

In Celebration of the GOLDEN JUBLIEE of Siddhartha Academy of  
General & Technical Education(1975-2025)

## REPORT ON GUEST LECTURE “THE ROLE OF MATHEMATICS IN AI”

Organized by  
Department of Mathematics

**Day & Date:** Friday 5-12-2025

**Venue:** Webinar Hall

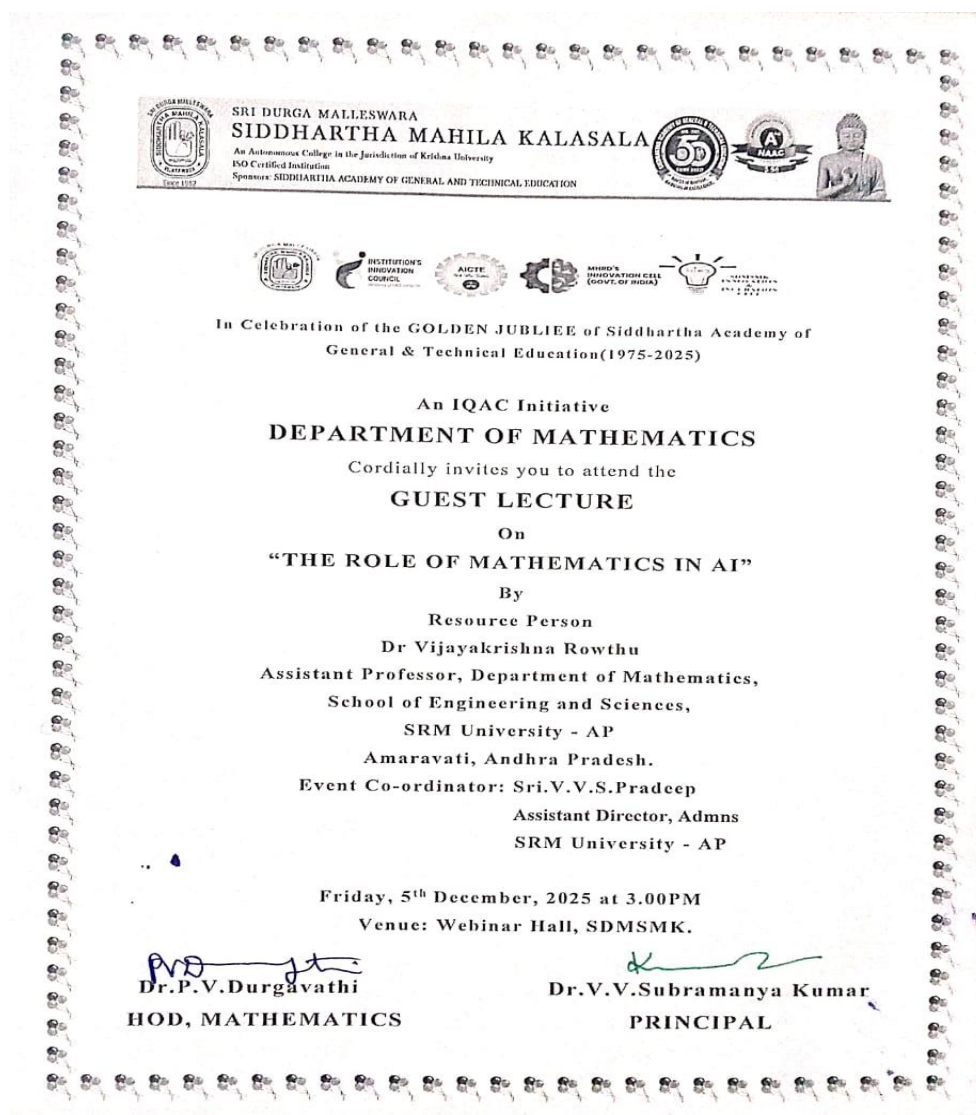
**Time:** 3:00PM-5.00PM

**PARTICIPANTS:** Students of I B.Sc Honours Mathematics & AI  
II B.Sc Honours Mathematics and  
III B.Sc Honours Mathematics

**RESOURCE PERSON:** Dr Vijayakrishna Rowthu  
Assistant Professor,  
Department of Mathematics,  
School of Engineering and Sciences,  
SRM University - AP  
Amaravati, Andhra Pradesh-522240

**Event Co-ordinator:** Sri.V.V.S.Pradeep  
Assistant Director, Admns  
SRM University - AP

## INVITATION:



## PROGRAMME SHEET

3.00PM - 3.05PM	: Welcoming the guests on to the Dias
3.05PM - 3.10PM	: Prayer Song
3.10PM - 3.15PM	: Address by Principal & HOD
3.15PM - 3.20PM	: Introducing the Resource Person
3.20PM - 4.55PM	: Session by Resource Person
4.55PM - 5.00PM	: Vote of thanks

**OBJECTIVE:** The main objective of the guest lecture was to provide students with an understanding of how mathematical concepts form the foundation of Artificial Intelligence (AI) and to highlight the growing importance of interdisciplinary skills in the modern technological landscape.

### WORKSHOP HIGHLIGHTS

The Department of Mathematics organized a guest lecture on the topic “The Role of Mathematics in AI” on 5th December 2025 at SDMSMK, Vijayawada. The lecture was delivered by Dr Vijayakrishna Rowthu, from SRM-AP University, Amaravati, who has extensive expertise in the fields of Mathematics and Artificial Intelligence.



### PRAYER SONG BY THE STUDENTS



## WELCOMING THE RESOURCE PERSON



## WELCOMING THE EVENT COORDINATOR

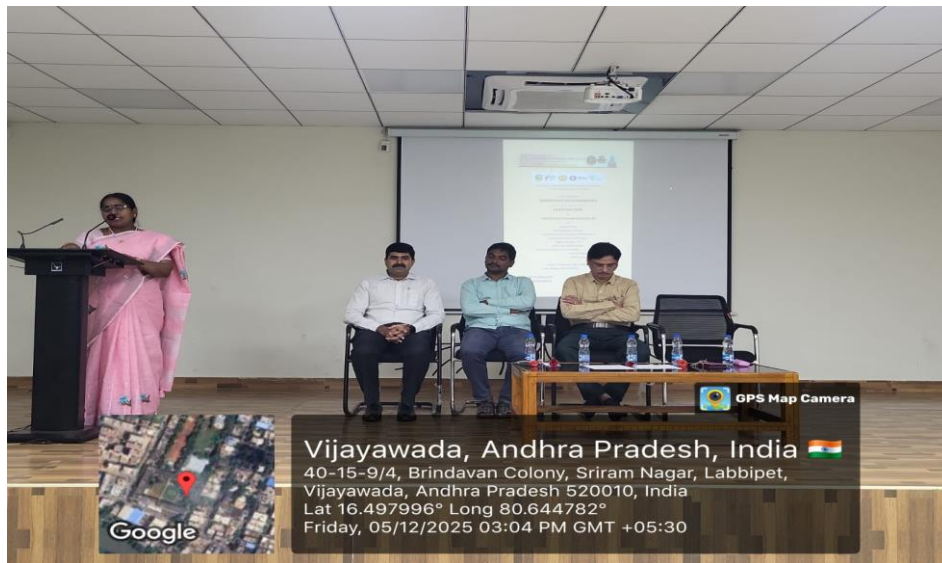


## PRINCIPAL OPENING REMARKS





## ADDRESSING THE GATHERING BY HOD



## BIO-DATA OF RESOURCE PERSON



- ❖ He has completed masters in 2005 and Ph.D. in Mathematics, Indian Institute of Technology, Kanpur, India in 2008.
- ❖ Experience:
  - 2015-2017, Post Doctoral Associate, UPMC, Pittsburgh, PA, USA
  - 2008-2009, Subject Matter Expert , Cramster. Learning Inc., Visakhapatnam, India.
- ❖ Research Interest: Mathematical modelling using partial differential equations to solve image inpainting problems and Finding a global

solution to the problem of fiber tracking in human brain white matter using variational calculus and nonlinear optimization techniques.

- ❖ Awards: 2010 – Junior Research Fellowship – CSIR-UGC.
- ❖ Publications: Multi-Modal Potential Based Non-linear PDE Model for Grayscale Image Inpainting and Higher order PDE based model for segmenting noisy image.
- ❖ Research Area: Applied Mathematics and Mathematical Modelling  
Differential Equations  
Artificial Intelligence and Machine Learning

### **RESOURCE PERSON TALK**

Resource Person began the session by explaining the meaning of Artificial Intelligence, its evolution, and its role in enabling machines to perform tasks that require human-like intelligence.



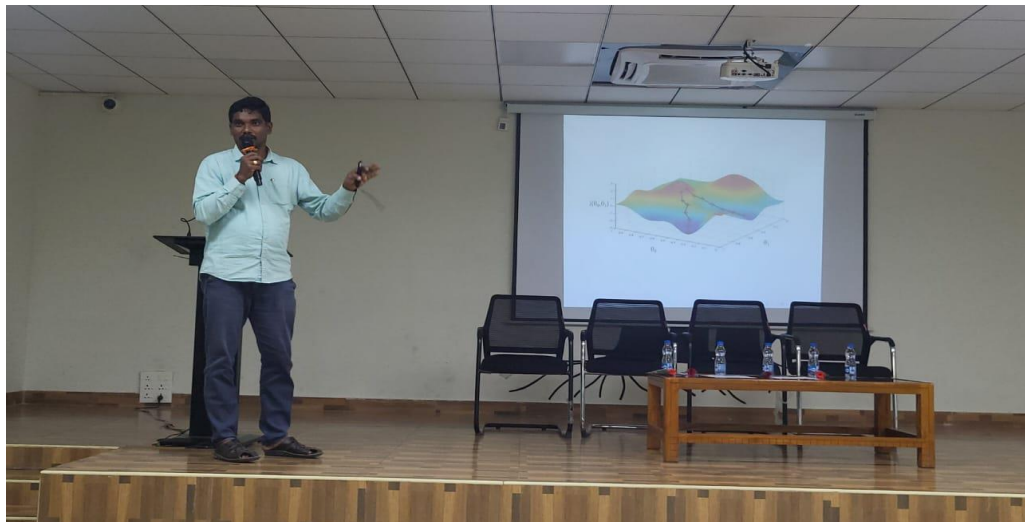
### **KEY POINTS COVERED:**

- What is AI?
- Mathematical Foundations of AI: The resource person highlighted how AI is fundamentally built on strong mathematical concepts. Key areas discussed included: Linear Algebra – vectors, matrices, transformations  
Calculus – optimization, gradients, rates of change

## Probability & Statistics

### Discrete Mathematics – logic, algorithms, graphs

- Machine Learning Through a Mathematical Lens
- Major ML Paradigms
- The Tough and Real Questions in AI
- Key Mathematical Pillars of AI
- Applications of AI
- Interdisciplinary Links: The session encouraged students to explore combinations of Mathematics with Computer Science, Statistics, Data Science, and Engineering, reflecting the interdisciplinary nature of AI.
- Future Directions: He concluded with the future scope of AI, urging students to strengthen their mathematical foundation to excel in AI-related careers.







### **SESSION BY EVENT COORDINATOR**

Following the lecture, Sri.V.V.S.Pradeep, the Event Coordinator, addressed the students. He provided:

- Tips on improving Cumulative Grade Point Average (CGPA)
- Importance of skill development for academic and career advancement
- Guidelines on body language, communication, and confidence while facing interviews
- Insights about company expectations and the growing demand for analytical and technical skills.





## INTERACTION SESSION

Students actively participated in the question–answer session. They raised queries regarding:

- The role of specific mathematical concepts in AI
- Career opportunities in Machine Learning and Data Science
- How to begin learning AI tools and programming
- Future research directions in Mathematics and AI

The resource person addressed all questions patiently and encouraged students to pursue continuous learning.

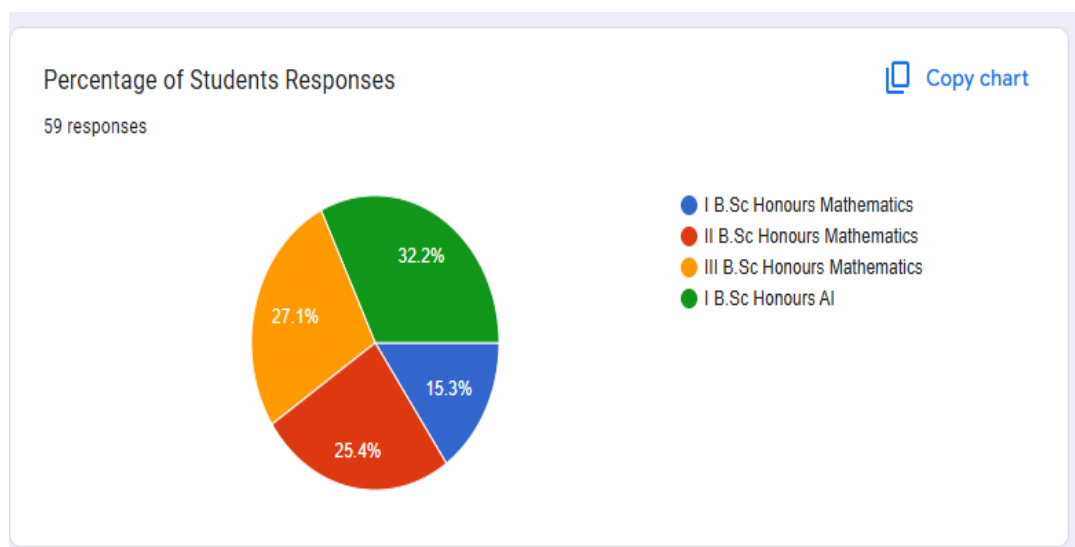




### OUTCOME:

- Students gained a clear understanding of how Mathematics acts as the backbone of Artificial Intelligence.
- The session strengthened their interest in exploring AI-related fields.
- Students learned about essential academic skills, interview readiness, and career planning.
- The programme successfully linked theory with practical applications, motivating students to pursue interdisciplinary learning.

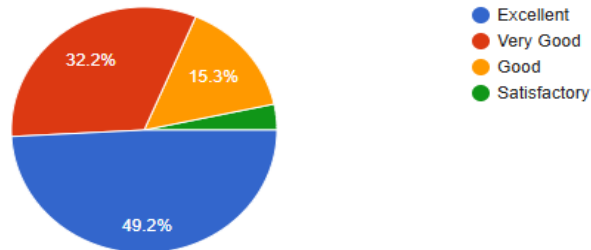
### FEEDBACK FROM STUDENTS



How clear and effective was the Resource Person's presentation and explanation?

[Copy chart](#)

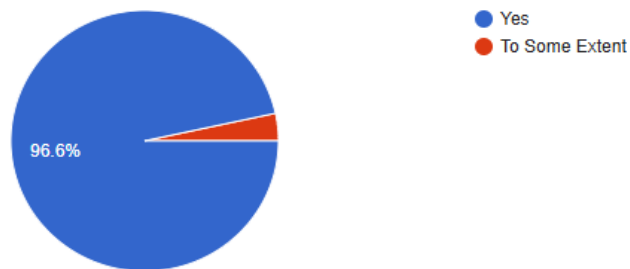
59 responses



Did the session enhance your understanding of the connection between Mathematics and AI?

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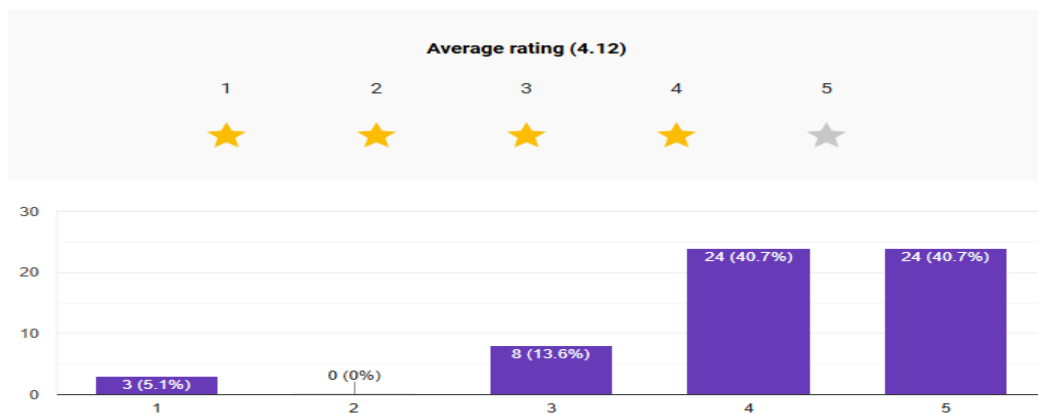
59 responses



How would you rate the overall guest lecture on "The Role of Mathematics in AI"?

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59 responses

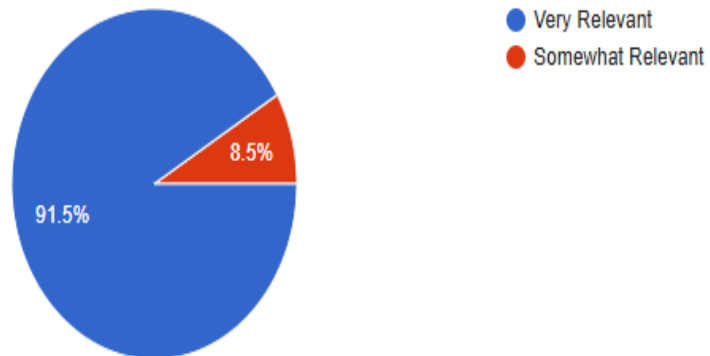




### How relevant were the talks to your field of study?

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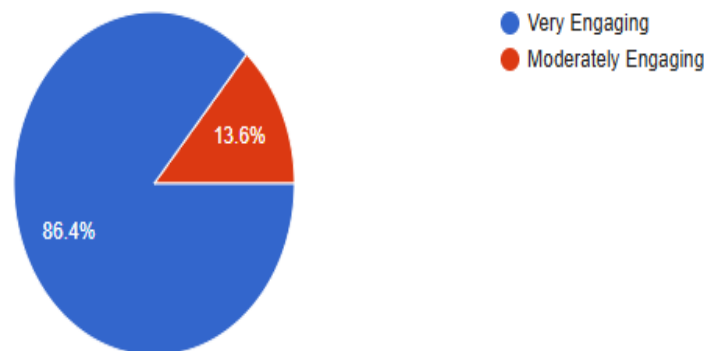
59 responses



### How engaging did you find the lecture?

 [Copy chart](#)

59 responses



## ATTENDANCE SHEET

### ATTENDANCE SHEET

DEPARTMENT OF MATHEMATICS

GUEST LECTURE

ON

## “THE ROLE OF MATHEMATICS IN AI”

**Resource Person:** Dr Vijayakrishna Rowthu

Assistant Professor, Department of Mathematics,

School of Engineering and Sciences,  
SRM Institute of Science and Technology

SRM University – AP, Amaravati, Andhra Pradesh.

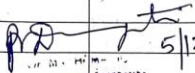
**DATE: 5.12.2025 (FRIDAY)    TIME: 3.00 PM - 5.00 PM**

S.NO	ROLL NO	CLASS	STUDENT NAME	STUDENT SIGNATURE
1.	2331385	III Maths	T.Dilleewani	T.Dilleewani
2.	2321335	III Maths	B. Gayathri	B. Gayathri
3.	2331045	III Maths	N. Jyothi	N. Jyothi
4.	2331033	III Maths	M.A. Romejunnisa	M. Romejunnisa
5.	2331415	III Maths	T. Anusha	T. Anusha
6.	2331465	III Maths	M. Ramya sri	M. Ramya sri
7.	2331335	III Maths	B. Deepika	B. Deepika
8.	2331445	III Maths	M. Bhavani	M. Bhavani
9.	2431413	III Maths	K.Naga Sukanya	K. Naga Sukanya
10.	2431555	III Maths	V. Jaya Sree	V. Jaya Sree
11.	2431475	III Maths	M.D. zafarunnisa	M.D. zafarunnisa
12.	2431185	III Maths	M. Amrutha	M. Amrutha
13.	2431465	III Maths	P. Bharathi	P. Bharathi
14.	2431355	III Maths	P. Harika	P. Harika
15.	2431835	III Maths	D. Mastanamma	D. Mastanamma
16.	2431345	III Maths	Ch. Mamatha	Ch. Mamatha
17.	2431395	III Maths	G. nithulleshwari	G. nithulleshwari
18.	2431565	III Maths	V. Naga vyshnavi	V. Naga vyshnavi
19.	2431405	III Maths	P. Sriisha	P. Sriisha

80.	2431315	I Maths	A. Perera	A. Perera
81.	2431505	I Maths	P. Teja Sri	P. Teja Sri
82.	2431535	I Maths	S.S.V. Valsaravi	S.S.V. Valsaravi
83.	2431455	I Maths	M. Prathisha	M. Prathisha
84.	2547445	I (AT)	C.H. Aswini	C.H. Aswini
85.	2547685	I (AT)	S. Surya Deepthi	S. Surya Deepthi
86.	2547435	I (AT)	A. Nikitha	A. Nikitha
87.	2547365	I (AT)	A. K. Jayasri	A. K. Jayasri
88.	2531335	I Maths	B. Revathi	B. Revathi
89.	2531095	I Maths	O. Dharmapriya	O. Dharmapriya
90.	2531385	I Maths	D. Bhana	D. Bhana
91.	2531615	I Maths	T. Lakshmi	T. Lakshmi
92.	2531565	I Maths	R. Janya	R. Janya
93.	2531525	I (Maths)	P. Bhavana	P. Bhavana
94.	2531025	I (Maths)	T. Meghana	T. Meghana
95.	2531485	I (Maths)	K. Sabhana	K. Sabhana
96.	2531835	I (Maths)	V. Akhila Deepthi	V. Akhila
97.	2531345	I (Maths)	Ch. Harini	Ch. Harini
98.	2531495	I (Maths)	K. Kalosri	K. Kalosri
99.	2531375	I (Maths)	Ch. Hanishka	Ch. Hanishka
100.	2531075	I (Maths)	K. Gnaneswari	K. Gnaneswari
101.	2531455	I (Maths)	K. Harini	K. Harini
102.	2531385	I (Maths)	M. Yashini	M. Yashini
103.	2531075	I (Maths)	SK. Shanum	SK. Shanum
104.	2531575	I (Maths)	S. Sravani	S. Sravani
105.	2531555	I (Maths)	P. Keerthi Pragnas	P. Keerthi Pragnas
106.	2531425	I (Maths)	E. Anjali	E. Anjali
107.	2531645	I (Maths)	K. Lavanya	K. Lavanya
108.	2531315	I (Maths)	A. Divya Sathi	A. Divya
109.	2547335	B.Sc A.I (I)	Aswathi Priya	A. Swathi Priya
110.	2547705	B.Sc A.I (I)	T. Aparanjanii	T. Aparanjanii
111.	2547655	(G A) ET	H. Thisowmya	Th. Thisowmya

52	2547295	I <sup>st</sup> AI	Chirugaparna Lakshmi	Ch.N.A Lakshmi
53	2547625	I <sup>st</sup> AT	P. Deepthi	P. Deepthi
54	2547485	I <sup>st</sup> AT	K. Jawanthi	K. Jawanthi
55	2547498	I <sup>st</sup> AI	K. Lakshmi Sravani	K. Lakshmi Sravani
56	2547385	I <sup>st</sup> AI	B. Monika Durga	B. Monika
57	2547605	I <sup>st</sup> AI	N. sailaja	N-sailaja
58	2547615	I <sup>st</sup> AT	P. Mounika	P. Mounika
59	2547055	I <sup>st</sup> AT	T. Sai Sri	T. Sai Sri
60	2547045	I <sup>st</sup> AI	P. Chaitanya	P. Chaitanya
61	2547095	I <sup>st</sup> AI	U. Rupa Sri	U. Rupa Sri
62	2547645	I <sup>st</sup> AT	M. Sandhya	M. Sandhya
63	2547535	I <sup>st</sup> AI	M. Venkata Ganga Raju	M.V.G.N. Lakshmi
64	2547585	I <sup>st</sup> AT	N. Anikitha	N. Anikitha
65	2547315	I <sup>st</sup> AI	T. Bhavani	T. Bhavani
66	2548315	I <sup>st</sup> AT	V. Anasitha	V. Anasitha
67	2547375	I <sup>st</sup> AI	M. Venkata Armutla	M.V. Armutla
68	2547645	I <sup>st</sup> AT	P. Kavya Sri	P. Kavya Sri
69	2547425	I <sup>st</sup> AT	S. Zalyani	S. Zalyani
70	2547065	I <sup>st</sup> AI	U. Sai Pravalika	U. Sai Pravalika
71	2547355	I <sup>st</sup> AT	K. Naz Ma	K. Naz Ma
72	2547025	I <sup>st</sup> AI	B. Shavita Sri	B. Shavita Sri
73	2547015	I <sup>st</sup> AT	Annam. Vennela	A. Vennela
74	2547375	I <sup>st</sup> AI	T. Haritha	T. Haritha
75	2547445	I <sup>st</sup> AI	G. Jaya Sathuika	G. Jaya Sathuika
76	2547405	I <sup>st</sup> AI	Ch. Bhavani	Ch. Bhavani
77	2547375	I <sup>st</sup> AI	B. Divya Sri	B. Divya Sri
78	2547565	I <sup>st</sup> AI	M. Jayasree	M. Jayasree
79	2547505	I <sup>st</sup> AT	K. Krishna Veni	K. Krishna Veni
80	2547335	I <sup>st</sup> AT	A. Om Pujitha	A. Om Pujitha
81	2547345	I <sup>st</sup> AI	A. Shivalishtha	A. Shivalishtha
82	2531325	D <sup>st</sup> Maths	S. Amulya	S. Amulya
83	2531395	D <sup>st</sup> Maths	D. V. N. S. Soupradha	D. Soupradha

84	2531603	I B.Sc (Maths)	Sr. Naimisha.	Sr. Naimisha
85	2531015	I.B.Sc (Maths)	Ch. Sai Nagalakshmi	Ch. Sai Nagalakshmi
86	2547595	I-BSc (A.I)	K.Vasundhara.	K. Vasundhara
87.	2331375	TU B.Sc(Maths)	G. Anubha	G. Anubha

  
 5/12/25  
 Sri Durga Mahalaxmi Sagarika  
 Mah. & Kalasala  
 JIJA YAWADA-520018

## MEDIA COVERAGE

# సాక్షి

## ఏఐలో పట్టుకు గణితంపై అవగాహన అవసరం

లబ్బిపేట(విజయవాడతూర్పు): ఏఐలో పట్టు సాధించాలంటే గణితంపై అవగాహన అవసరమని ఎస్ఆర్ఎం యూనివర్సిటీ ఆసిస్టెంట్ ప్రొఫెసర్ డాక్టర్ ఆర్.విజయకృష్ణ అన్నారు. ఎంజీ రోడ్డులోని శ్రీ దుర్గామల్లేశ్వర సిద్ధార్థ మహిళా కళాశాల గణిత శాస్త్ర విభాగం ఆధ్వర్యంన శుక్రవారం ది రోల్ ఆఫ్ మేథమెటిక్స్ ఇన్ ఏఐ అంశంపై సదస్సు జరిగింది. విజయకృష్ణ మాట్లాడుతూ ఏఐలో గణితం పాత్ర, ఏఐపీ ఉపయోగించడానికి గణితం ఎలా ఉపయోగిస్తామో తెలియజేశారు. మెషిన్ లెర్నింగ్ తెలియజేస్తూ, దాన్ని ఎలా ఉపయోగించాలో వివరించారు. కార్యక్రమంలో ఎస్ఆర్ఎం మరో ఆసిస్టెంట్ ప్రొఫెసర్ వీఎస్ఎస్ ప్రదీప్, కళాశాల ప్రిన్సిపాల్ వీవీఎస్ కుమార్, గణితశాస్త్ర విభాగాధిపతి పీవీ



ఏఐ వినియోగంలో గణితం ప్రాధాన్యాన్ని వివరిస్తున్న విజయకృష్ణ, వేదికపై అధ్యాపకులు

దుర్గావతి, అధ్యాపకులు బి.కిరణ్మయి, కె.భానుప్రియ, వై.ప్రరూప, ఎన్.జాహ్నవీదేవి తదితరులు పాల్గొన్నారు.

06/12/2025 | Vijayawada East | Page : 11  
Source : <https://epaper.sakshi.com/>

# పున్నమి



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శ్రీ దుర్గా మల్లేశ్వర సిద్ధార్థ మహిళా కళాశాల గణిత శాస్త్ర విభాగం వారి ఆధ్వర్యంలో నిర్వహించబడిన గెస్ట్ లెక్చర్

