

## Guest Lectures

2020-21

### 1. “Vector Calculus and its applications”

A Webinar was conducted by the department of Mathematics and Statistics on 21<sup>st</sup> January, 2021, between 3 P.M. to 3:50 P.M. on the topic “Vector Calculus and its applications”. This was done in order to familiarise students with the meaning of Vector Calculus and its applications through real time examples.

The Webinar started by the Introduction of Dr N. Pothanna, Assistant Professor of the Department of Humanities and Sciences, in VNR Vignana Jyothi Institute, by Mrs GS Mini (HOD of Mathematics and Statistics) in the presence of other faculty members and students.

It was followed by the welcome address to students by Dr N. Pothanna. He further proceeded by introducing students to Vector Calculus. Dr N. Pothanna’s presentation started with a brief explanation on topics like The Greens Theorem, The Divergence Theorem, Line Integrals and Surface Integrals.

He let the students know more about the applications of Vector calculus in various vector fields. The students were asked to give their feedback on the webinar through filling a form.



APPLICATIONS OF VECTOR CALCULUS By Dr. POTANNA

18:50

## Contents

- ▶ Vectors, Scalars
- ▶ Gradient and its Applications
- ▶ Divergence, Curl and its Applications
- ▶ Vector Integrals and its Applications
- ▶ Vector Integral Theorems and its Applications

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18:50 21-01-2021

APPLICATIONS OF VECTOR CALCULUS By Dr. POTANNA

19:41

## Vectors and Scalars

- ▶ Vector has both magnitude and direction but scalar has only magnitude
- ▶ ~~scalar has only~~
- ▶ We can find out as to how a football player should hit the ball to give a pass to another player of the team, when you watch a football match, by determining the direction and force, which are vectors.
- ▶ How airplane pilots receive instructions to land at airports. During a visual approach, the Air Traffic Control instructs pilots to fly a particular heading (direction) for a certain distance (magnitude). This is exactly what a vector quantity is: something that has a magnitude and direction.

potanna\_m@vnrvt.org

19:41 21-01-2021

## 2. Application of First Order Differential Equations

A webinar was conducted by the Department of Mathematics and Statistics on 21st January, 2021, between 2 P.M. to 3 P.M. on the topic, "Application of First Order Differential Equations" in order to familiarise students with the real time applications of first order differential equations.

The Webinar started with the introduction of Dr.P.Aparna, Senior Assistant Professor of the Department of Humanities and Sciences, in VNR Vignana Jyothi Institute, by

Mrs.G.Mini, the Head of the Mathematics and Statistics Department. It was followed by the welcome address by Mrs. Santi Rohit Rao, faculty of the Department of Mathematics.

The Webinar transitioned to the explanation and discussion of various topics related to first order differential equations by Dr.P.Aparna. Her presentation and talks started with the introduction of Orthogonal Trajectories, which was explained in detail along with examples.

This was followed by the explanation of Kirchhoff Laws, which is applicable in the use of circuit boards and general circuitry. This was continued with a brief about the usage and importance of differential equations in tumour growth and cancer studies. Newton's Law of Cooling was also explained, in terms of differential equations. The final topic was about the application of first order differential equations to determine the compound interest, which is widely used by banks.

The Webinar concluded with the vote of thanks given by Mrs. Santi Rohit Rao, after which the staff members collected the student's feedback on the webinar.

### **3. AI-Data and Insights**

This webinar was organised on 18-01-2021, to create awareness about the ML(Machine Learning)- Supervised and Unsupervised learning, role of AI(Artificial Intelligence)-data and Insights in current technology.

Resource Person Mr Sreekanth Reddy Soudary, Senior Consulting Manager, Data Analytics, Wipro Limited.

Mr Sreekanth Reddy Soudary explained the practical applications of data and statistics in day to day life and gave a good information on how data recorded and used for the purpose of analysis and gave examples on usage of data in flipkart like how flipkart is using data analytics and algorithm to help the burgeoning number of sellers get better insight into their business during the festive season. And also gave an example on airlines regarding route distance, altitudes, aircraft type, weight, weather etc. And also gave an example in booking of travel services such as Ola, Uber etc.

Also have a good explanation on ML (Machine Learning)- Supervised learning, Unsupervised learning and clear cut information on how supervised learning is the task of learning a function that maps an input to an output pairs and how unsupervised learning is a machine learning technique.

Briefed us about what actually AI(Artificial Intelligence) is all about and what are its most popular programming languages, and also explained about AI neural networks. How can AI be relatable to statistics and data, and also summarised the topic how one can explore the ocean of statistics in various sectors for analysing the data and organizing it in apt form.



#### **4. Applications of Linear Algebra**

Department of Mathematics and Statistics Organised a webinar for undergraduate students on “Applications of Linear Algebra” on 18-01-2021 , under DBT Star College scheme.

Dr.Saroj M Revankar , Associate Professor, Stanley College of Engineering & Technology , was the resource person Dr. Saroj explained the graphical view of Linearly independent & Linearly dependent vectors. She explored the concepts such as product of vectors, multiplication of matrices with their geometrical interpretation.

The use of linear combinations in neural networks was explained with different examples. The significance of matrices as pixel matrices in Image processing was discussed in brief. Solving systems of linear equations as solutions for various problems in different fields was explained with examples. The process of coding and decoding, concepts of cipher text , using inverse of matrices was explained with examples. Overall the importance of Linear Algebra in various emerging fields like Artificial Intelligence, Data Science etc. was explained with good examples.

Mrs. G S Mini, Officiating HOD Dept of Mathematics & Statistics and other faculty members of the department, 67 students of III year BSc Physical Sciences(MPCs,MSCs&MECs) were present for the webinar.

## **5. Data Science – Role of Visualisation**

A Webinar on ‘Data Science – Role of Visualisation’ was conducted on 12<sup>th</sup> January 2021, on the platform of Teams, for the students of Bhavan’s Vivekananda College.

The Guest, Mr Naveen Kumar, Principal Analyst, Juxt Smart Mandate, Medivia.io, started the webinar with the explanation of the word Visualisation. He further pontificated the importance of it in the designing process.

The session continued, with the explanation of Data Visualisation and how they are connected to Data Science. He briefly stated that communication of data in a visual manner, or turning raw data into insights that can be easily interpreted. Then he showed the importance of creating a portfolio in order to have a prosperous career in the field of data science.

The presentation was also fascinating as it explained the use of data visualisation in the form of images, diagrams or animations and how visualisation can put their message easily and make sure that the receiver understands it completely.

The next rhetorical question that Mr Naveen Kumar asked us was “Why is Data Visualisation?” Which was answered in the slide by stating that it is the practice of translating information into a visual context, such as a map, diagram or graph, to make data easily interpretable, enabling us to observe trends, patterns and outliers in large data sets. Moreover, he explained how data must be visualised in order for conclusions to be made.

The program concluded by Mr Naveen Kumar showing us further considerations of data visualisation which was a list of things one should check before finalising their data visualisation.



## **6. Data Science – Trends and Applications**

A Webinar on ‘Data Science – Trends and Applications’, was conducted on 12<sup>th</sup> January 2021, on the platform of Teams, for the students of Bhavan’s Vivekananda College.

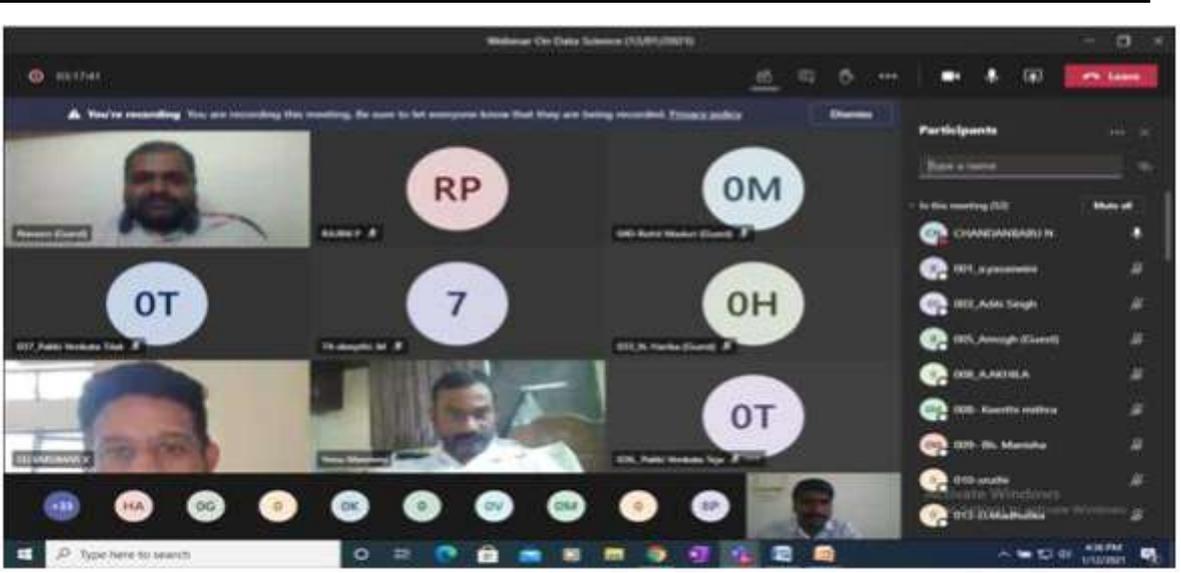
The Guest, Mr.M.Venugopal Rao, Data Scientist & General Manager, Juxt Smart Mandate, Medivia.io, started the webinar with the explanation of the word Data Science. He moved on to describe the rising importance of data and that data has become a key and integral part of society.

The seminar continued, with the explanation of various new technologies and how they are connected to Big Data. Mr.M.Venugopal, soon explained the trends and facts of how data science is growing to be one of the most demanding jobs in the future.

The presentation was also fascinating as it explained the use of data, in various services like Amazon Go, Google Assistant and many of Mr.M.Venugopal's own endeavours.

The program proceeded, with explaining how one can get exposure, in the field of Data Science, by participating in Kaggle Competitions, attending MeetUps, Reading Online Blogs, among many others. This was a very useful part of the session as it helped the students, by providing a way to approach the subject.

The program reached its final conclusion, where Mr. M. Venugopal emphasised the importance of statistics in the field of Data Science, and also that a knowledge of multiple subjects is required for understanding Data. He emphasised again, the overarching effects of demand and necessity of handling data in the growing world.



## 7. Envelope and Evolute

The faculty of Department of Mathematics and Statistics of Bhavan's Vivekananda College organized a webinar on "Envelope and Evolute" on 19 December, 2020 which was held from 2:30 PM to 3:30 PM. The webinar was conducted to have a brief glance on "Envelope and Evolute" under DBT-Star college Scheme.

The speaker of the session was Dr. V. Kiran, Assistant Professor in Osmania University.

The Welcome Address was delivered by G. S. Mini, and by prof Y. Ahsok, Principal, BVC.

### COURSE CONTENT :

The basic ideas on envelopes were discussed in this session .

The speaker of the session " Dr.V.Kiran" has given a brief explanation on the definitions of envelope and evolute from Differential calculus

*Envelope, in mathematics*, a curve that is tangential to each one of a family of curves in a plane or, in three dimensions, a surface that is tangent to each one of a family of surfaces. For example, two parallel lines are the **envelope** of the family of circles of the same radius having centres on a straight line.

*Evolute*, a curve which is the locus of the centres of curvature of another curve.

He also explained the other topics like : Relation between envelope and evolute :That is **to** say that when the center of curvature of each point on a curve is drawn, the resultant shape will be the **evolute of** that curve. The **evolute of** a circle is therefore a single point at its center. Equivalently, an **evolute** is the **envelope of** the normals **to** a curve.

Observation of each and every problem which is discussed in the session.The first year students of B.Sc have this topic in semester 1. This webinar was attended by 97 Students.



① KRISHNAVENI P started recording



Ashok Yaski (Guest)



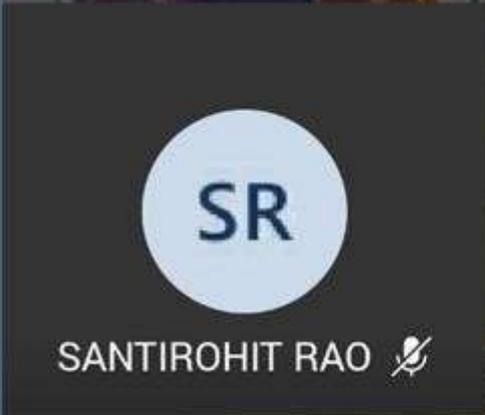
LAKSHMIHARINI G



MINI GS



SELVAKUMAR V



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Kiran



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## 8. Curvature

The faculty of Department of Mathematics and Statistics of Bhavan's Vivekananda College organized a webinar on "Curvature" on 18 december, 2020 which was held from 2:30 PM to 3:30 PM. The webinar was conducted to have a brief rebound on "Curvature" under DBT-Star college Scheme.

The speaker of the session was Dr. V. Kiran, Assistant Professor in Osmania University.

The Welcome Address was delivered by G. S. Mini, and by prof Y. Ahsok, Principal, BVC

### Course Content

The basic ideas on Curvature were discussed in this Session.

The speaker Dr. V. Kiran has given a brief explanation on the definition of Curvature from Differential Calculus. He mentioned that an important property of a curve is its curvature. Curvature plays an important role in laying tracks, roads etc. Curvature of curve is a measure of rate of change of blindness. He explained about

6Angle of Curvature.

Radius of Curvature.

Length of Curvature

- a. Cartesian Equation
- b. Parametric Equation
- c. Polar equation.

Centre of curvature.

Based on the above topics he explained Derivations and Problems.

The first year students of B.Sc have this topic in semester 1. This webinar was aimed at benefiting them. 142 Students have attended this webinar.

## 9. BASICS OF MATLAB

22/7/2020

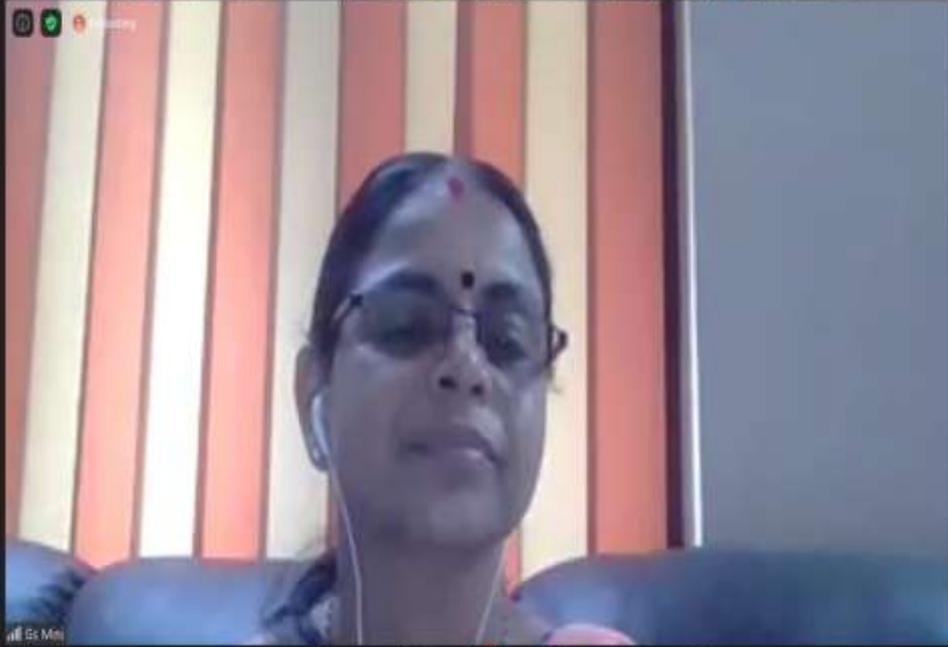
The Department of Mathematics and Statistics organized an online National Webinar on '**Basics of Matlab**' on 22/7/2020 from 10:00 am to 11:30 am under DBT Star scheme. Dr. P. Aparna, Asst. professor, VNRVJIET,Hyd. was the resource person. 532 students from Telangana, Andhra Pradesh, Tamil Nadu, Kerala and Rajasthan had participated and were provided with the online certificate also. The webinar provided the basic information on Applications of Matlab, Books on Matlab, Getting started with Matlab, using Matlab for plotting and visualization of 2D and 3D graphs.

The webinar started with the welcoming and introduction of the resource person followed by a slideshow of a ppt. prepared by our resource person. Students learnt that Matlab stands for Matrix Laboratory and is a software package used for high performance numerical computations and visualization. Under Applications of Matlab, students got to know that Matlab can be used for finding solutions of O.D.E's, P.D.E's, system of linear equations,

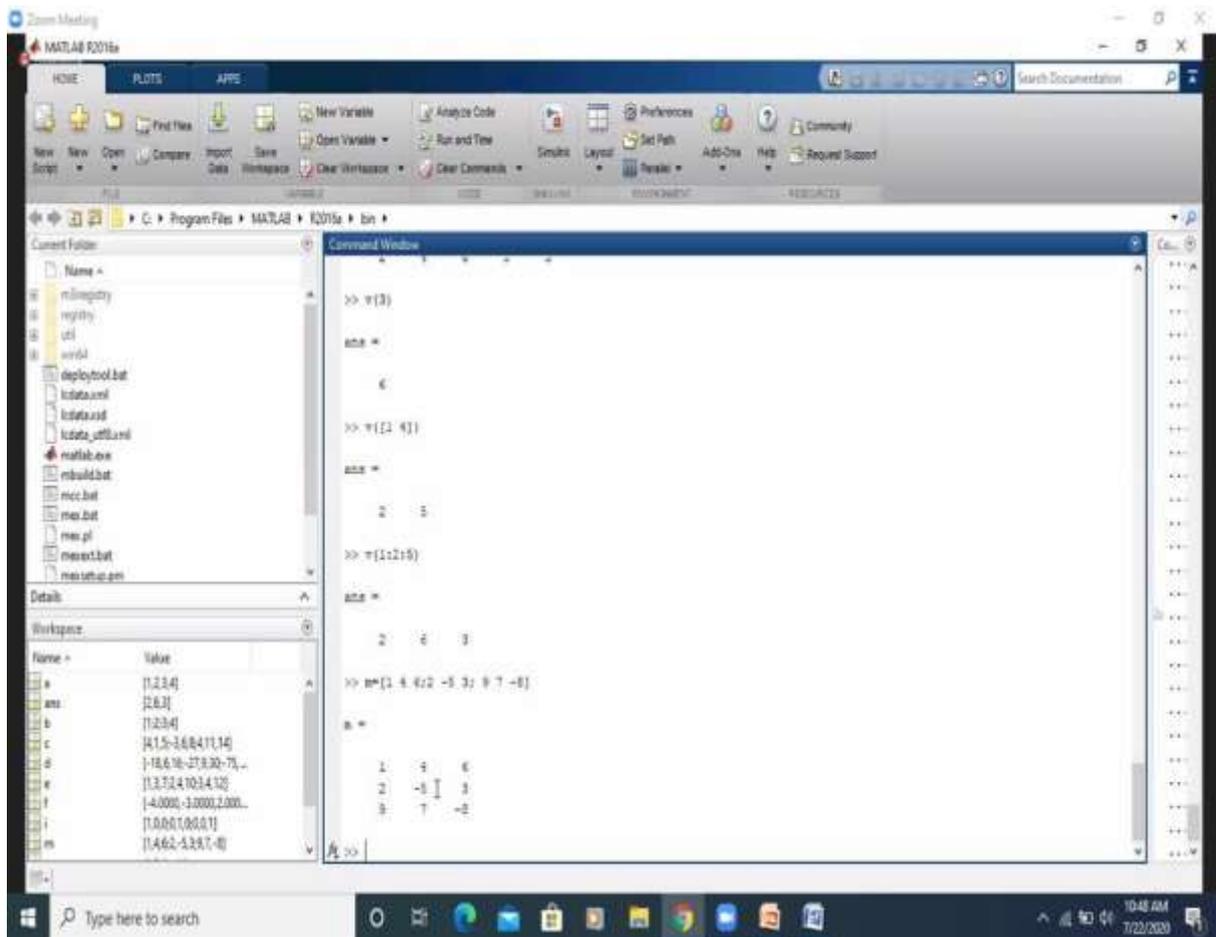
Curve tracing, Curve fitting, finding the roots of polynomials, operations on matrices like addition, multiplication, rank, inverse of a matrix etc.

The webinar gave a brief idea about the programming in Matlab which was very enriching.





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## **10. A Brief report on Harnessing the power of Data Analytics Using Python for undergraduate students - 18th July, 2020.**

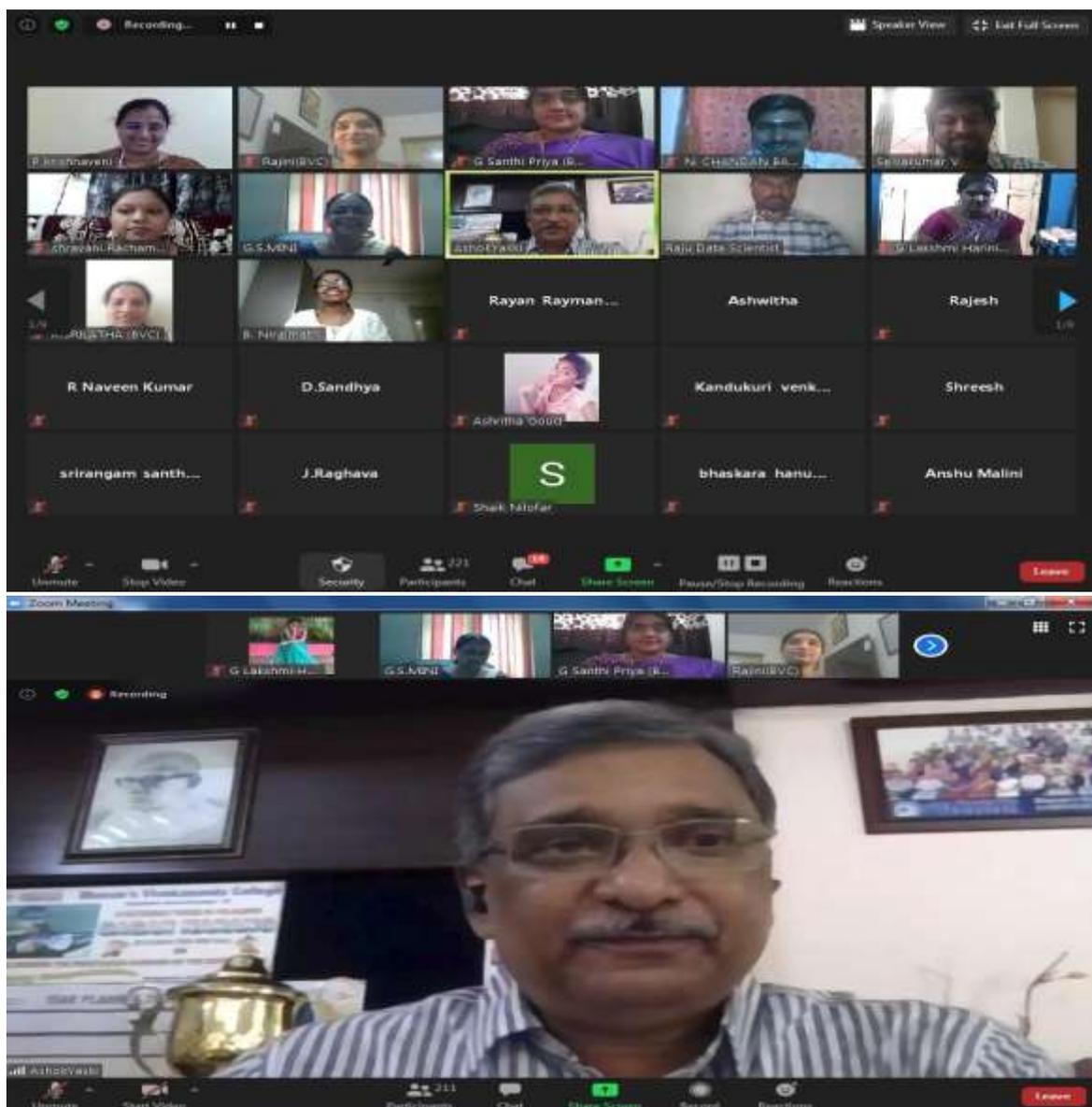
Organized by Department of Mathematics and Statistics, Bhavan's Vivekananda college of science, humanities and commerce, Sainikpuri, Sec-bad.

Resource person: Mr. K.Raju – Sr. Data analyst, IBM,

No. of students participated: 255

The course content delivered in the webinar is as follows: The impact of recent technology in Data Science in the living environment was discussed in this session. The Speaker of the Session Mr.K. Raju spoke on "Introduction to Data Science". He discussed the basic concepts used in the technology relating with best suitable real life examples which are essential for the understanding of technology. He projected a clear understanding of the importance of intelligent robots and future problems in the real world. He inspired the audience by lively interacting on topics such as new trends in applying Data-driven, Machine Learning approaches for business decisions and incorporation of Artificial Intelligence, Big

Data, and Machine Learning applications. He discussed about analyzing structured and unstructured data using different tools and techniques, developing an understanding of descriptive and predictive Analytics, building models for day-to-day applicability, forecasting to take proactive business decisions, using data concepts to represent data for easy understanding. He emphasized on Business Analytics career opportunities in India and global market and gaining practical mastery over applications of machine learning through a hands-on project using Python. He projected on comprehending the theoretical concepts and relating to the practical aspects of Artificial Intelligence. He insisted on modeling algorithms for deep learning, clustering, and recommendation systems. Also the feedback about the session was collected from all the participants to improve the sessions that will be conducted in future.



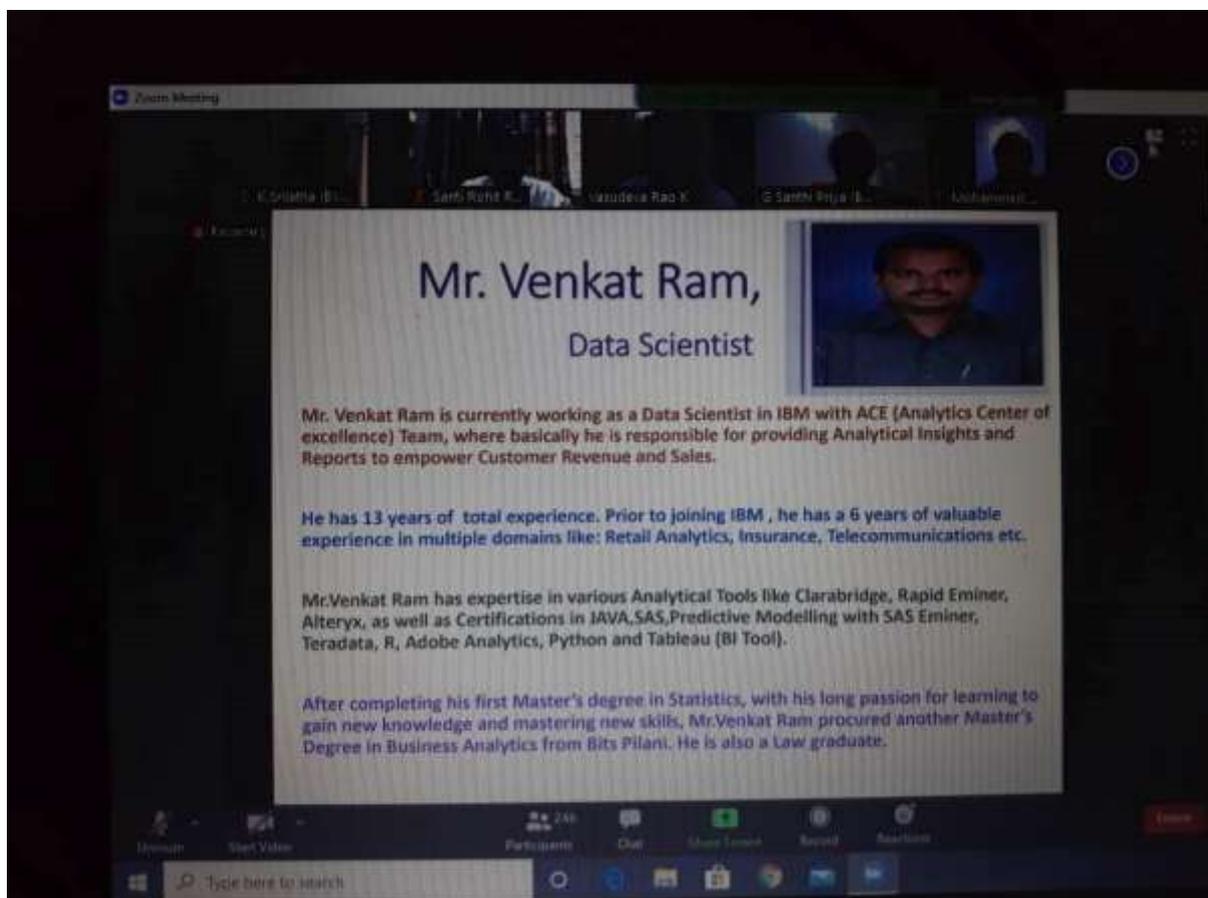
## **11. Power of Data Analytics Using Python**

This webinar was organised on Power of Data Analytics Using Python on 23-05-2020,

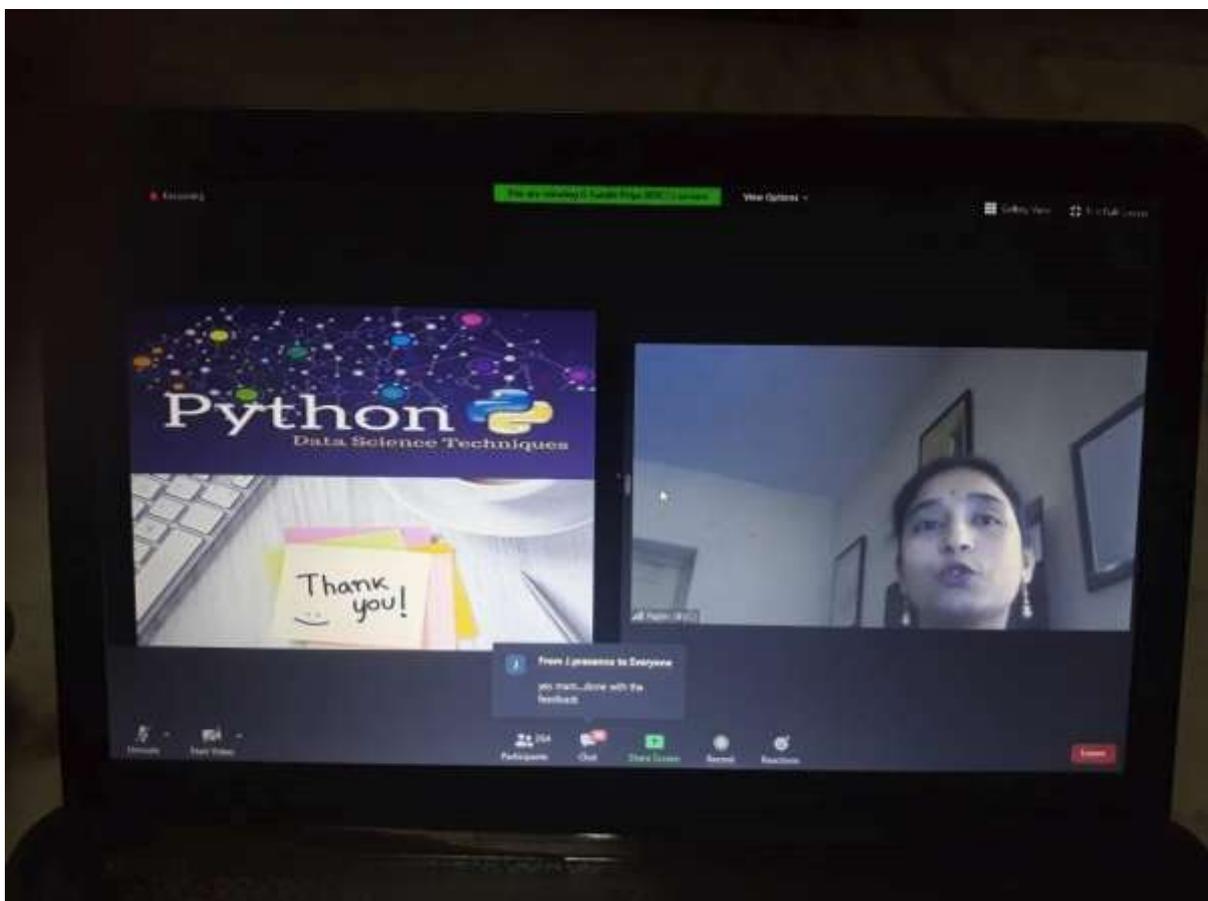
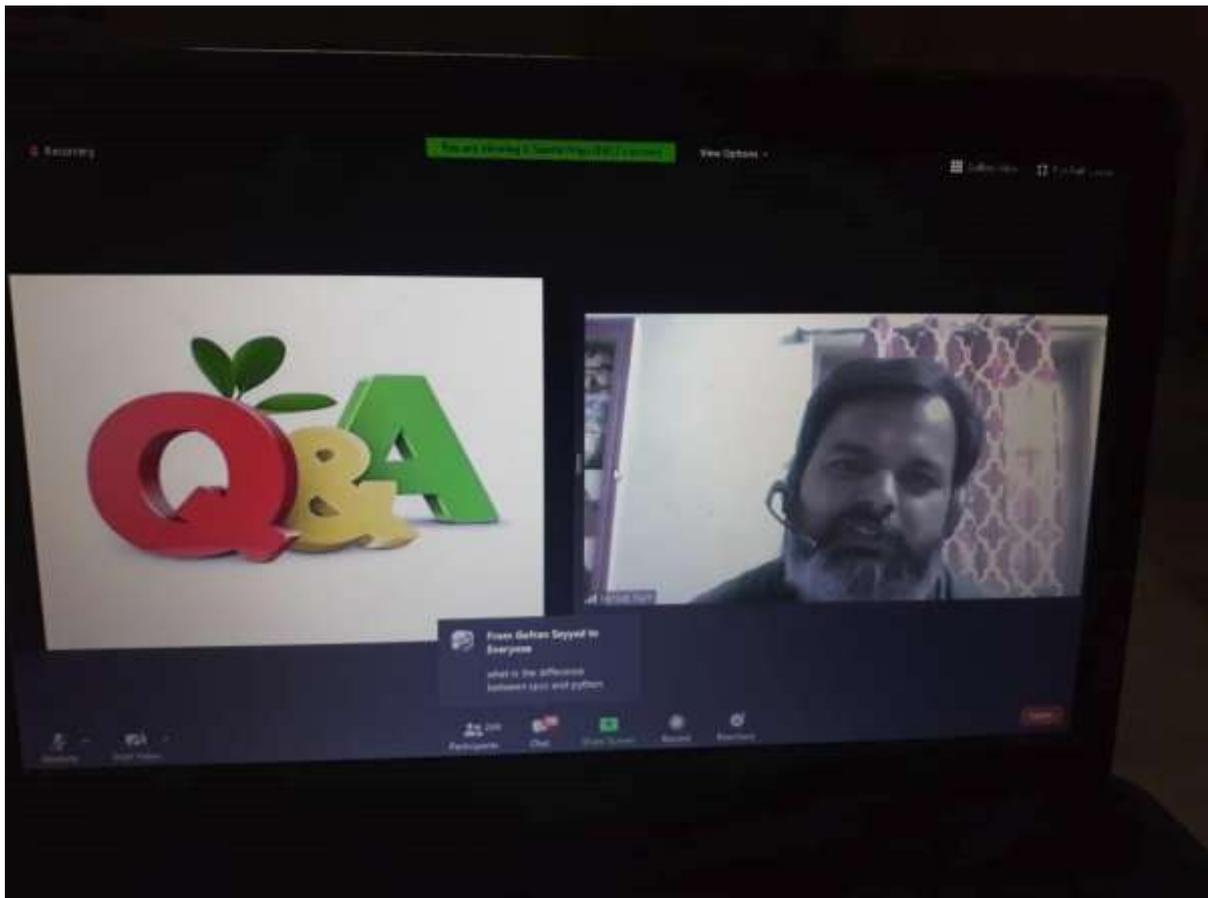
for the faculty members from various colleges.

The resource Person Mr Venkat Ram, Data Analyst, IBM, Hyderabad.

Mr Venkat Ram explained the practical applications of data, Data Science and statistics in day to day life and provided good information about data recording for the purpose of analysis and gave real life examples. Through the example he explained about: Data Analytics, Data Science, turn data into data products, Types of Analytics, life cycle of Data Science / Data Analytics, Skill sets required for Data Analytics, applications Python, features and applications of Python, objects & basic packages of Python, descriptive Statistics in Python, practical examples using Python.



The image is a screenshot of a Zoom meeting. At the top, there are five video thumbnails for participants: K. Shilpa (B...), Sarthi Rohit K., Varadava Rao K., G. Saathi Prjya (B...), and Mohammed... The main content is a slide titled "Mr. Venkat Ram, Data Scientist" with a portrait of a man. The slide text reads: "Mr. Venkat Ram is currently working as a Data Scientist in IBM with ACE (Analytics Center of excellence) Team, where basically he is responsible for providing Analytical Insights and Reports to empower Customer Revenue and Sales. He has 13 years of total experience. Prior to joining IBM, he has a 6 years of valuable experience in multiple domains like: Retail Analytics, Insurance, Telecommunications etc. Mr. Venkat Ram has expertise in various Analytical Tools like Clarabridge, Rapid Miner, Alteryx, as well as Certifications in JAVA, SAS, Predictive Modelling with SAS Eminer, Teradata, R, Adobe Analytics, Python and Tableau (BI Tool). After completing his first Master's degree in Statistics, with his long passion for learning to gain new knowledge and mastering new skills, Mr. Venkat Ram procured another Master's Degree in Business Analytics from Bits Pilani. He is also a Law graduate." The Zoom interface at the bottom shows a search bar with "Type here to search", a "Participants" list with 2/6, and icons for "Chat", "Share Screen", "Record", and "Reactions".



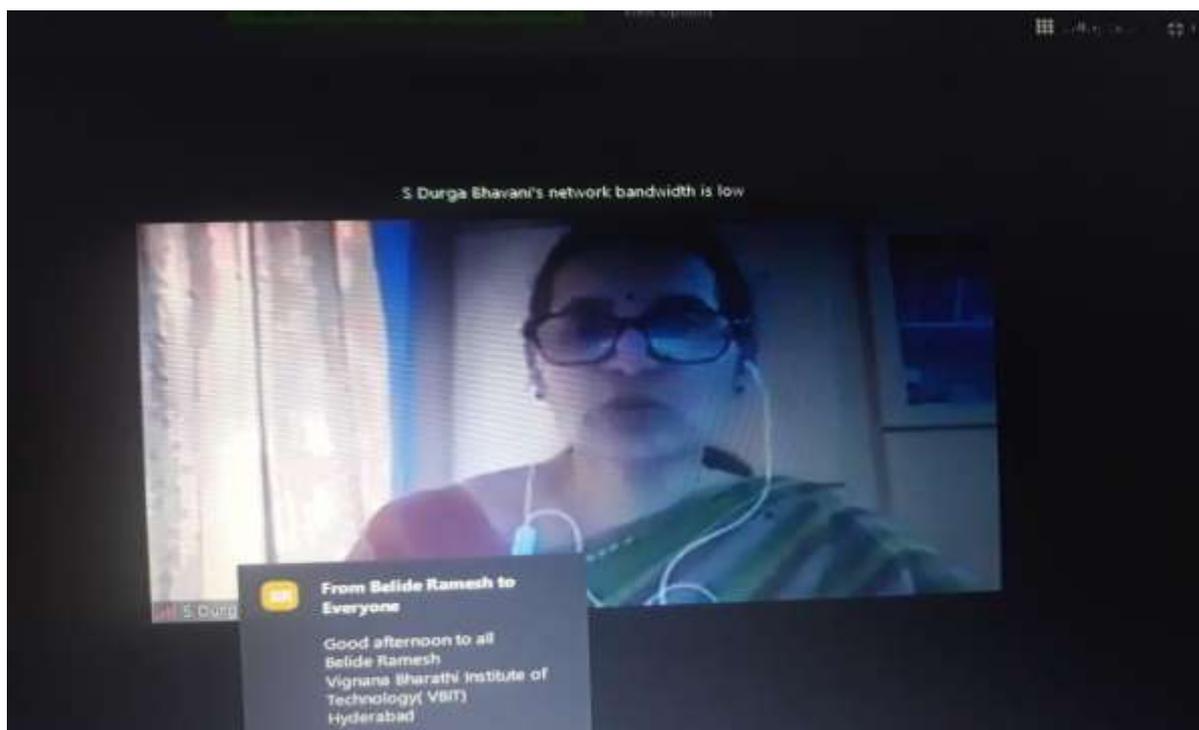
## **12. Webinar on Applications of Linear Algebra in Computer Science**

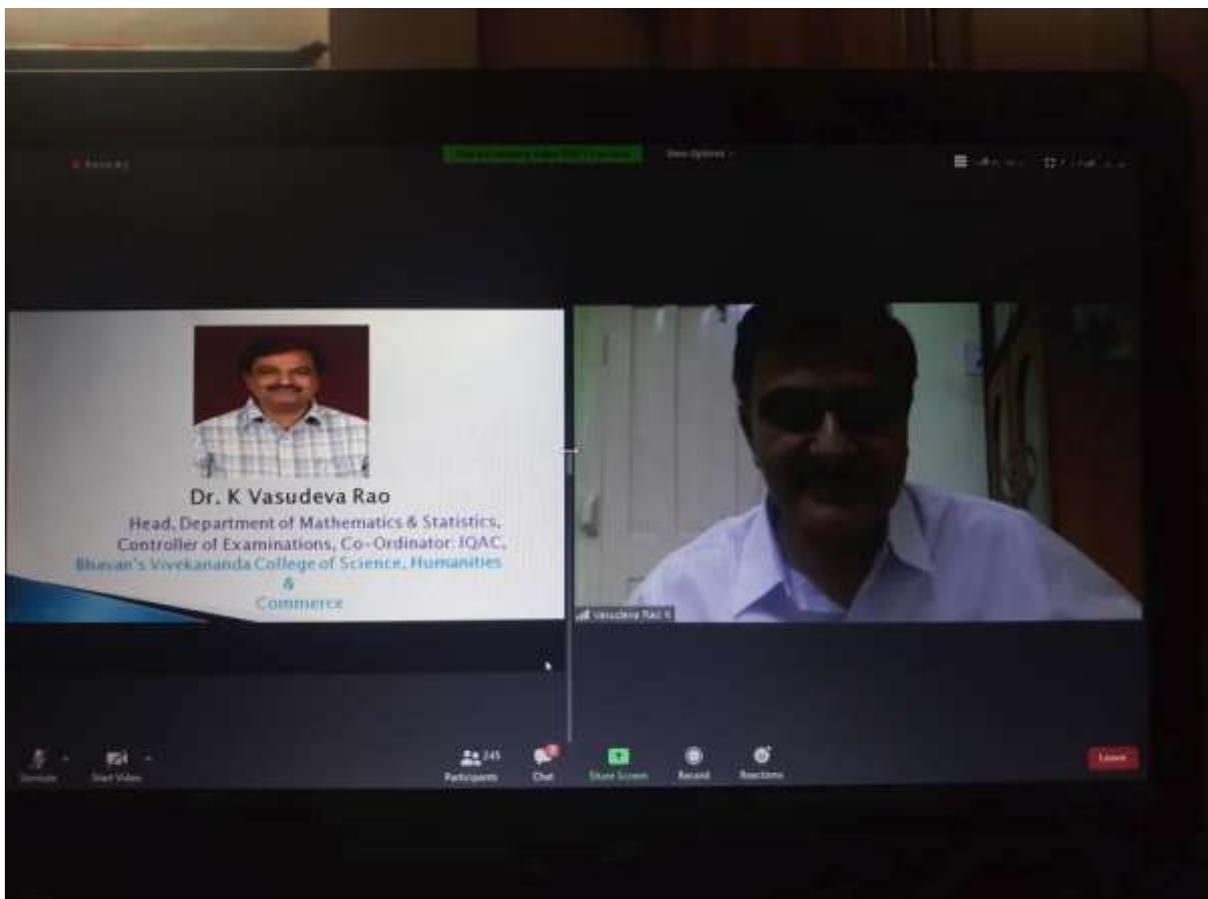
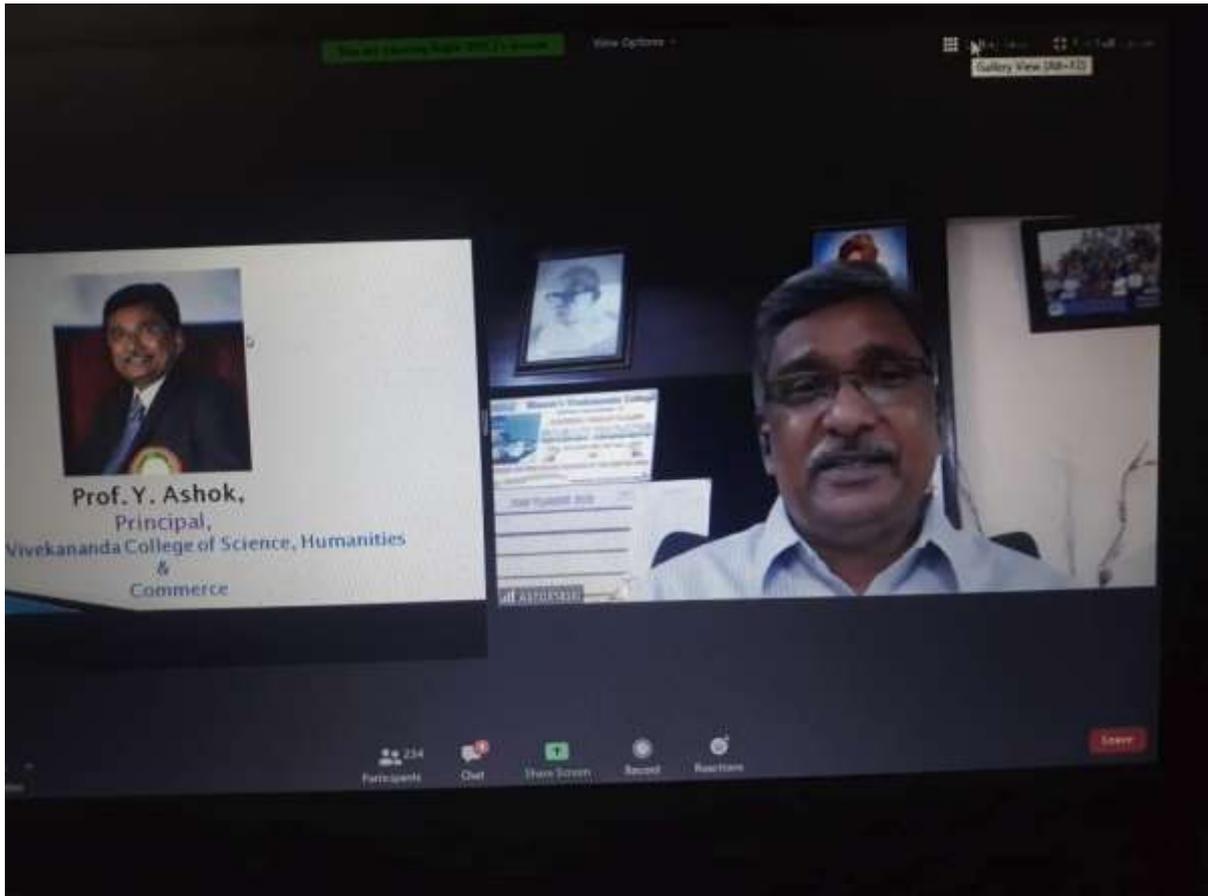
The Department of Mathematics and Statistics conducted the webinar on “Applications of Linear Algebra in Computer Science” on 23<sup>rd</sup> May 2020 , under DBT Star College scheme for teaching faculties. Prof. S Durga Bhavani, Associate Professor, University of Hyderabad, was the resource person.

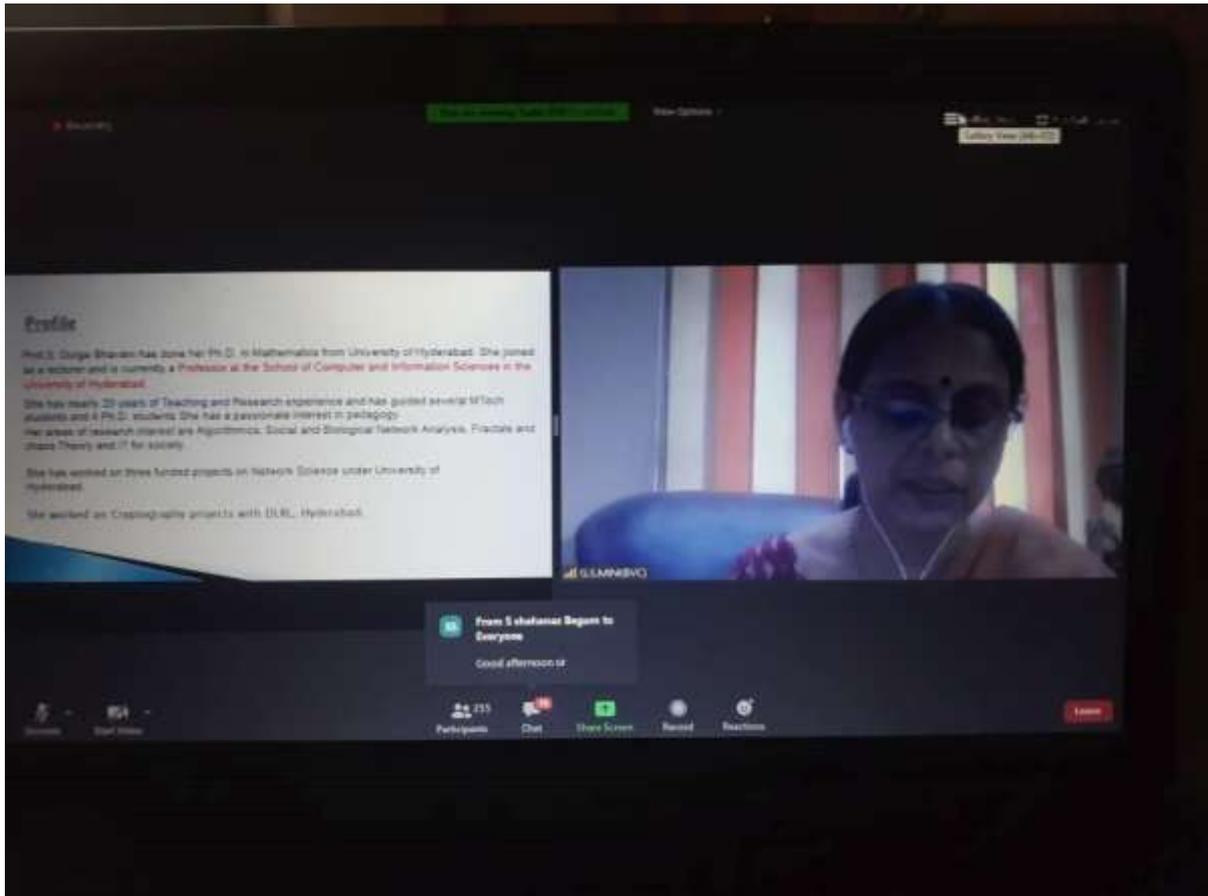
The speaker of the session explained how Linear Algebra is applied to Graph Theory, Image processing, Computer games, Optimization ,Web Search ,Cryptography and Coding with examples in brief.

Prof. S Durga Bhavani Mam also gave many applications of Linear Algebra in Computer Science like from simple circuit solving to large web engine algorithms, and how linear algebra is used in generation and formation of computer coding schemes .

And many more examples were explained briefly.304 Participants attended from various institutions.







**2019-20**

**1. Guest Lecture on Applications of statistics in various domains and Advanced Experimental Designs**

Date of the event: **11/01/2020**

A wonderful seminar was given by Dr. Ravi Kumar Dasari, Statistical Specialist, Novartis, Hyderabad, on Data Science and Pharma Industry who works in Novartis Hyderabad. Sir has given a brief introduction about Statistics and application of statistics in various domains. He also explained about Advanced Experimental Designs. Students had a very interactive session with Ravi Kumar. He gave a clear lecture on Pharma Industry with a case study, which was very helpful for the students.

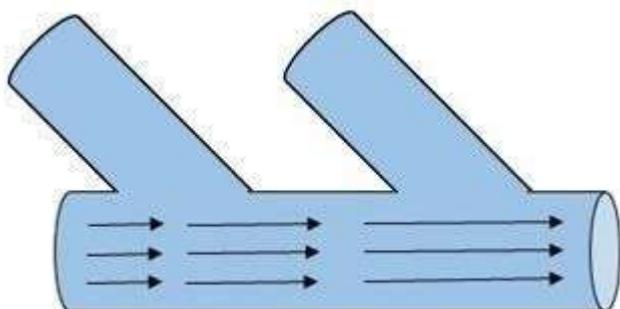


## 2. GUEST LECTURE On Vectors and its applications

Dr.Aparna , Sr.Assistant professor in VNRVJIET gave a talk on ‘vectors and it’s applications’.The talk was for students of B.Sc III year on December 10<sup>th</sup> 2019 in Room No. 71.The students had a paper on Vector Calculus in their sem 5.This talk was on the applications. The speaker gave an insight into the physical interpretations of different concepts of which the students learnt only the mathematical aspects.In the fifth semester students had various concepts like gradient divergence, curl,irrotational, solenoidal vector.

Divergence:

Consider water flowing through a large pipe. Now, it has smaller pipes joined to it. Hence, as the water flows, more water is added along the way by the smaller pipes. Hence, the mass flow rate increases as the water flows.



In another case, consider that there is a leakage in the pipe. Hence the mass flow rate decreases as it flows. **This change in the flow rate through the pipe, whether it increases or decreases, is called divergence.** Divergence denotes only the magnitude of change and so, it is a scalar quantity. It does not have a direction.

When the initial flow rate is less than the final flow rate, divergence is positive (divergence  $> 0$ ). If the two quantities are the same, divergence is zero. If the initial flow rate is greater than the final flow rate divergence is negative (divergence  $< 0$ ).

Curl:

Imagine pouring water in a cup. The water won't just flow linearly but rather, as it reaches the end of the cup, it will flow in a rotational motion before settling in the cup. Or consider water draining down the sink, it will swirl in a rotational motion before going out. If we plot this rotational flow of water as vectors and measure it, it will denote the Curl.

**Curl is a measure of how much a vector field circulates or rotates about a given point.** When the flow is counter-clockwise, curl is considered to be positive and when it is clockwise, curl is negative. Sometimes, curl doesn't necessarily flow around a single time. It can also be any rotational or curled vector.

Learning about gradient, divergence and curl are important. They help us calculate the flow of liquids and correct the disadvantages. For example, curl can help us predict the voracity, which is one of the causes of increased drag. By using curl, we can calculate how intense it is and reduce it effectively. Calculating divergence helps us understand the flow rate and correct it to suit our needs.

In vector calculus a solenoidal vector field (also known as an incompressible vector field, a divergence-free vector field, or a transverse vector field ) is a **vector field**  $v$  with divergence zero at all points in the field:



The speaker has given a clear picture of the physical interpretation in fluid dynamics. The concept of energy flow and heat transfer in a machine in a vehicle was explained clearly. The students were very happy with the content and relevance of the lecture.

### **3. GUEST LECTURE IN MATHEMATICS On Introduction to MATLAB**

A Guest Lecture on Introduction to MATLAB by Dr. Aparna Dode, Associate Professor in University college of Engineering on Introduction to MATLAB was conducted by department of Mathematics and Statistics on 12 July 2019. The speaker gave a lecture on MATLAB and its applications in the present field of Science and Technology . The lecture was organized only for the faculty of Physical Sciences.

MATLAB is a high-performance language for technical computing. It integrates computation, visualization, and programming in an easy-to-use environment where problems and solutions are expressed in familiar mathematical notation. Typical uses include:

- Math and computation
- Algorithm development
- Modeling, simulation, and prototyping
- Data analysis, exploration, and visualization
- Scientific and engineering graphics
- Application development, including Graphical User Interface building

MATLAB is an interactive system whose basic data element is an array that does not require dimensioning. This allows you to solve many technical computing problems, especially those with matrix and vector formulations, in a fraction of the time it would take to write a program in a scalar noninteractive language such as C or Fortran.

The name MATLAB stands for matrix laboratory. MATLAB was originally written to provide easy access to matrix software developed by the LINPACK and EISPACK projects, which together represent the state-of-the-art in software for matrix computation.

MATLAB has evolved over a period of years with input from many users. In university environments, it is the standard instructional tool for introductory and advanced courses in mathematics, engineering, and science. In industry, MATLAB is the tool of choice for high-productivity research, development, and analysis.

MATLAB features a family of application-specific solutions called toolboxes. Very important to most users of MATLAB, toolboxes allow you to learn and apply specialized technology. Toolboxes are comprehensive collections of MATLAB functions (M-files) that extend the MATLAB environment to solve particular classes of problems. Areas in which toolboxes are available include signal processing, control systems, neural networks, fuzzy logic, wavelets, simulation, and many others.

#### The MATLAB System

The MATLAB system consists of five main parts:

The MATLAB language.

This is a high-level matrix/array language with control flow statements, functions, data structures, input/output, and object-oriented programming features. It allows both "programming in the small" to rapidly create quick and dirty throw-away programs, and "programming in the large" to create complete large and complex application programs.

#### The MATLAB working environment:

This is the set of tools and facilities that you work with as the MATLAB user or programmer. It includes facilities for managing the variables in your workspace and importing and exporting data. It also includes tools for developing, managing, debugging, and profiling M-files, MATLAB's applications.

#### Handle Graphics:

This is the MATLAB graphics system. It includes high-level commands for two-dimensional and three-dimensional data visualization, image processing, animation, and presentation graphics. It also includes low-level commands that allow you to fully customize the appearance of graphics as well as to build complete Graphical User Interfaces on your MATLAB applications.

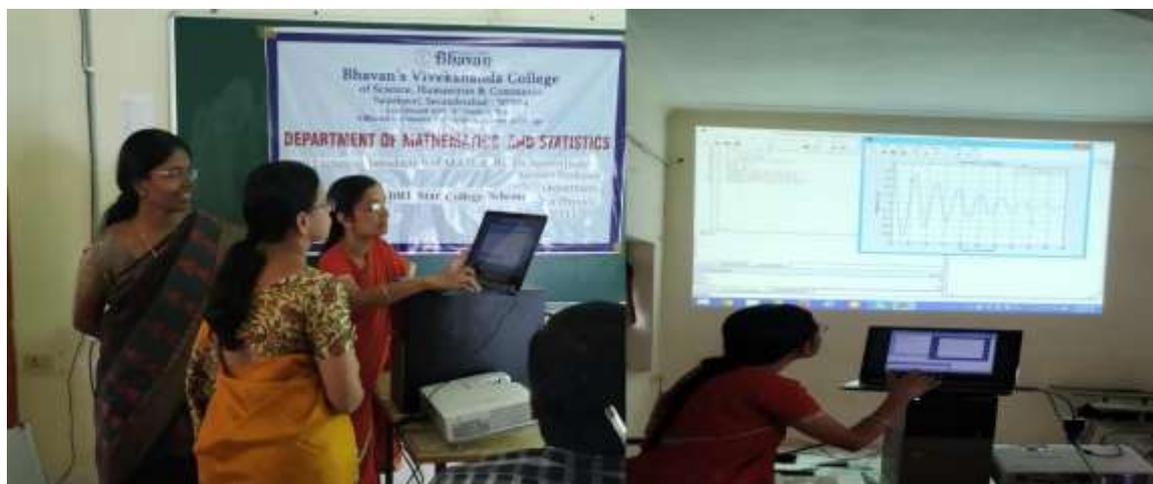
The MATLAB mathematical function library:

This is a vast collection of computational algorithms ranging from elementary functions like sum, sine, cosine, and complex arithmetic, to more sophisticated functions like matrix inverse, matrix eigenvalues, Bessel functions, and fast Fourier transforms.

The MATLAB Application Program Interface (API).

This is a library that allows you to write C and Fortran programs that interact with MATLAB. It includes facilities for calling routines from MATLAB (dynamic linking), calling MATLAB as a computational engine, and for reading and writing MAT-files.

The session was very informative and faculty were very keen to learn new techniques.



#### **4. Guest Lecture On Data Sciences- For a wonderful present and a brilliant future**

The Department of Mathematics and Statistics has organized a guest lecture on 29<sup>th</sup> June 2019 on “Data Sciences- For a wonderful present and a brilliant future” by Prof. V. V. HaraGopal, department of mathematics, BITS Pilani, Hyderabad. Prof. V. V. HaraGopal briefed us about the importance of Data- Sciences, all the trends and applications of data sciences its uses to the world and the predictions we can make using it. Data Sciences is one of the most growing fields of today’s generation, his speech about the same is really helpful for the students who aspire to build a career in this field. Also he helped us understand the benefits of entering this field and encouraged us to actually opt for it.

On the occasion of National Statistics day the department of Mathematics and Statistics conducted a statistical Quiz and 23 teams participated in this quiz. Baba and Pooja

from B.Sc (MSCs-III A) stood 1<sup>st</sup> in the quiz and were awarded the certificates by the guest and Dr. K. Vasudeva Rao, Head Department of Mathematics and Statistics also appreciated the prize winners and participants.

Dr. K. Vasudeva Rao addressed the students about the importance of statistics and various trends of new software related to statistics. Finally we concluded the program by vote of thanks.



## **5. Guest Lecture on Active learning methods**

A Guest Lecture by **Dr. Jayashree**, Associate Professor in VNRVJIET on Active learning methods was conducted by department of Mathematics and Statistics on 18<sup>th</sup> June 2019. The speaker stressed on the present day education system which not only needs curriculum knowledge but also students must be acquainted with more online courses. In today's competitive world it is important for students not only have good basics in their subjects but also have some extra skill set. To have some extra knowledge one of the best is online courses because a certificate is also present for proof. Different means of improving skill set was discussed. The different online sites like moocs, Nptel, mhrd etc., were discussed.

The present industry related topics like data analysis and it's demand in the industry was discussed. Online courses help to get practical skills using the latest computer technology to enable them to solve real-world problems and prepare students for a career in a wide range

of areas such as finance, investment, information technology, environmental management, health, marketing, logistics, defence, media, education and research.



**2018-19**

### **Guest Lecture On Applications of Numerical analysis**

Talk on Applications of Numerical Analysis and Vector Algebra by Dr. Aparna from VNRVJIET College on 19/12/2018. The Guest Speaker discussed various aspects of Numerical Applications and its importance in real life, also about vector algebra and its aspects. It was a really very interactive session with students. She encouraged everyone about maths and it's useful in real big problems. 100 students attended.



**2015-16**

**Guest Lecture On Application of Statistics & Mathematics in Industry**

Guest Lecture in Application of Statistics and Mathematics in Industry by Dr. Venkat KC Timmaraju, Principal Data Scientist ATOS (USA)

Talk by Dr. Venkat "Pester your lecturers with questions!" said Dr. Venkat, an alumnus of Bhavan's Vivekananda college who had taken some time off his schedule to speak and enlighten the students of our college. Dr. Venkat has masters in applied mathematics, york university, a PhD in statistics and mathematics, an MBA from Henley business school, UK. He had given a talk on the applications of statistics and mathematics in the industries which was very enlightening for our students for the foray into the future as to how to put their knowledge into good use after they graduate. He had mentioned a huge number of options for the students and has opened their minds to the potential of the subjects they've chosen. He had stressed very much on the concept of 'Big Data' as it is deemed to be the next big thing in the industry, a major potential which lacks people. He shared his views and got the students interested and motivated. A total of **95 students** attended the lecture.

