.I	ECE	II	I
7	Krishnakumar.S	AI&DS	II	II
8	Yuvaraj.B	ECE	II	II
9	Chandru.E	AI&DS	II	II
10	Nivetha.S	ECE	II	II
11	Mohanapriya.M	ICE	II	III
12	Ajay.D	Civil	II	III
13	Barath	Mech	II	III
14	Karthiga.S	AI&DS	II	III
15	Gopika.V	AI&DS	II	III



Department of Mathematics

From

Mrs.B.Kavitha
Head of the Department
Sri Manakula Vinayagar Engineering College
Madagadipet,
Puducherry -605 107.

To

Dr.T.Asir
Associate Professor
Pondicherry University
Puducherry -605 107.

Respected Sir

SUB: Invitation to Act as Chief Guest on National Mathematics Day Celebration-Requsition -reg

I hope this letter finds you in good health and high spirits. On behalf of Department of Mathematics of our college(SMVEC) , I am honored to extend a warm invitation to you to grace our National Mathematics Day celebration as the Chief Guest.

As you are undoubtedly aware, National Mathematics Day is a momentous occasion that commemorates the birth anniversary of the legendary mathematician, Srinivasa Ramanujan. It serves as a platform to celebrate the profound contributions of mathematicians to the field and inspire a passion for mathematics among students and enthusiasts.

The event is scheduled to take place on 22nd December 2025 at our college auditorium and We believe that your participation will make our National Mathematics Day celebration truly memorable.Your outstanding achievements and significant contributions to the field of mathematics make you an ideal figure to motivate and inspire the audience.

Thank you very much for considering our invitation.

Place: Puducherry

Date: 15.12.2025

Sincerely



SRI MANAKULA VINAYAGAR
ENGINEERING COLLEGE
(AN AUTONOMOUS INSTITUTION)

INVITATION



SRI MANAKULA VINAYAGAR
ENGINEERING COLLEGE
(AN AUTONOMOUS INSTITUTION)
Midnapore, Puducherry - 605 017

The Management, Director, Deans, HoD's, Staff and Students cordially invite you to the

Department of Mathematics

Celebrates

NATIONAL MATHEMATICS DAY

On Monday, 22nd December 2025 at 10.00 am
Venue : New Block, II Floor, ECE Seminar Hall

Chief Guest

Dr. T.Asir

Associate Professor
Department of Mathematics
Pondicherry University, Puducherry

Shri.M.Dhanasekaran

Chancellor, Takshashila University, Tindivanam
Chairman and Managing Director, SMVE Trust

Presidential Address

Dr.K.Narayanasamy

Secretary, SMVE Trust

Shri.D.Rajaraman

Treasurer, SMVE Trust

Shri.S.Velayudham

Joint Secretary, SMVE Trust

Special Address

Dr.V.S.K.Venkatachalapathy

Director cum Principal, SMVEC

Felicitates

Dr.S.Jayakumar
COE

Dr.S.Anbumalar
Dean Academics

Dr.K.Velmurugan
Dean Research

Dr.A.A.Arivalagar
Dean Academics

Dr.N.S.N.Cailassame
Dean Placement

your esteemed presence is highly solicited

Mrs.B.Kavitha
HOD/Mathematics, SMVEC
Convenor



SRI MANAKULA VINAYAGAR
ENGINEERING COLLEGE
AN AUTONOMOUS INSTITUTION

NATIONAL MATHEMATICS DAY
Monday 22nd December 2025, 10.00 am

DEPARTMENT OF MATHEMATICS

PROGRAMME SCHEDULE

- **Prayer Song**
- **Welcome Address** - **Mrs. B. Kavitha**
- **Honoring the Dignitaries** - **Mrs. B. Kavitha**
- **Introduction of Chief Guest** - **Dr. S. Rajakumar, Professor**
- **Chief Guest Address** - **Dr. T. Asir, Associate Professor**

Department of Mathematics, Pondicherry University
- **Prize Distribution**
- **Vote of Thanks** - **Mrs. S.P. Lavanya, Assistant Professor**
- **National Anthem**



SRI MANAKULA VINAYAGAR
ENGINEERING COLLEGE
(AN AUTONOMOUS INSTITUTION)

DEPARTMENT OF MATHEMATICS

NATIONAL MATHEMATICS DAY

BANNER

The banner features a dark blue background with a white and yellow logo at the top center. Below the logo, the college's name is written in white. A red horizontal band contains the text 'DEPARTMENT OF MATHEMATICS CELEBRATES'. Below this, a yellow band features a small portrait of a man and the text 'NATIONAL MATHEMATICS DAY on Monday, 22nd December 2025 at 10.00 am'. The bottom section has a blue background with a white circular portrait of a man, followed by his name and title. The venue and organizing department are listed at the bottom.

SRI MANAKULA VINAYAGAR
ENGINEERING COLLEGE
(AN AUTONOMOUS INSTITUTION)
Madagadipet, Puducherry - 605 107

DEPARTMENT OF MATHEMATICS
CELEBRATES

 **NATIONAL
MATHEMATICS DAY**
on Monday, 22nd December 2025 at 10.00 am

Welcomes



Chief Guest
Dr. T. ASIR
Associate Professor
Department of Mathematics
Pondicherry University
Puducherry.

Venue : New Block, II-Floor, ECE - Seminar Hall

Organized by
Department of Mathematics
ALL ARE WELCOME

PHOTOS GALLERY: NATIONAL MATHEMATICS DAY

Prayer Song



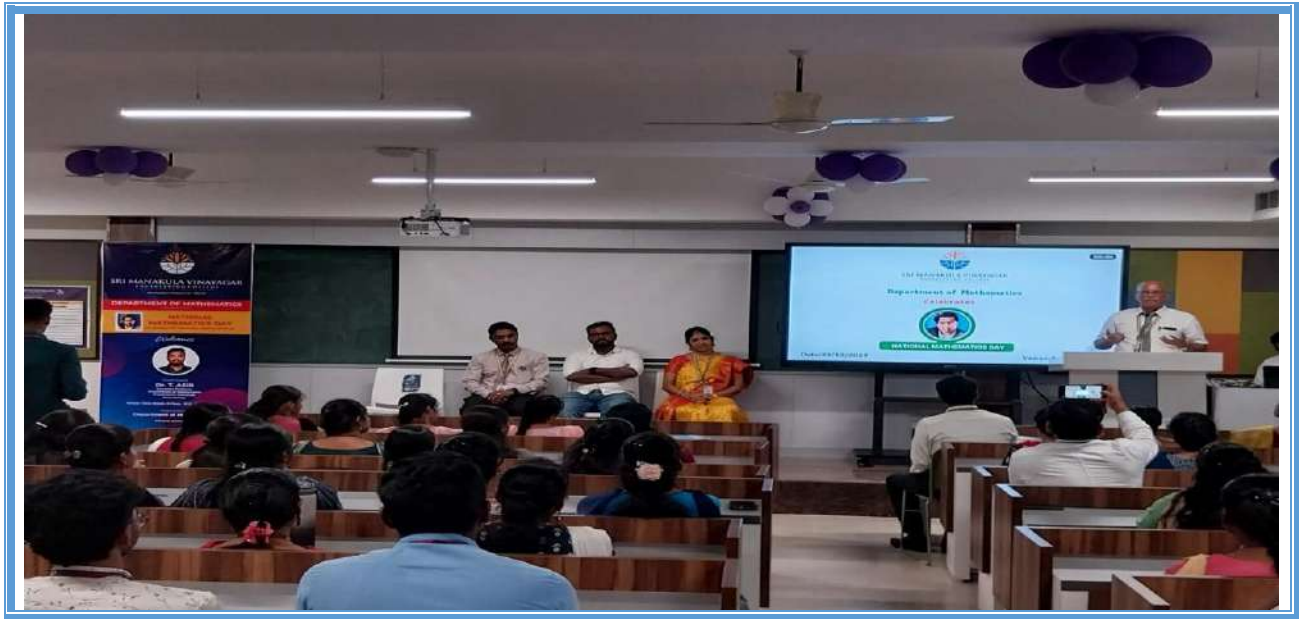
Welcome Address (Mrs.B.Kavitha, Prof & Head)



Honoring the Dignitaries



Presidential Address by Dean Academics , Dr. A. A. Arivalagar



Special Address by HOD/ECE , Dr.P.Raja

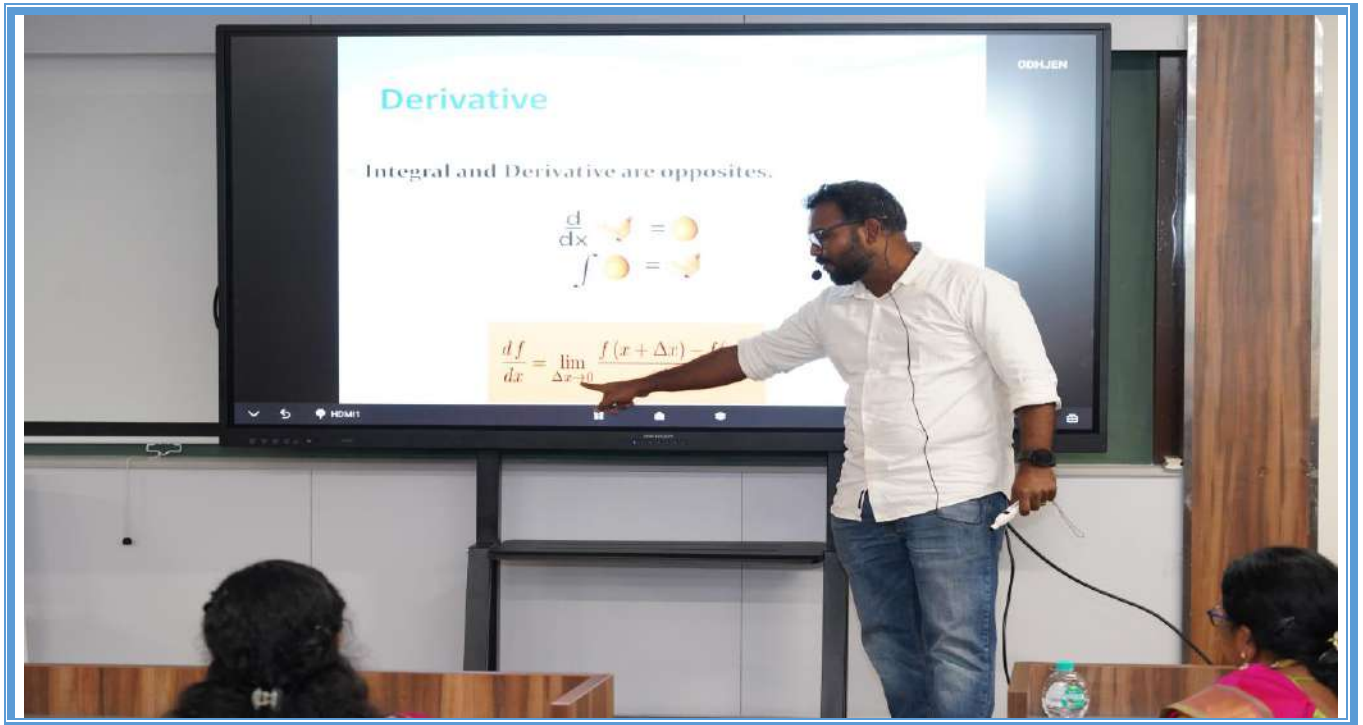


Introduction of Chief Guest by Dr. S. Rajakumar, Professor



Chief Guest Address - Prof. Dr. T.Asir





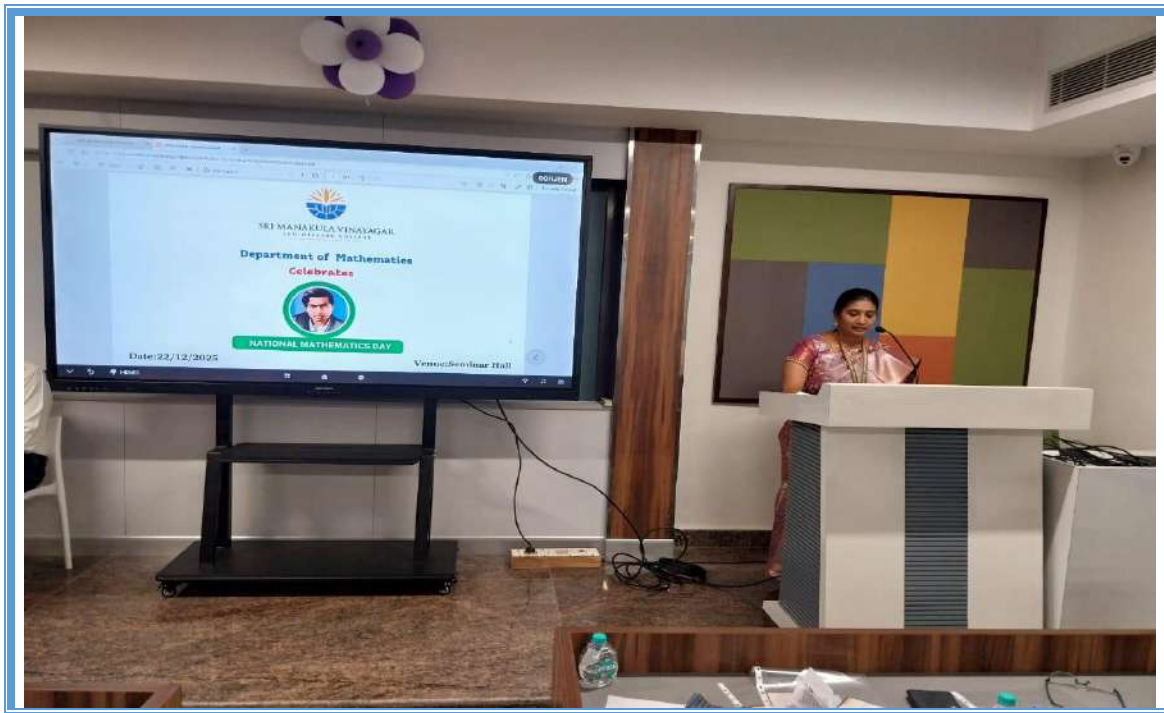
Prize Distribution







Vote of Thanks by Mrs. S.P.Lavanya, Assistant Professor



Faculty Participation



A Glimpse of the Student Participants



Certificates:




SRI MANAKULA VINAYAGAR
ENGINEERING COLLEGE
(AN AUTONOMOUS INSTITUTION)
Madagadipet, Puducherry - 605107



Certificate of Merit


This is to certify that KABITHA P of
II year IT has been awarded I prize in
POSTER PRESENTATION
held on 22. 12. 2025 conducted by Department of Mathematics in celebration of
National Mathematics Day.



Mrs. B. Kavitha
HoD/Mathematics


Dr. S. Anbumalar
Dean Academics

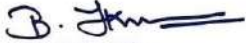

Dr. V. S. K. Venkatachalapathy
Director cum Principal

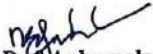




SRI MANAKULA VINAYAGAR
ENGINEERING COLLEGE
(AN AUTONOMOUS INSTITUTION)
Madagadipet, Puducherry - 605107


Certificate of Merit

This is to certify that SURENDHAR V of
II year ECE has been awarded II prize in
POWER POINT PRESENTATION
held on 22. 12. 2025 conducted by Department of Mathematics in celebration of
National Mathematics Day.


Mrs. B. Kavitha
HoD/Mathematics


Dr. S. Anbumalar
Dean Academics


Dr. V. S. K. Venkatachalapathy
Director cum Principal



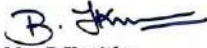
SRI MANAKULA VINAYAGAR
ENGINEERING COLLEGE
AN AUTONOMOUS INSTITUTION
Madagadpet, Palacerry - 605107

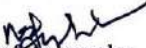


Certificate of Merit

This is to certify that Karthiga S of
II year AI&DS has been awarded III prize in
ANALYTICAL SKILL TEST

held on 22.12.2025 conducted by Department of Mathematics in celebration of
National Mathematics Day.


Mrs. B. Kavitha
HoD/Mathematics


Dr. S. Anbumalar
Dean Academics


Dr. V. S. K. Venkatachalapathy
Director cum Principal



SRI MANAKULA VINAYAGAR
ENGINEERING COLLEGE



NATIONAL MATHEMATICS DAY

Heartfelt thanks to
our resource person

Dr. T. ASIR

Associate Professor
Department of Mathematics
Pondicherry University, Puducherry

Organized by Department of Mathematics
SMVEC, Puducherry
held on 22.12.2025



SRI MANAKULA VINAYAGAR
ENGINEERING COLLEGE
IN AN AUTONOMOUS INSTITUTION

Budget

National Mathematics Day

S.No	Item	Quantity	Cost
1	Gift for Guest	1	Rs 2000
2	Remuneration for Chief Guest	1 person	Rs 3000
3	Shawl	3	Rs 1000
4	Bouquet	3	Rs 1000
5	Snacks, Sweets	10 persons	Rs 1000
6	Gifts for students (For Prize winners in Mathematical Analytical test, Poster presentation, Mathematical Modelling) $25+ 5+3= 33$	33	Rs 13000
Total			Rs 21000

Benefits in terms of Learning/Skill/Knowledge obtained

- Students know about the renowned Mathematician Srinivasa Ramanujan
- Students got knowledge in Application of Mathematics

Total No of Faculty Participants – 25

Total No of Students Participants – 80

Total No of External Participants – 2

Convenor
(Mrs.B.Kavitha)

Dean Academics
(Dr.S.Anbumalar)

Director cum Principal
(Dr.V.S.K.Venkatachalapathy)