COURSE EXIT SURVEY: Analysis Report
Academic Session: 2024-25
Department: Mathematics

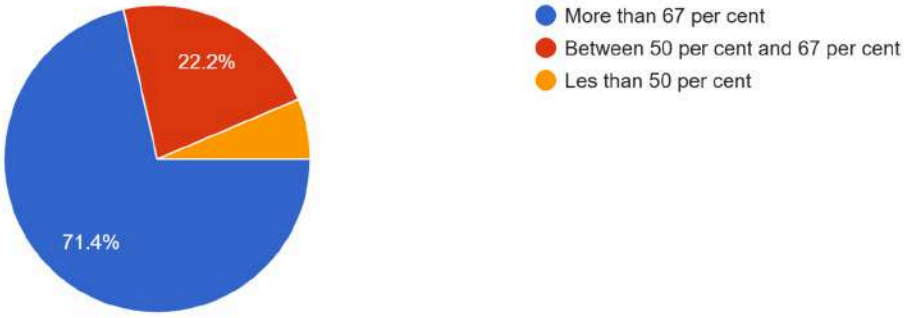
Semester: I

Program: B. Sc. (H.) Mathematics

Paper Name: DSC-1 Algebra

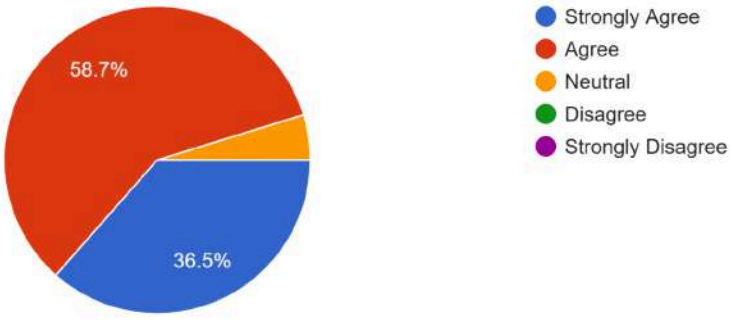
Percentage of classes attended

63 responses



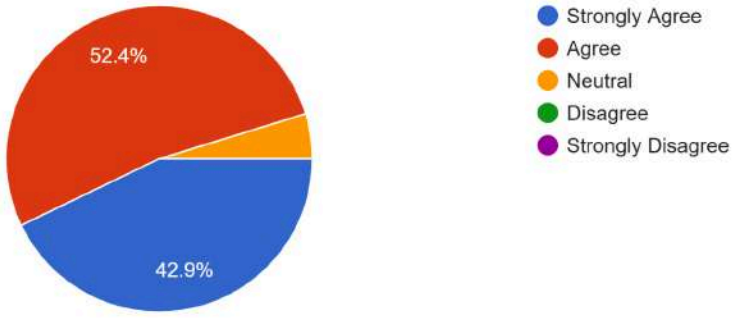
You have learned to determine number of positive/negative real roots of a real polynomial.

63 responses



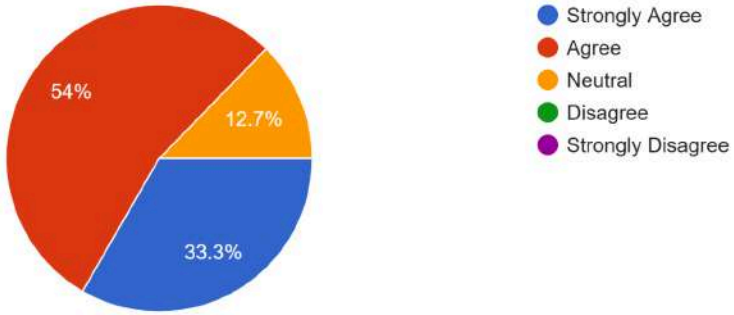
You have learned to solve cubic and quartic polynomial equations with special condition on roots and in general.

63 responses



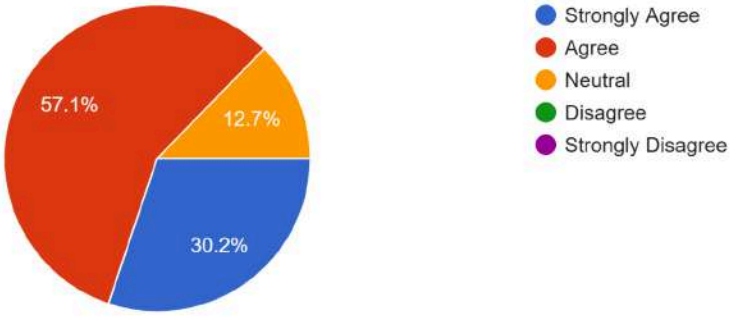
You understood to employ De-Moivre's theorem in a number of applications to solve numerical problems.

63 responses



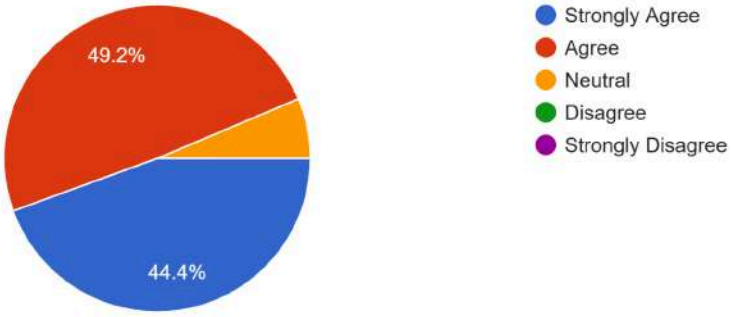
You have learned to use modular arithmetic and basic properties of congruences

63 responses



You have learned to recognize the algebraic structure, namely groups, and classify subgroups of cyclic groups.

63 responses



Observations:

From the given responses, it is observed that around 60% of students strongly agreed and agreed that they learned to determine the number of positive/negative real roots of real polynomial, cubic and quartic polynomial equations with the special conditions on roots and in general. The majority of students understood how to employ De-Moivre's theorem in a number of applications to solve numerical problems. They also learned to recognize the algebraic structure, namely groups, and classify subgroups of cyclic groups. It is also observed that students had an interest in the paper as 71.4% of students had more than 67% of attendance.

Action Taken:

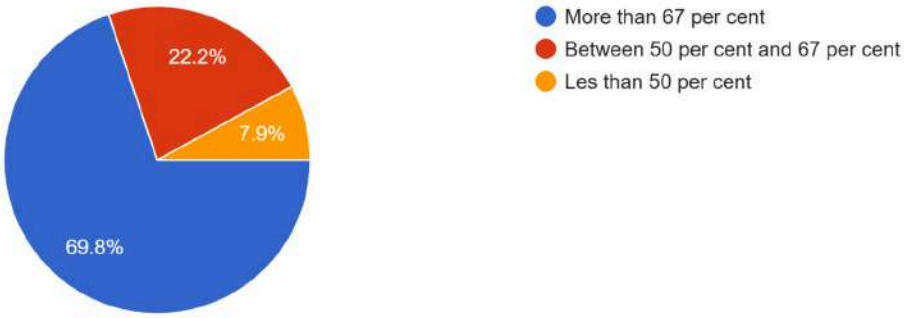
For moderate responses, topics will be discussed more with the students in tutorials. For the weak students, special classes will be held to discuss important questions with them. Measures will be taken to make the subject more engaging and appealing to the students to ensure higher attendance. Assessments would also be done at regular intervals.

Program: B. Sc. (H.) Mathematics

Paper Name: DSC-2 Elementary Real Analysis

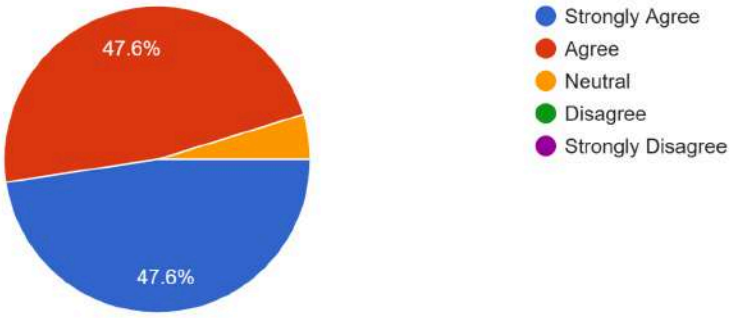
Percentage of classes attended

63 responses



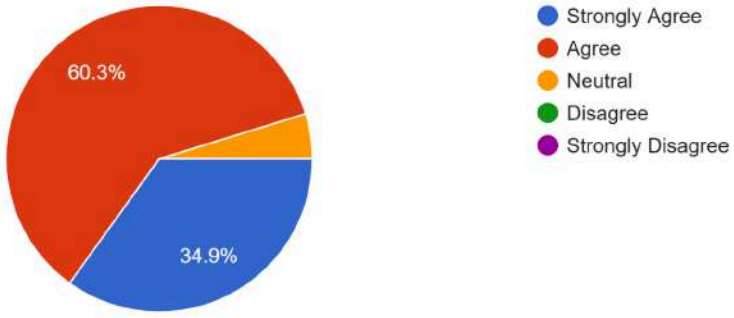
You understood the fundamental properties of the real numbers, including completeness and Archimedean, and density property of rational numbers in $\mathbb{R}$.

63 responses



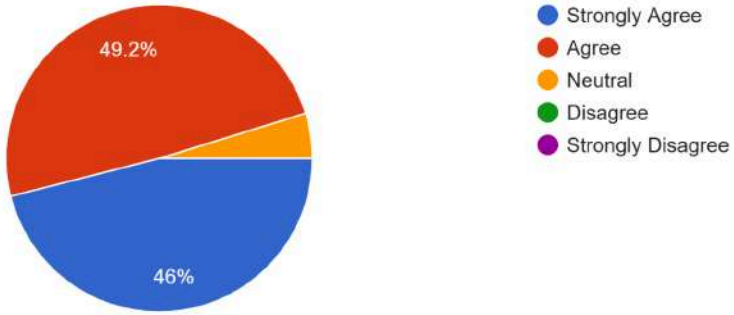
You have learned to define sequences in terms of functions from $\mathbb{N}$ to a subset of $\mathbb{R}$ and find the limit.

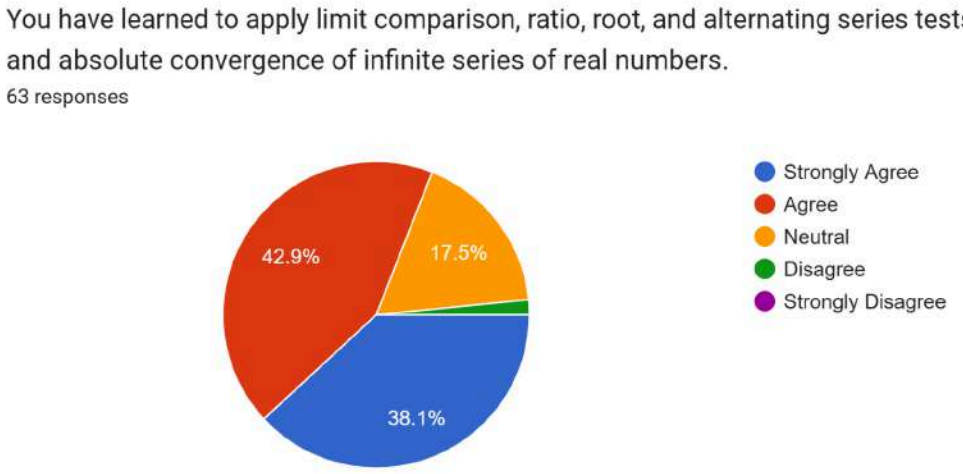
63 responses



You understood the concepts of bounded, convergent, divergent, Cauchy and monotonic sequences and learned to calculate the limit superior and limit inferior of a bounded sequence.

63 responses





Observations:

From the given responses, it is observed that around 60% of students strongly agreed and agreed that they understood the fundamental properties of real numbers, including completeness and Archimedean, and density property of rational numbers in $\mathbb{R}$ and learned to define sequences in terms of functions from $\mathbb{N}$ to a subset of $\mathbb{R}$ and find the limit. The majority of students understood to apply limit comparison, ratio, root, and alternating series tests for convergence and absolute convergence of infinite series of real numbers. It is also observed that students had an interest in the paper as 69.8% of students had more than 67% of attendance.

Action Taken:

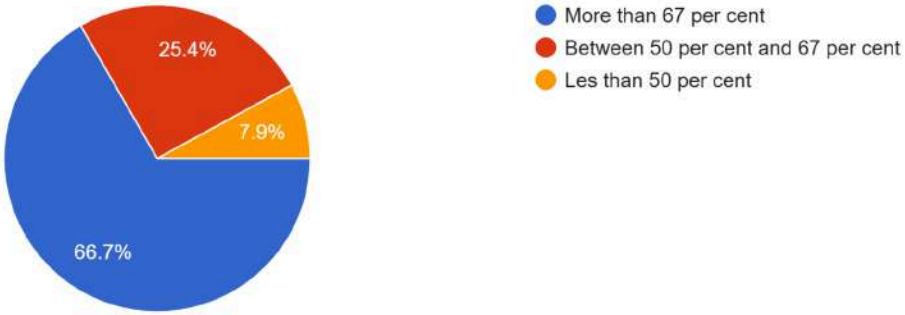
For moderate responses, topics will be discussed more with the students in tutorials. For the weak students, special classes will be held to discuss important questions with them. Measures will be taken to make the subject more engaging and appealing to the students to ensure higher attendance. Assessments would also be done at regular intervals.

Program: B. Sc. (H.) Mathematics

Paper Name: DSC-3 Probability And Statistics

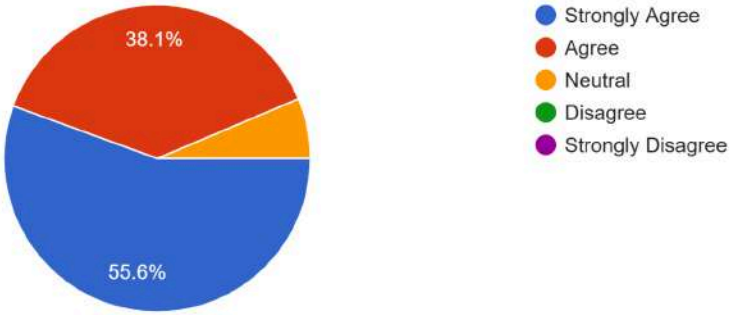
Percentage of classes attended

63 responses



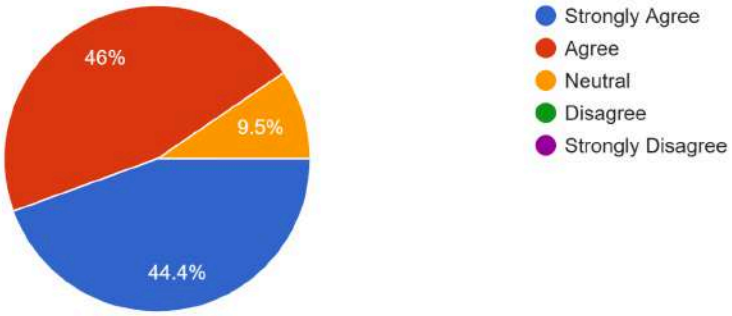
You understood some basic concepts and terminology - population, sample, descriptive and inferential statistics including stem-and-leaf plots, dotplots, histograms and boxplots.

63 responses



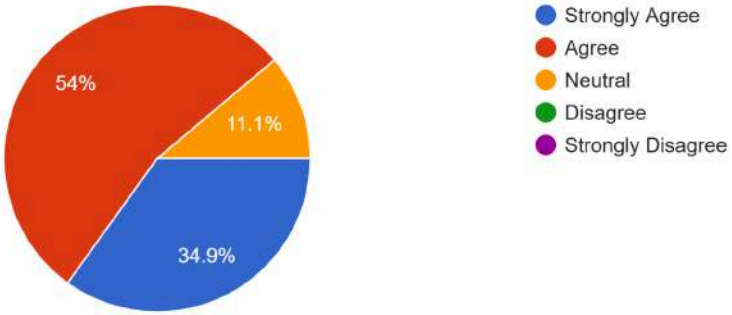
You have learned about probability density functions and various univariate distributions such as binomial, hypergeometric, negative binomial, Poisson, normal, exponential and lognormal.

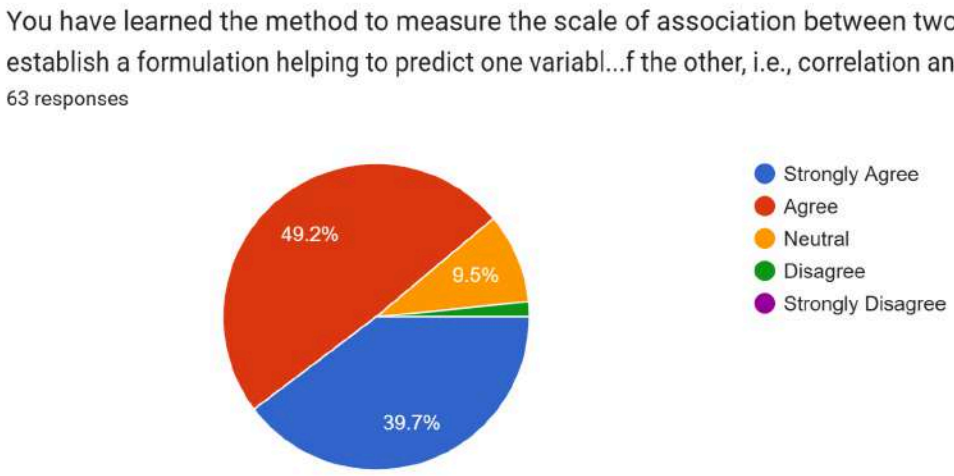
63 responses



You understood the remarkable fact that the empirical frequencies of so many natural populations, exhibit bell-shaped (i.e., normal) curves, using the Central Limit Theorem.

63 responses





Observations:

From the given responses, it is observed that around 60% of students strongly agreed and agreed that they understood some basic concepts and terminology - population, sample, descriptive and inferential statistics including stem-and-leaf plots, dotplots, histograms and boxplots and also learned about probability density functions and various univariate distributions such as binomial, hypergeometric, negative binomial, Poisson, normal, exponential and lognormal. The majority of students understood the remarkable fact that the empirical frequencies of so many natural populations exhibit bell-shaped (i.e., normal) curves, using the Central Limit Theorem and concept of correlation and linear regression. It is also observed that students had an interest in the paper as 66.7% of students had more than 67% of attendance.

Action Taken:

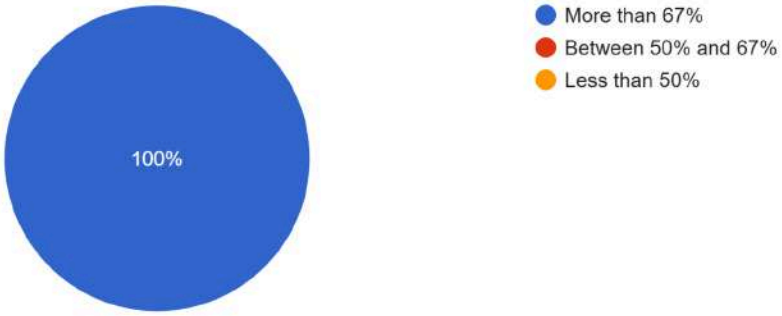
For moderate responses, topics will be discussed more with the students in tutorials. For the weak students, special classes will be held to discuss important questions with them. Measures will be taken to make the subject more engaging and appealing to the students to ensure higher attendance. Assessments would also be done at regular intervals.

Program: B. A. (Prog.)

Paper Name: Major_Elements of Discrete Mathematics

Percentage of Classes Attended

1 response

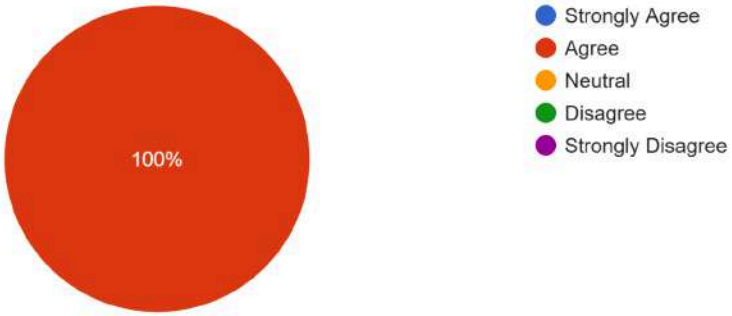


You have learnt about partial order and related properties.

1 response

You have understood the basic concepts of sets, relations, functions and induction.

1 response

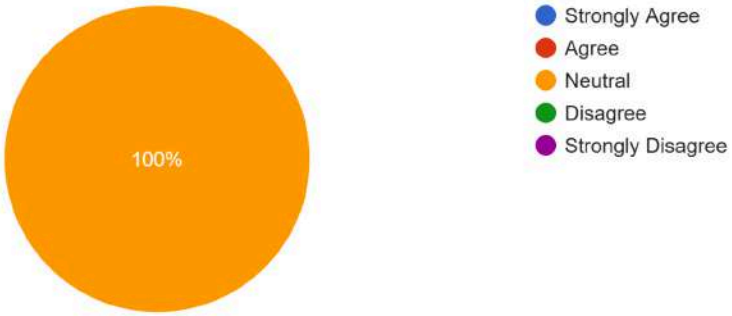


You have understood the mathematical logic and logical operations to various fields.

1 response

You have understood the notion of order and maps between partially ordered sets.

1 response



You have learnt to minimize a Boolean polynomial.

1 response

Observations:

From the given responses, it is observed that 100% of the students strongly agreed and agreed that they were able to learn about the partial order and related properties and learned to describe basic concepts of sets, relations, functions and induction. They were also able to understand the importance of mathematical logic and logical operations to various fields and its applications and learned to use the notion of order and maps between partially ordered sets. 100% of the students strongly agreed and agreed that they were able to learn to minimize a Boolean polynomial with applications.

Actions Taken

The response to this paper has been encouraging. More efforts will be made to keep students intrigued. For moderate responses, topics will be discussed more with the students. For the weaker students, special classes will be held to discuss important topics. Assessments like tests, assignments, and Viva would also be done at regular intervals.

COURSE EXIT SURVEY: Analysis Report
Academic Session: 2024-25
Department: Mathematics

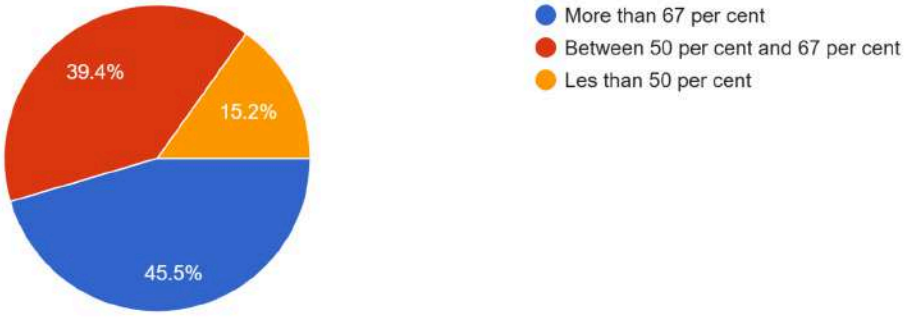
Semester: II

Program: B. Sc. (H.) Mathematics

Paper Name: DSC-4 Linear Algebra

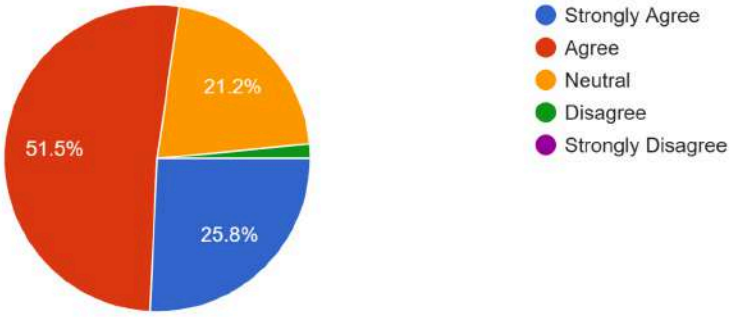
Percentage of classes attended

66 responses



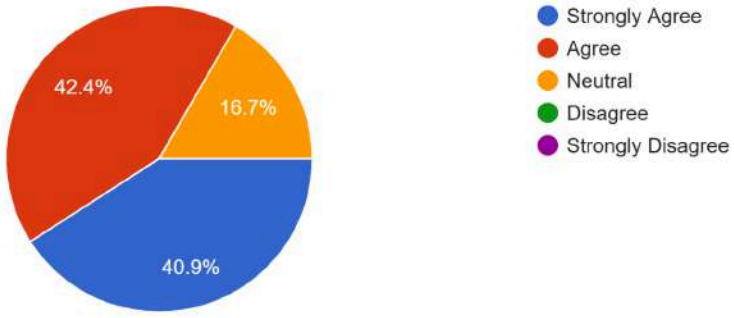
You have learned to visualize the space $RRnn$ in terms of vectors and their interrelation with matrices.

66 responses



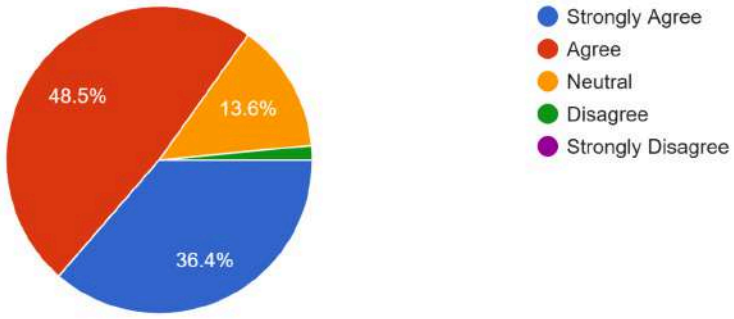
You have familiarized with basic concepts in vector spaces, linear independence and span of vectors over a field.

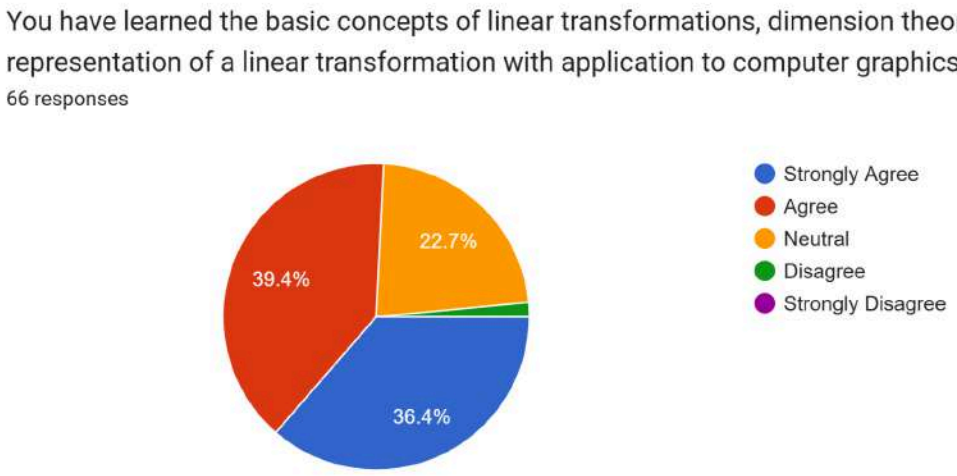
66 responses



You understood the concept of basis and dimension of a vector space.

66 responses





Observations:

From the given responses, it is observed that around 60% of students strongly agreed and agreed that they learned to visualize the space Rn in terms of vectors and their interrelation with matrices, understood the basic concepts of vector spaces, linear independence and span of vectors over a field, basis and dimension of a vector space and concepts of linear transformations, dimension theorem, matrix representation of a linear transformation with application to computer graphics. It is also observed that students had an interest in the paper as 45.5% of students had more than 67% of attendance.

Action Taken:

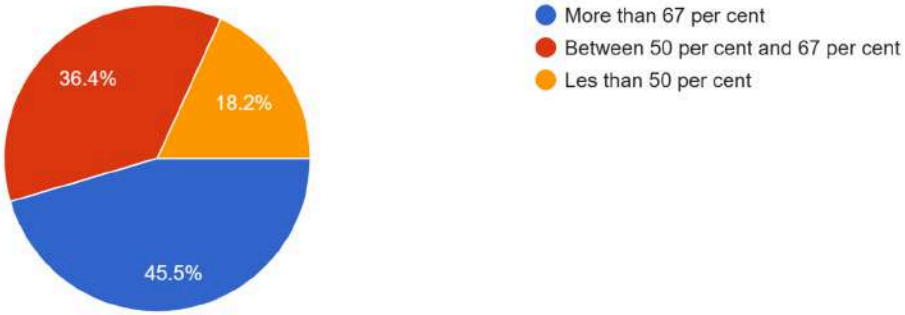
For moderate responses, topics will be discussed more with the students in tutorials. For the weak students, special classes will be held to discuss important questions with them. Measures will be taken to make the subject more engaging and appealing to the students to ensure higher attendance. Assessments would also be done at regular intervals.

Program: B. Sc. (H.) Mathematics

Paper Name: DSC-5 Calculus

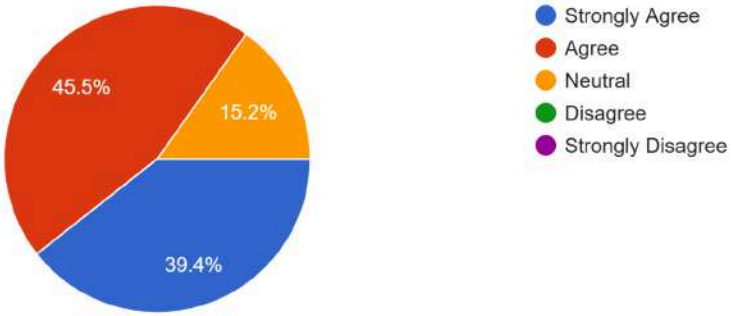
Percentage of classes attended

66 responses



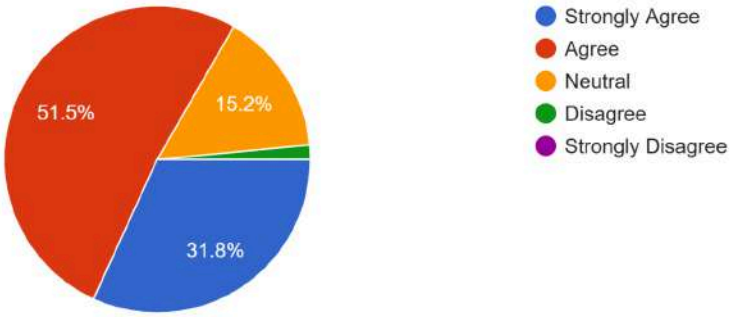
You understood the notion of limits, continuity and uniform continuity of functions.

66 responses



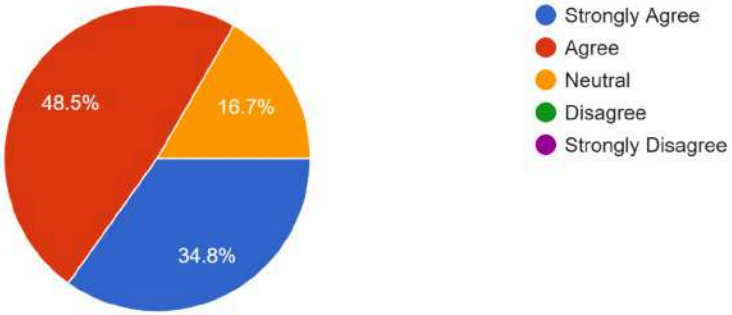
You have learned the geometrical properties of continuous functions on closed and bounded intervals.

66 responses



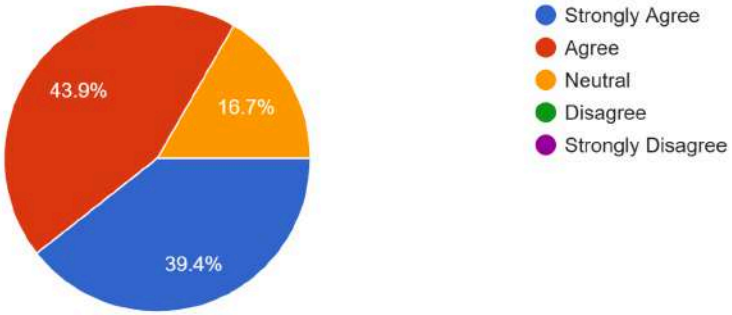
You understood the applications of derivative, relative extrema and mean value theorems.

66 responses



You learned the higher order derivatives, Taylor's theorem, indeterminate forms and tracing of curves.

66 responses



Observations:

From the given responses, it is observed that around 60% of students strongly agreed and agreed that they understood the notion of limits, continuity and uniform continuity of functions, geometrical properties of continuous functions on closed and bounded intervals, applications of derivative, relative extrema and mean value theorems and higher order derivatives, Taylor's theorem, indeterminate forms and tracing of curves. It is also observed that students had an interest in the paper as 45.5% of students had more than 67% of attendance.

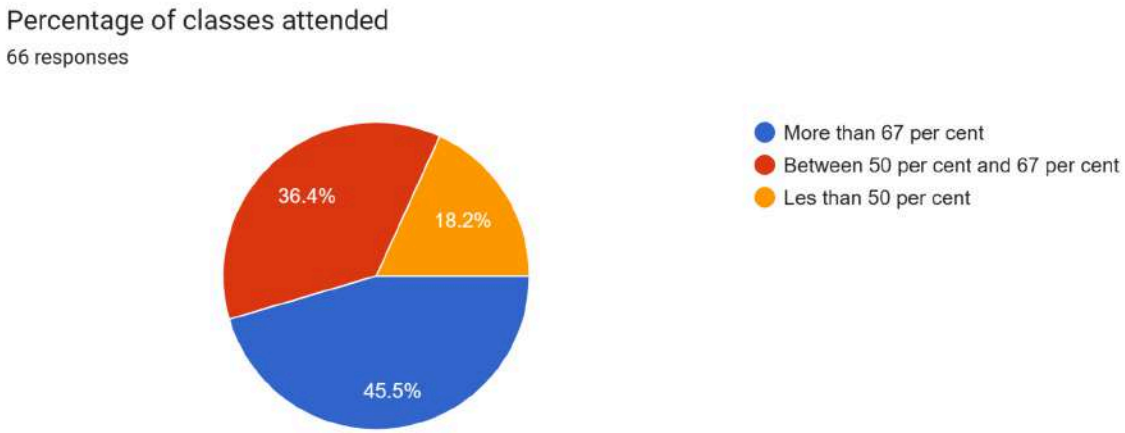
Action Taken:

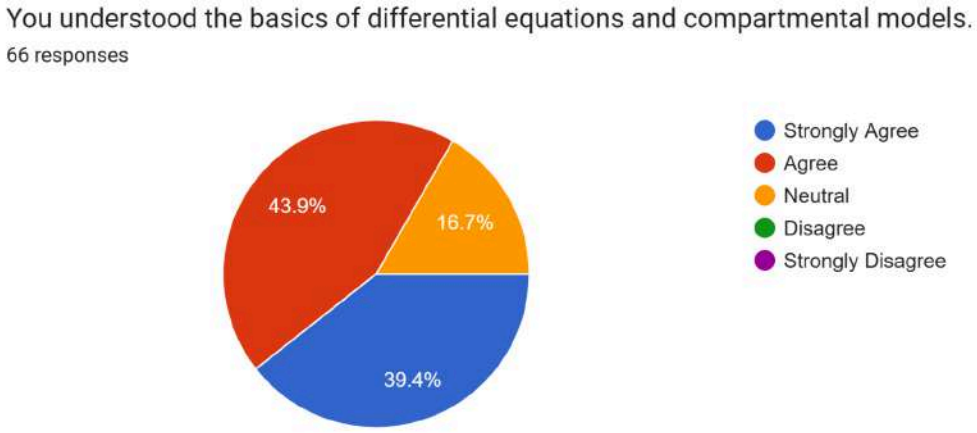
For moderate responses, topics will be discussed more with the students in tutorials. For the weak students, special classes will be held to discuss important questions with them. Measures will be taken to make the subject more engaging

and appealing to the students to ensure higher attendance. Assessments would also be done at regular intervals.

Program: B. Sc. (H.) Mathematics

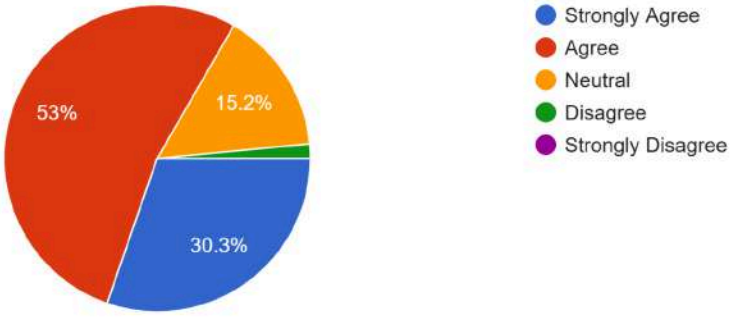
Paper Name: DSC-6 Ordinary Differential Equations





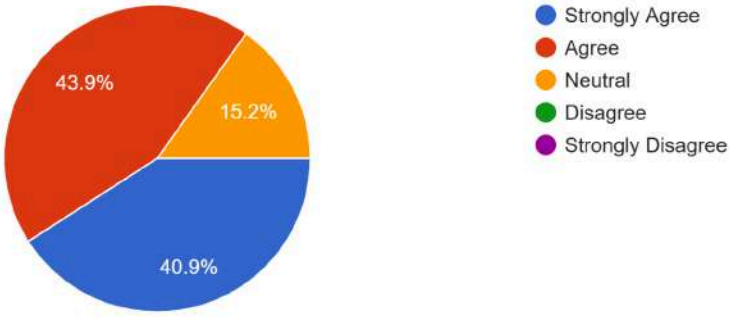
You have learned to formulate differential equations for various mathematical models.

66 responses



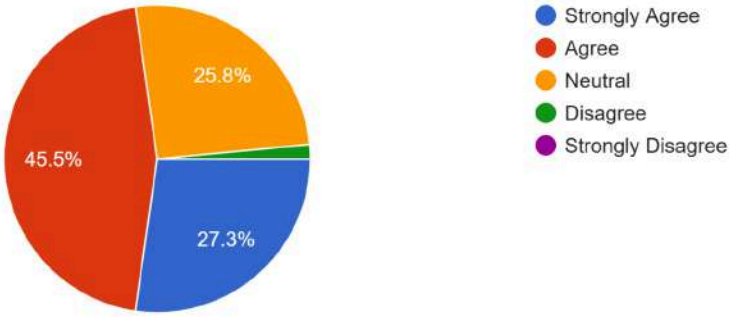
You learned to solve first order non-linear differential equations, linear differential equations of higher order and system of linear differential equations using various techniques.

66 responses



You have learned to apply these techniques to solve and analyze various mathematical models.

66 responses



Observations:

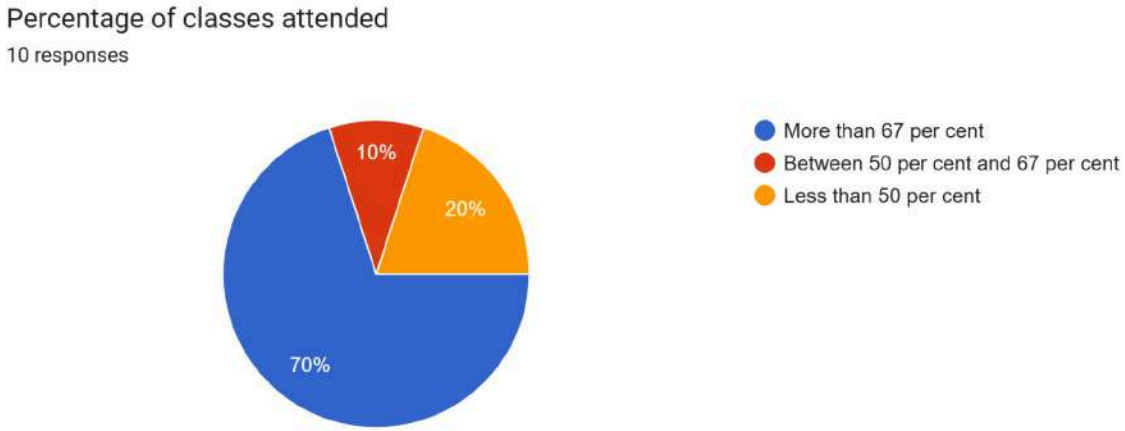
From the given responses, it is observed that around 60% of students strongly agreed and agreed that they understood the basics of differential equations and compartmental models, formulate differential equations for various mathematical models, solving first order nonlinear differential equations, linear differential equations of higher order and system of linear differential equations using various techniques and apply these techniques to solve and analyze various mathematical models. It is also observed that students had an interest in the paper as 45.5% of students had more than 67% of attendance.

Action Taken:

For moderate responses, topics will be discussed more with the students in tutorials. For the weak students, special classes will be held to discuss important questions with them. Measures will be taken to make the subject more engaging and appealing to the students to ensure higher attendance. Assessments would also be done at regular intervals.

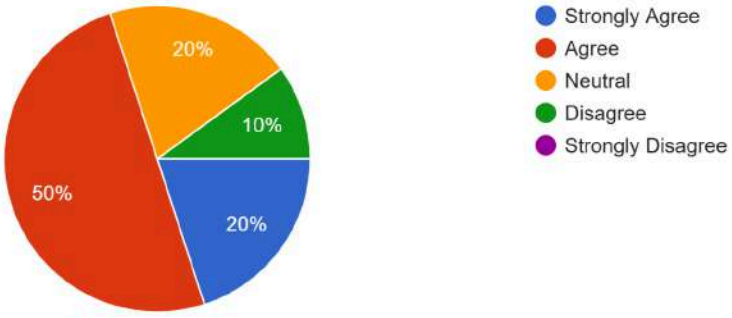
Program: B. A. (Prog.)

Paper Name: Minor Elementary Linear Algebra



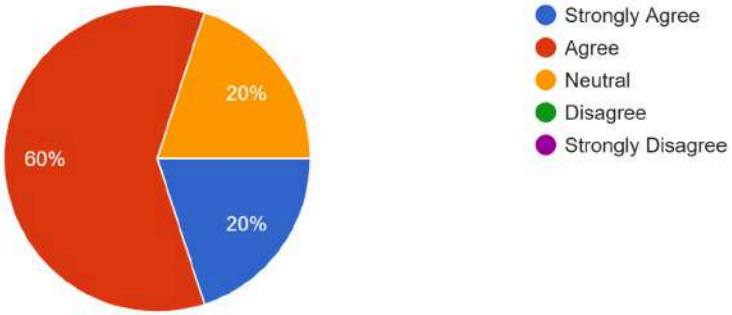
You have learned to visualize the space $RRnn$ in terms of vectors and their interrelation with matrices.

10 responses



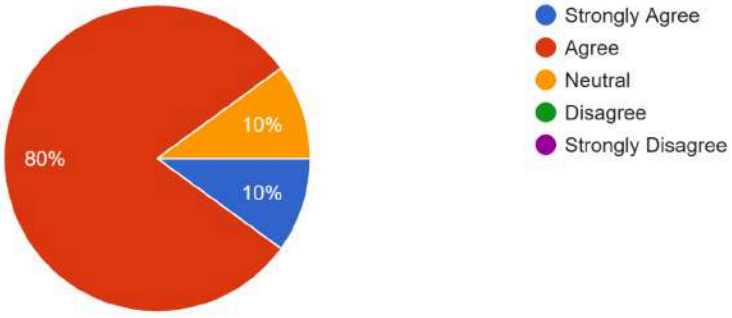
You have familiarized with basic concepts in vector spaces, linear independence and span of vectors over a field.

10 responses



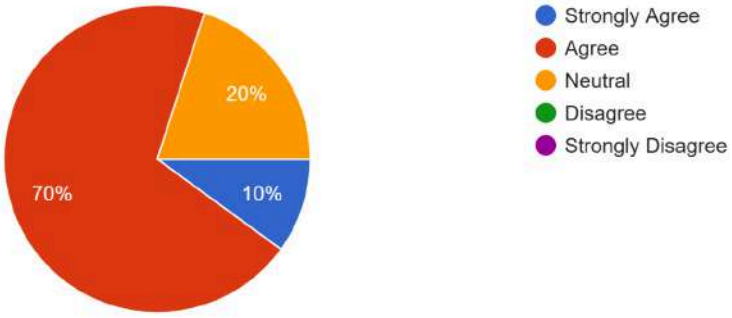
You understood the concept of basis and dimension of a vector space.

10 responses



You have learned the basic concepts of linear transformations and its corresponding matrix.

10 responses



Observations:

From the given responses, it is observed that around 60% of students strongly agreed and agreed that they have learned to visualize the space Rn in terms of vectors and their interaction with matrices. About 40% of the students strongly agree that they are familiarized with basic concepts in vector spaces,linearly independent and the span of vectors over a field. Mostly agree that they understood the concept of basis and dimension of vector space. It is also observed that students had an interest in the paper as 70% of students had more than 67% of attendance.

Action Taken:

For moderate responses, topics will be discussed more with the students in tutorials. For the weak students, special classes will be held to discuss important questions with them. Measures will be taken to make the subject more engaging

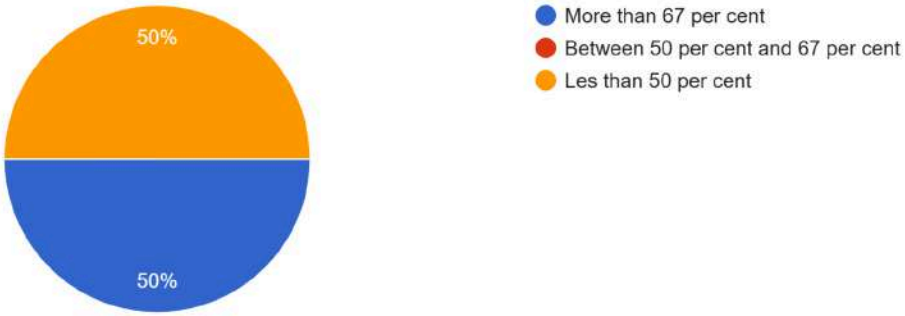
and appealing to the students to ensure higher attendance. Assessments would also be done at regular intervals.

Program: B. A. (Prog.)

Paper Name: Major_Analytic Geometry

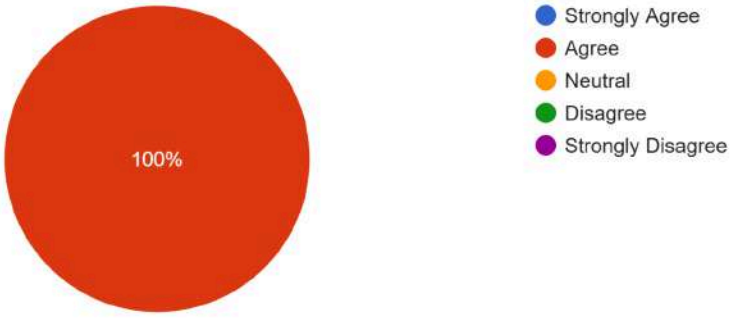
Percentage of classes attended

2 responses



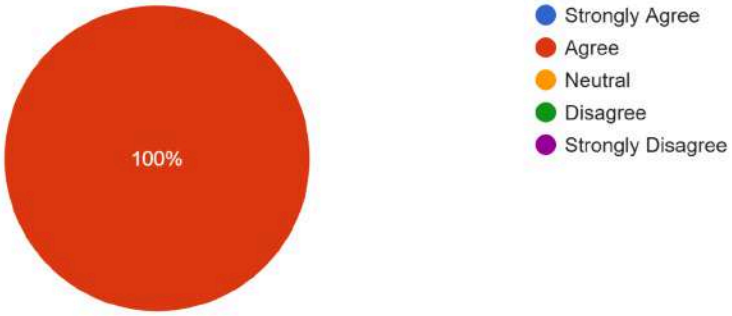
You have learnt the concepts in two-dimensional geometry.

2 responses



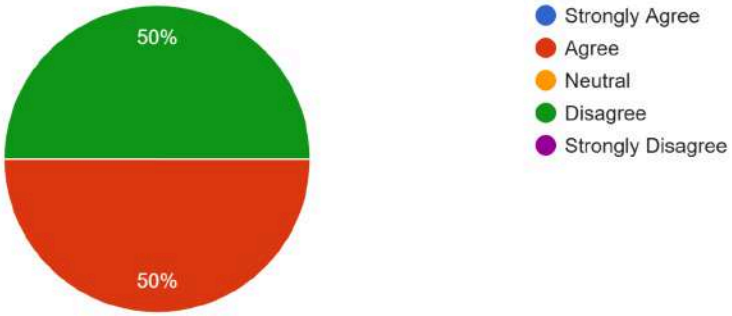
You have learnt to identify and sketch conics namely ellipse, parabola and hyperbola.

2 responses



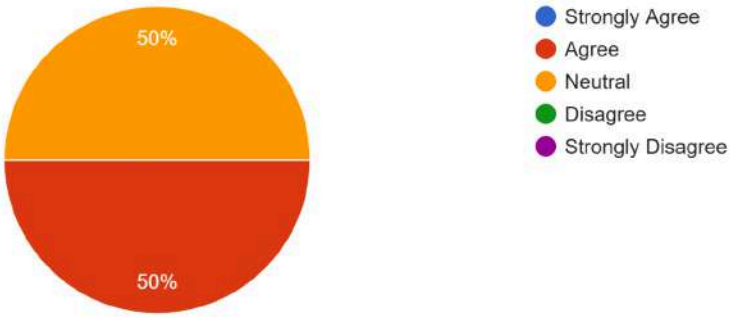
You have learnt about 3D objects such as straight lines using vectors, spheres, cones and cylinders.

2 responses



You have learnt about 3D objects such as planes using vectors, spheres, cones and cylinders.

2 responses



Observations:

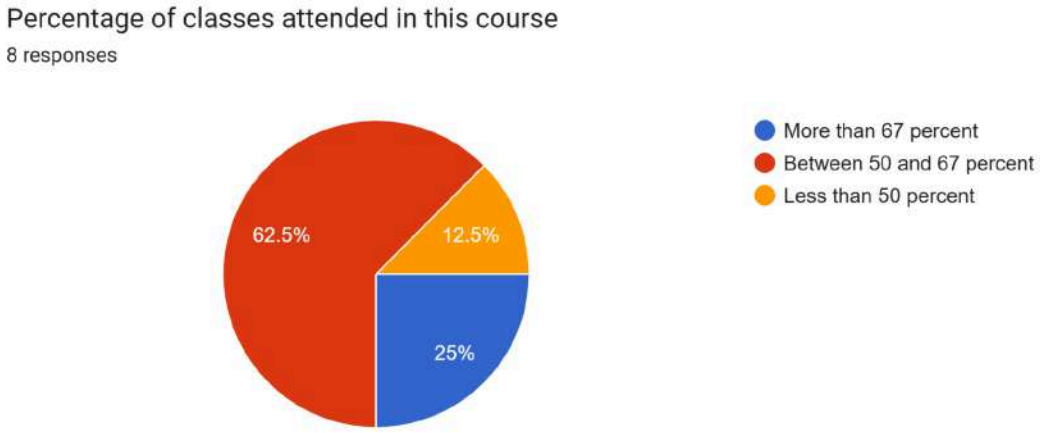
From the given responses, it is observed that around 60% of students strongly agreed and agreed that they learned the concepts in two dimensional geometry and are able to identify and sketch conics namely ellipse, parabola and hyperbola. About 50% of the students strongly agree that they are familiarized with basic concepts in 3D objects such as straight lines, planes using vectors, spheres, cones and cylinders. It is also observed that students had an interest in the paper as 50% of students had more than 67% of attendance.

Action Taken:

For moderate responses, topics will be discussed more with the students in tutorials. For the weak students, special classes will be held to discuss important questions with them. Measures will be taken to make the subject more popular, engaging and appealing to the students to ensure higher attendance. Assessments would also be done at regular intervals.

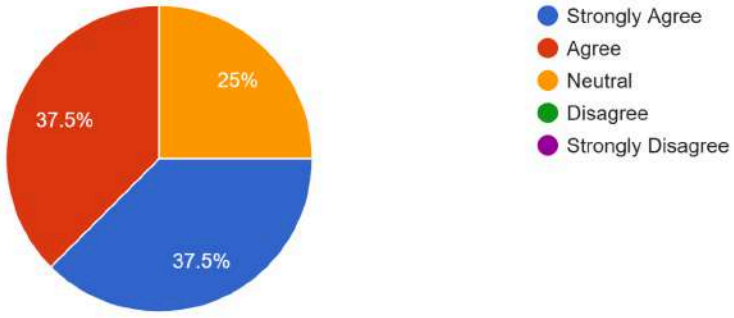
Program: All Hons. other than Maths (Hons.)

Paper Name: GE-2 Introduction to Linear Algebra



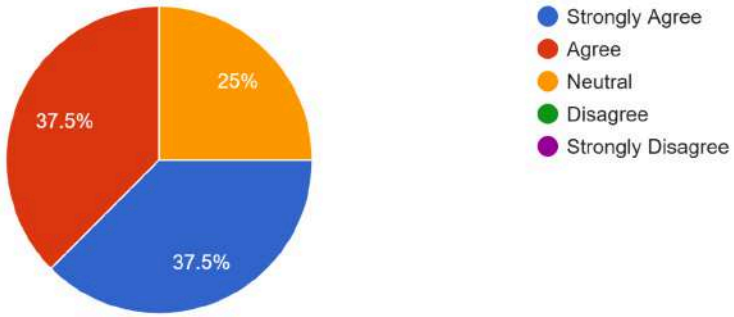
You were able to visualize the space R^n in terms of vectors and the interrelation of vectors with matrices.

8 responses



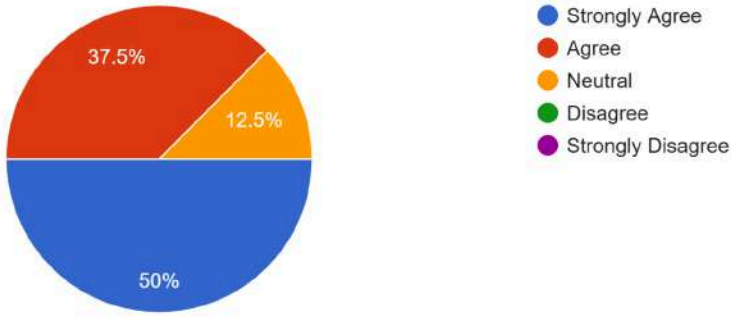
You understood concepts in vector spaces, namely, basis, dimension and minimal spanning sets.

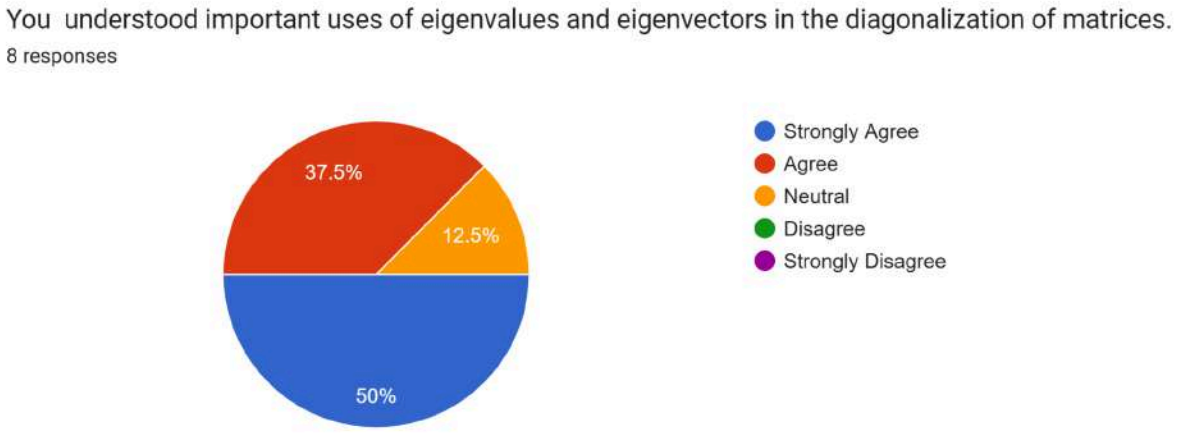
8 responses



You learned about linear transformations and its corresponding matrix.

8 responses





Observations:

From the given responses, it is observed that around 60% of students strongly agreed and agreed that they learned to visualize the space Rn in terms of vectors and their interrelation with matrices, understood the basic concepts of vector spaces, linear independence and span of vectors over a field, basis and dimension of a vector space and concepts of linear transformations, dimension theorem, matrix representation of a linear transformation. It is also observed that students had an interest in the paper as 25% of students had more than 67% of attendance.

Action Taken:

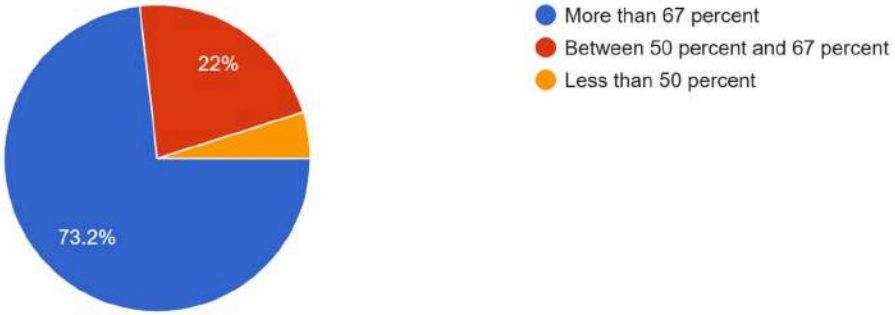
For moderate responses, topics will be discussed more with the students in tutorials. For the weak students, special classes will be held to discuss important questions with them. Measures will be taken to make the subject more popular, engaging and appealing to the students to ensure higher attendance. Assessments would also be done at regular intervals.

Program: All Courses

Paper Name: SEC- IT Skills and Data Analysis 1

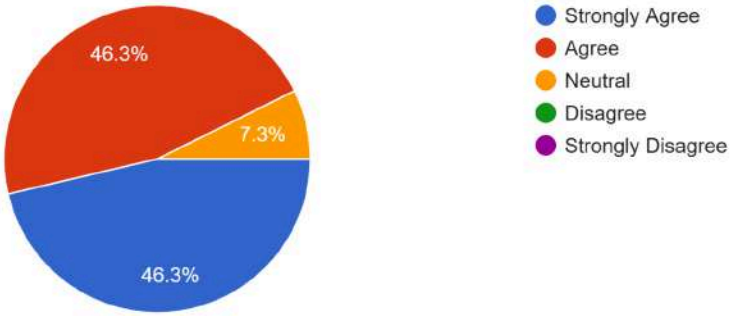
Percentage of Classes Attended

41 responses



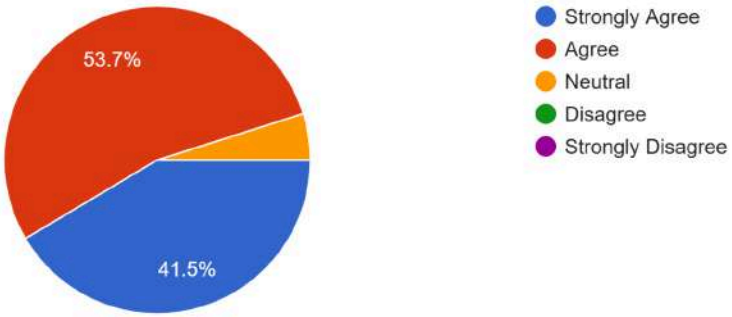
You are able to represent and interpret data in tabular and graphical forms.

41 responses



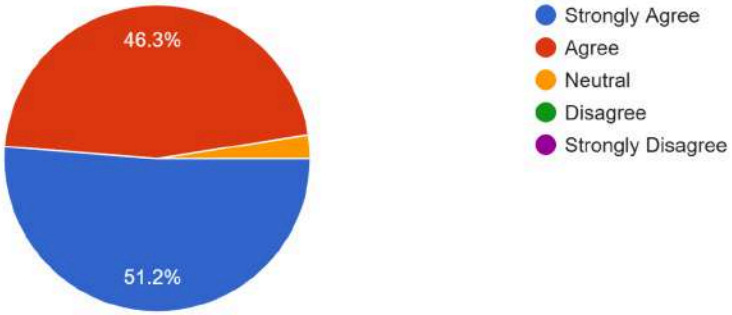
You have understood and can interpret the measures of central tendency and dispersion.

41 responses



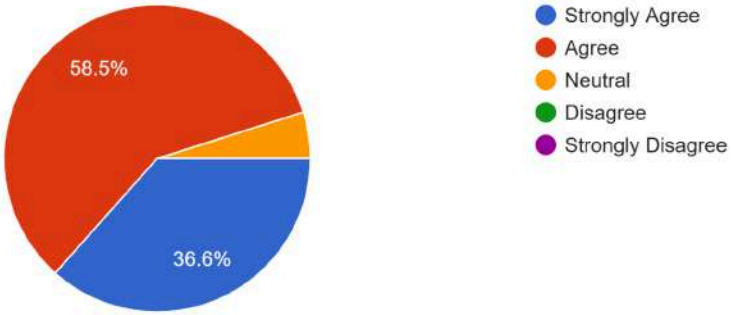
You can use IT tools such as spreadsheets to visualise and analyse data.

41 responses



You are equipped with some fundamental concepts, which play a critical role in understanding and visualizing real world data.

41 responses



Observations:

From the given responses, it is observed that around 60% of students strongly agreed and agreed that they are able to represent and interpret data in tabular and graphical forms. They have understood and can interpret the measures of central tendency and dispersion. It is also observed that students had an interest in the paper as 73.2% of students had more than 67% of attendance.

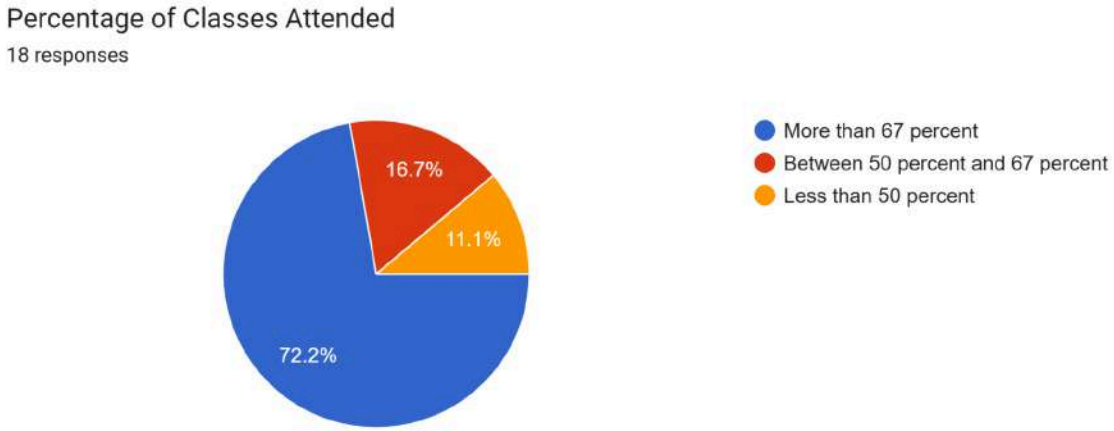
Action Taken:

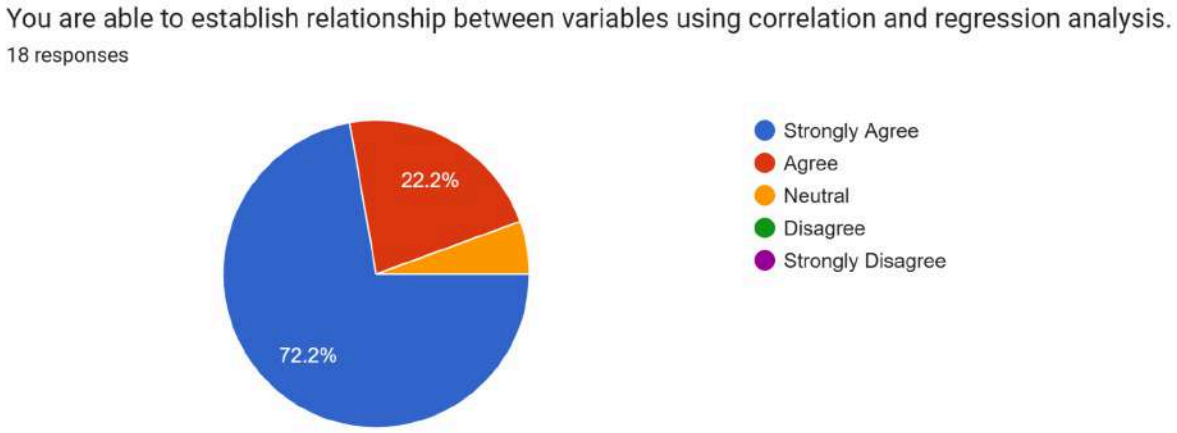
For moderate responses, topics will be discussed more with the students in tutorials. For the weak students, special classes will be held to discuss important questions with them. Measures will be taken to make the subject more popular,

engaging and appealing to the students to ensure higher attendance. Assessments would also be done at regular intervals.

Program: All Courses

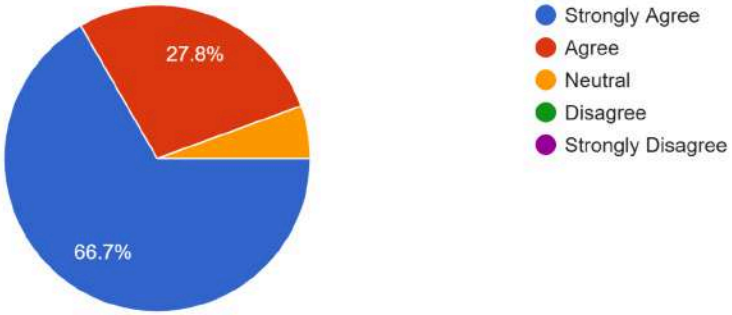
Paper Name: SEC- IT Skills and Data Analysis 2





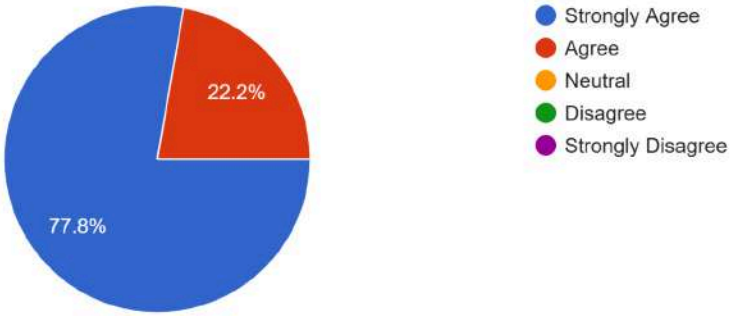
You are able to visualize functions.

18 responses



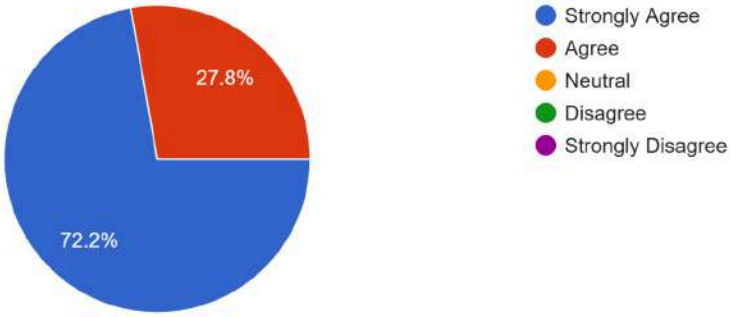
You can use IT tools such as spreadsheets to visualise and analyse data.

18 responses



You can differentiate between linear and non-linear functions.

18 responses



Observations:

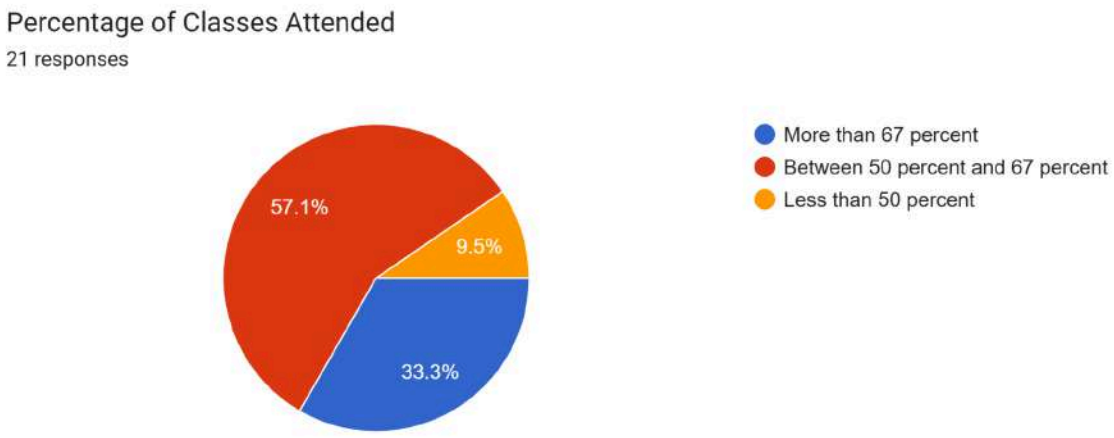
From the given responses, it is observed that around 60% of students strongly agreed and agreed that they can establish relationships between variables using correlation and regression analysis. They can use IT tools such as spreadsheets to visualize and analyze data. It is also observed that students had an interest in the paper as 72.2% of students had more than 67% of attendance.

Action Taken:

For moderate responses, topics will be discussed more with the students in tutorials. For the weak students, special classes will be held to discuss important questions with them. Measures will be taken to make the subject more popular, engaging and appealing to the students to ensure higher attendance. Assessments would also be done at regular intervals.

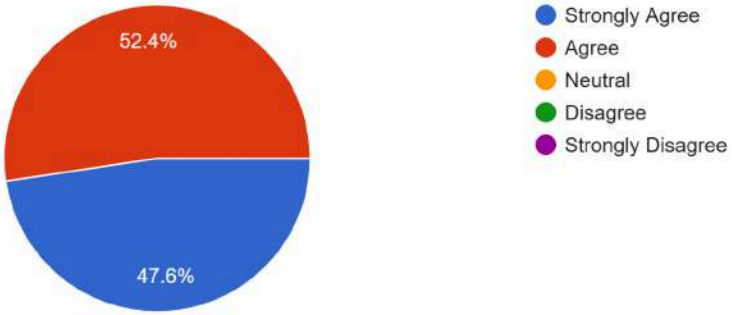
Program: All Courses

Paper Name: SEC- E-Tourism



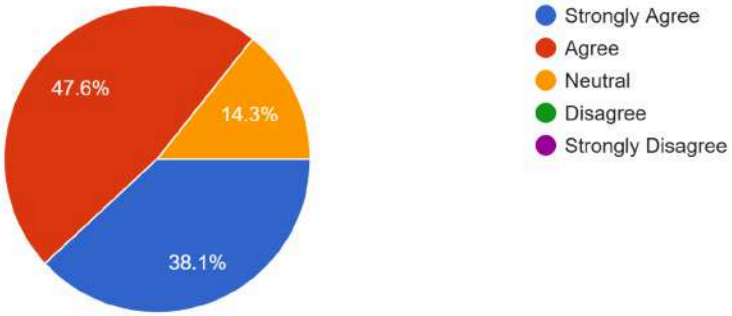
You are able to gain insight into concept of E-Tourism, travel intermediaries and travel websites..

21 responses



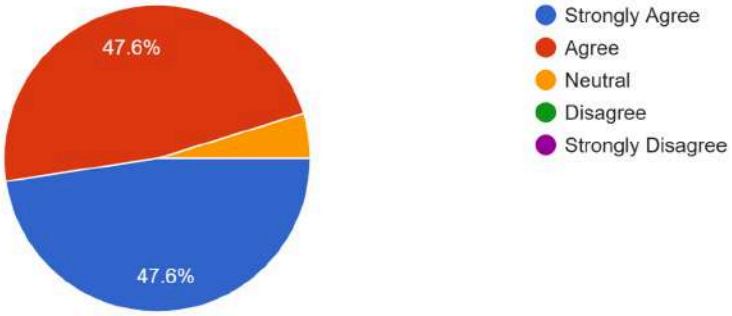
You will be able to learn and explain the emerging ICT tools and its impact in the industry.

21 responses



You are able to understand and implement the use of social media platforms/artificial intelligence in E-Tourism.

21 responses



Observations:

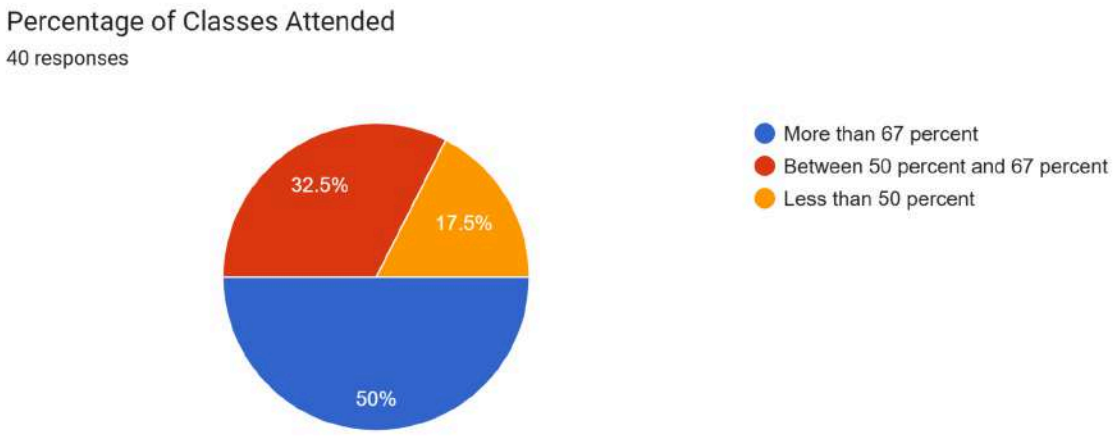
From the given responses, it is observed that around 60% of students strongly agreed and agreed that they understood the concept of E-Tourism, travel intermediaries and travel websites. They all explain the emerging ICT tools and its impact in the industry. They also implement the use of social media platforms/artificial intelligence in E-Tourism. It is also observed that students had an interest in the paper as 33.3% of students had more than 67% of attendance.

Action Taken:

For moderate responses, topics will be discussed more with the students in tutorials. For the weak students, special classes will be held to discuss important questions with them. Measures will be taken to make the subject more popular, engaging and appealing to the students to ensure higher attendance. Assessments would also be done at regular intervals.

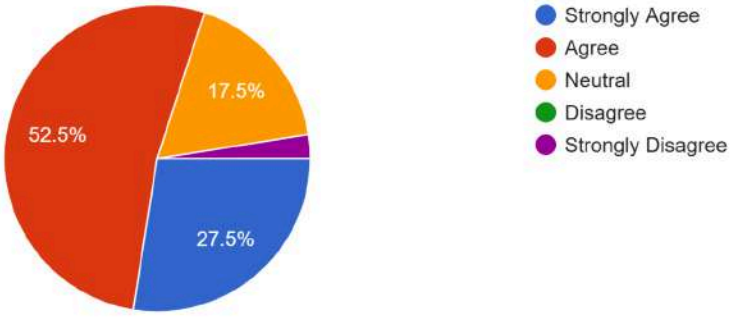
Program: All Courses

Paper Name: VAC- Vedic Mathematics 1



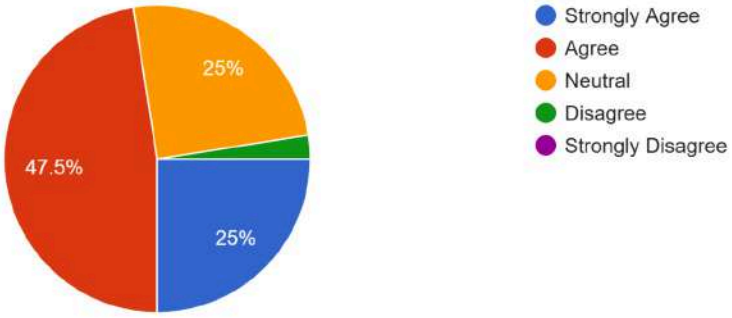
You are familiarized with the mathematical underpinnings and techniques.

40 responses



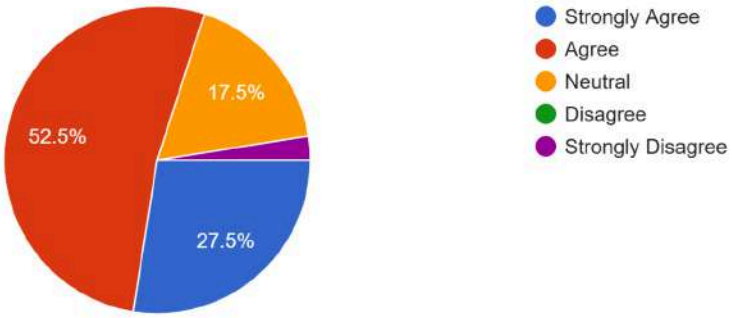
You are able to do basic maths faster and with ease.

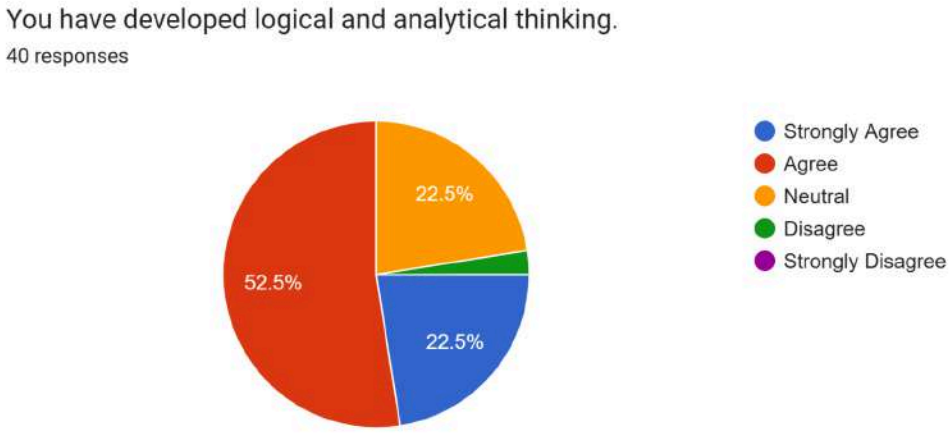
40 responses



You have experienced joyful learning of Mathematics

40 responses





Observations:

From the given responses, it is observed that around 50% of students strongly agreed and agreed that they were familiarized with mathematical underpinnings and techniques. They were able to do basic maths faster and with ease. About 50% students experienced joyful learning of mathematics. It is also observed that students had an interest in the paper as 50% of students had more than 67% of attendance.

Action Taken:

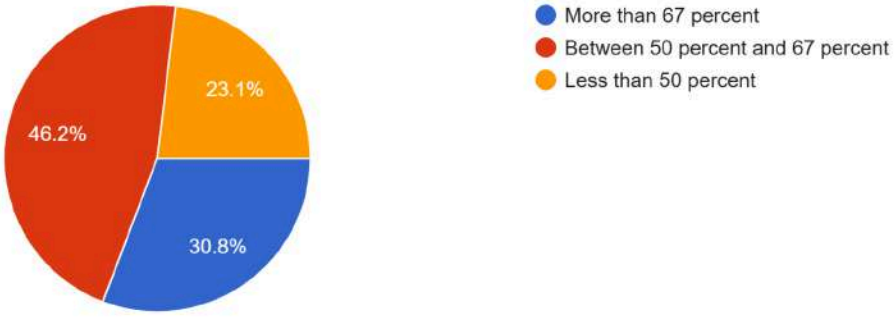
For moderate responses, topics will be discussed more with the students in tutorials. For the weak students, special classes will be held to discuss important questions with them. Measures will be taken to make the subject more popular, engaging and appealing to the students to ensure higher attendance. Assessments would also be done at regular intervals.

Program: All Courses

Paper Name: VAC- Vedic Mathematics 2

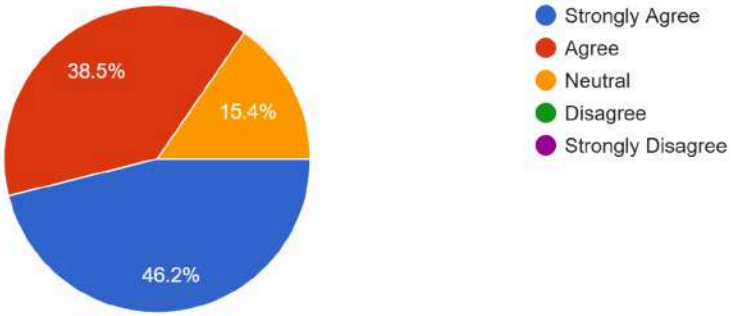
Percentage of Classes Attended

13 responses



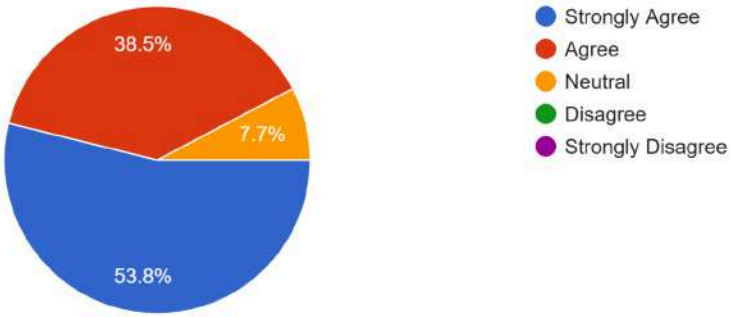
You are able to find the mathematical solution of algebraic expressions.

13 responses



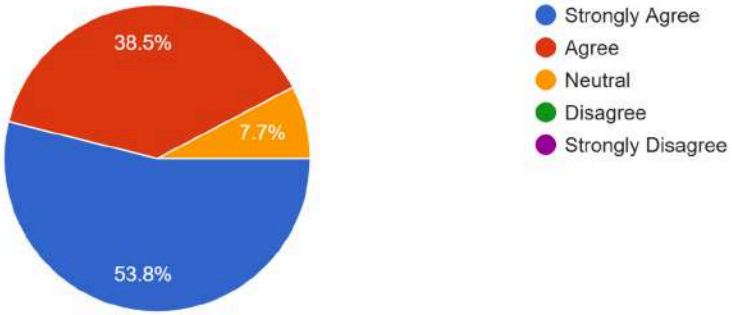
You are able to do basic maths faster and with ease.

13 responses



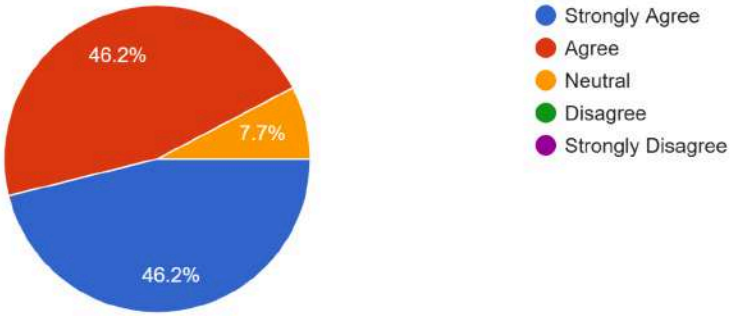
You are able to solve system of linear equations and matrices faster and with ease.

13 responses



You have developed logical and analytical thinking.

13 responses



Observations:

From the given responses, it is observed that around 60% of students strongly agreed and agreed that they are able to solve systems of linear equations & matrices faster and with ease. Also they have learnt to do basic maths faster. It is also observed that students had an interest in the paper as 30.8% of students had more than 67% of attendance.

Action Taken:

For moderate responses, topics will be discussed more with the students in tutorials. For the weak students, special classes will be held to discuss important questions with them. Measures will be taken to make the subject more popular,

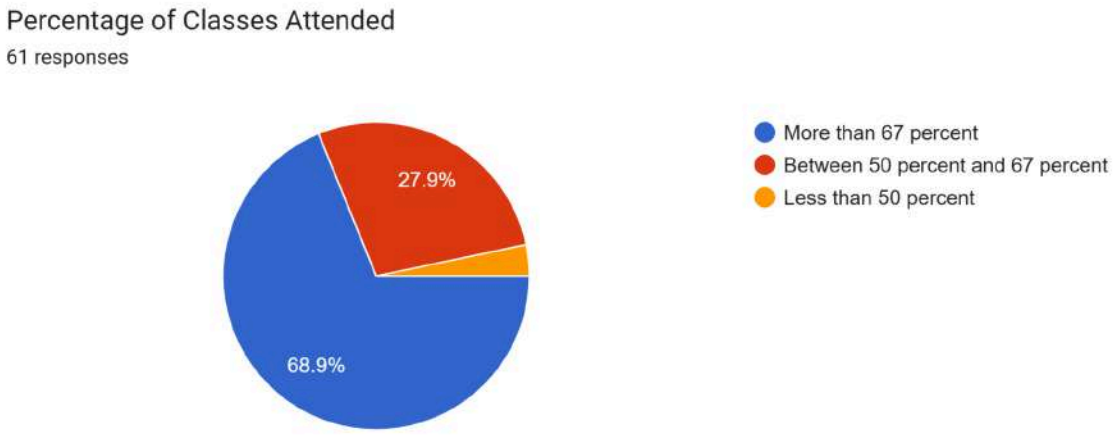
engaging and appealing to the students to ensure higher attendance. Assessments would also be done at regular intervals.

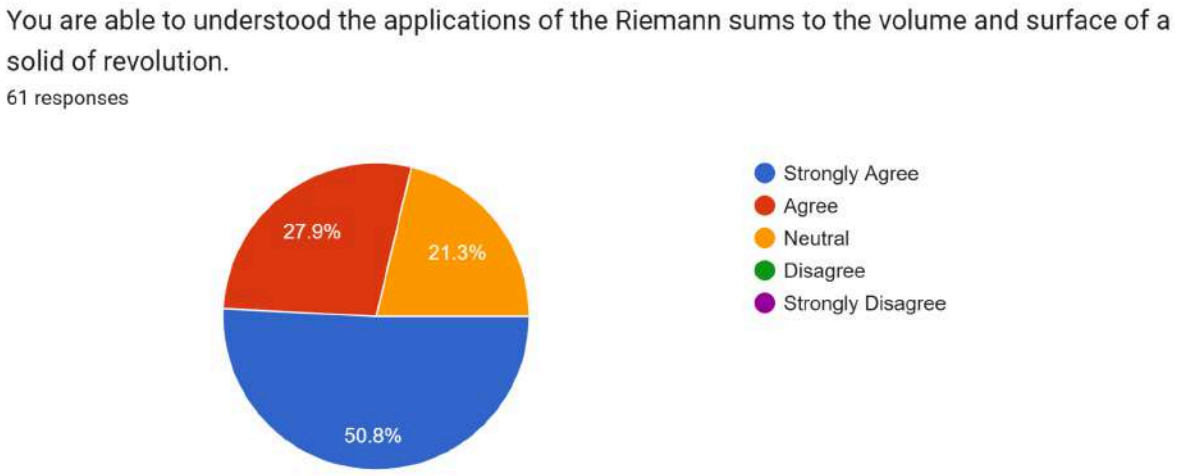
COURSE EXIT SURVEY: Analysis Report
Academic Session: 2024-25

Department: Mathematics **Program: B.Sc.(H) Mathematics**

Semester: 3

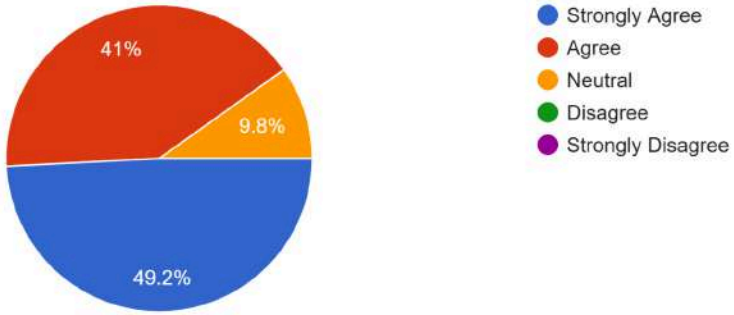
Paper Name: Discipline Specific Core Course – 8 RIEMANN INTEGRATION





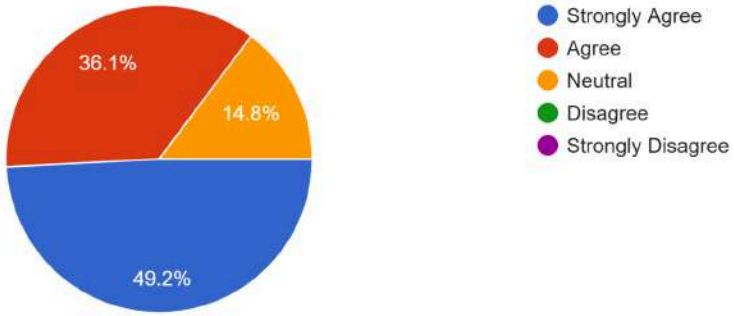
You have learnt about the properties of Riemann integrable functions.

61 responses



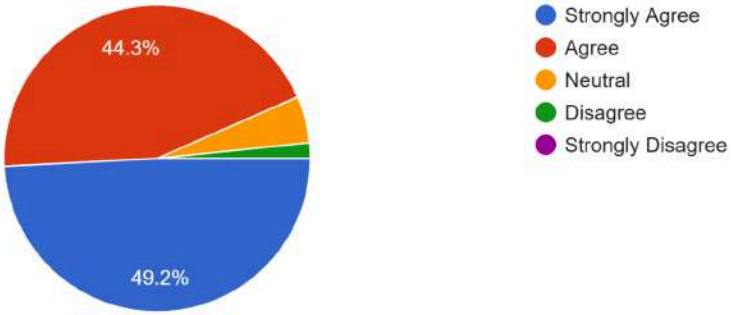
You understood geometrical properties of continuous functions on closed and bounded intervals.

61 responses



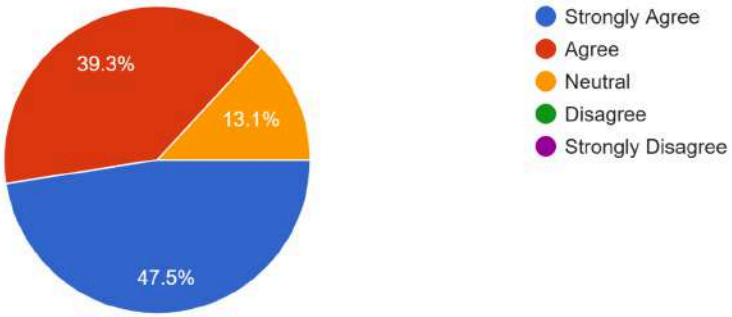
You were able to learn integration by substitution and integration by parts.

61 responses



You understood the convergence of improper integrals including, beta and gamma functions.

61 responses



Observations:

From the given responses, it is observed that more than 87% of students strongly agreed and agreed that they learned to determine the Riemann sum, intermediate value theorem for integral, Fundamental theorem and convergence of improper integral. They also learned to recognize the integral for practical purposes.

Action Taken:

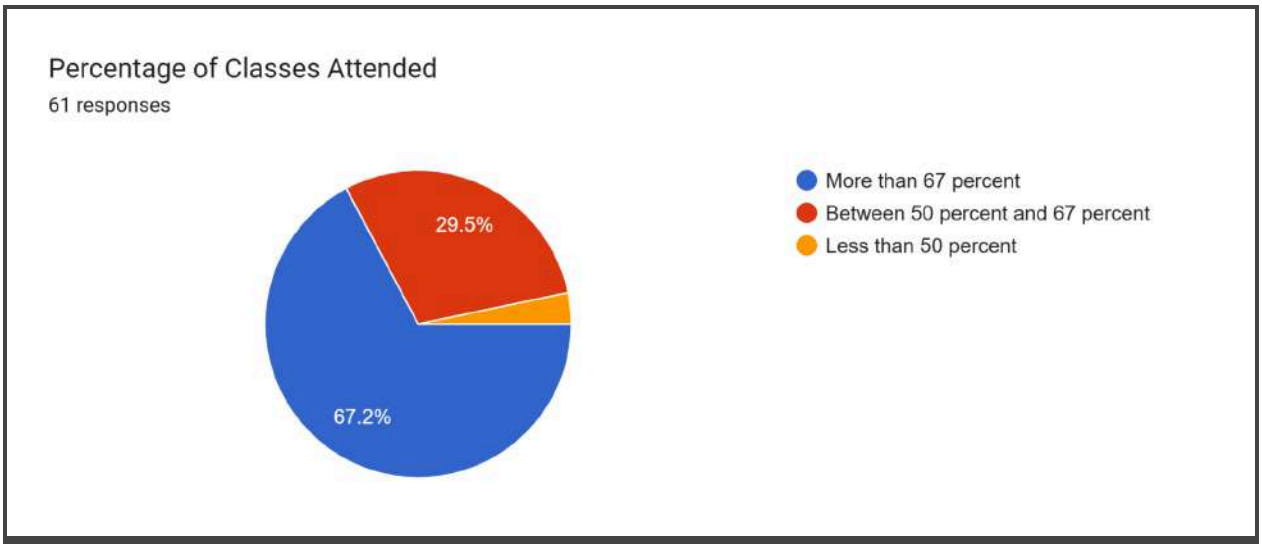
For moderate responses, topics will be discussed more with the students in tutorials. For the weak students, special classes will be held to discuss important questions with them. Measures will be taken to make the subject more engaging

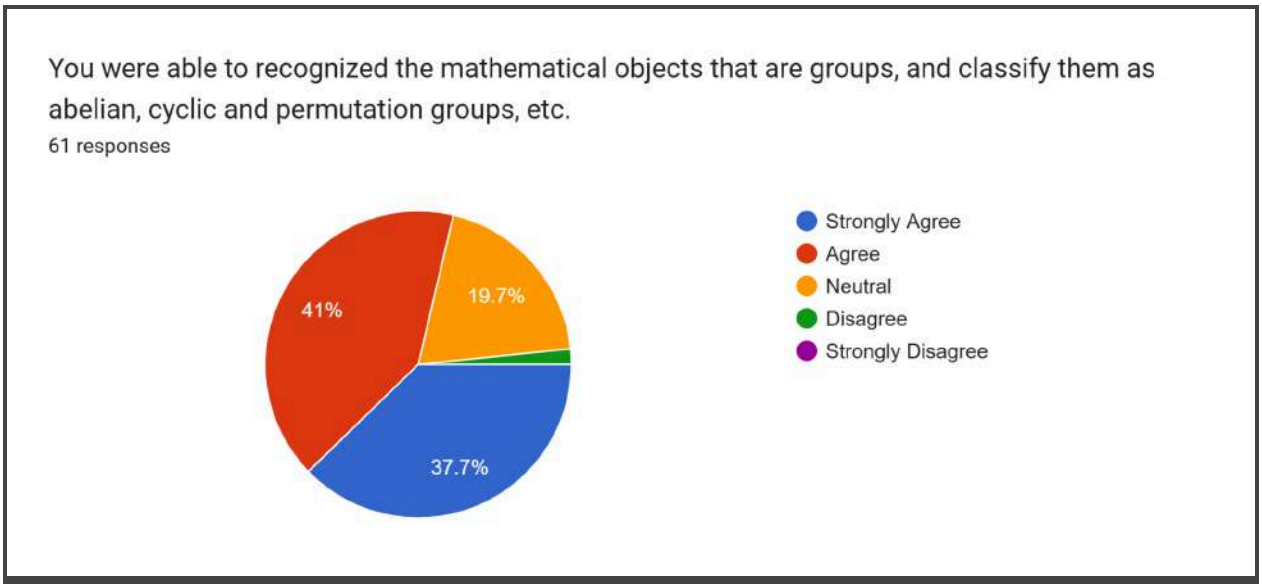
and appealing to the students to ensure higher attendance. Assessments would also be done at regular intervals.

Department: Mathematics **Program: B.Sc.(H) Mathematics**

Semester: 3

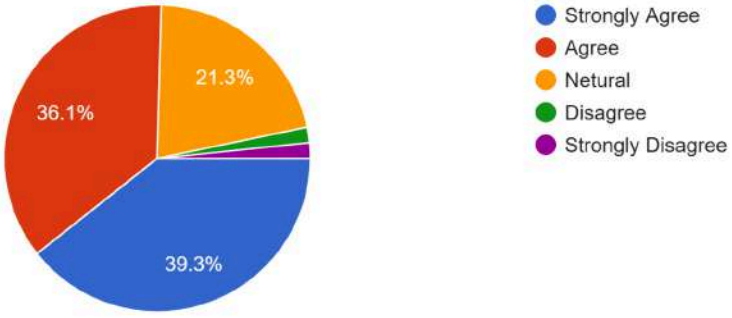
Paper Name: Discipline Specific Core Course – 7: Group Theory





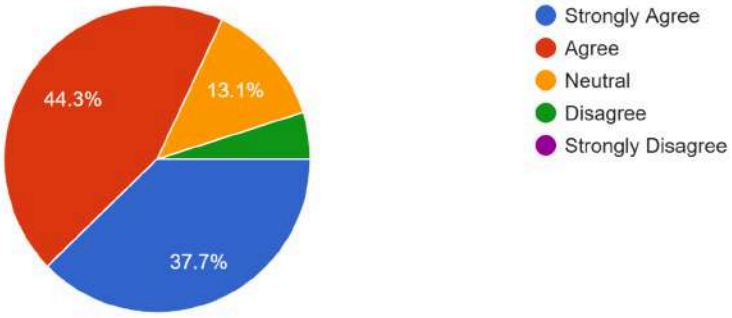
You were able to link the fundamental concepts of groups and symmetrical figures.

61 responses



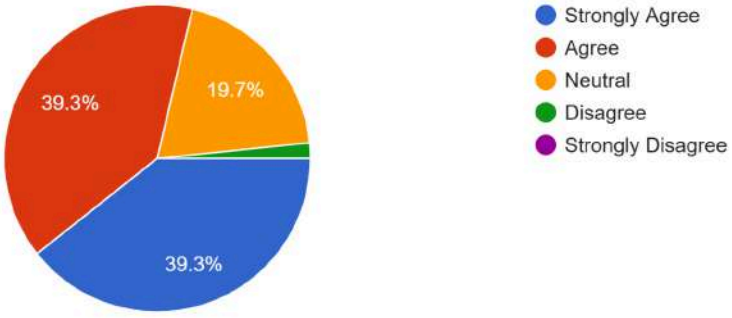
You were able to analyze the subgroups of cyclic groups and classify subgroups of cyclic groups.

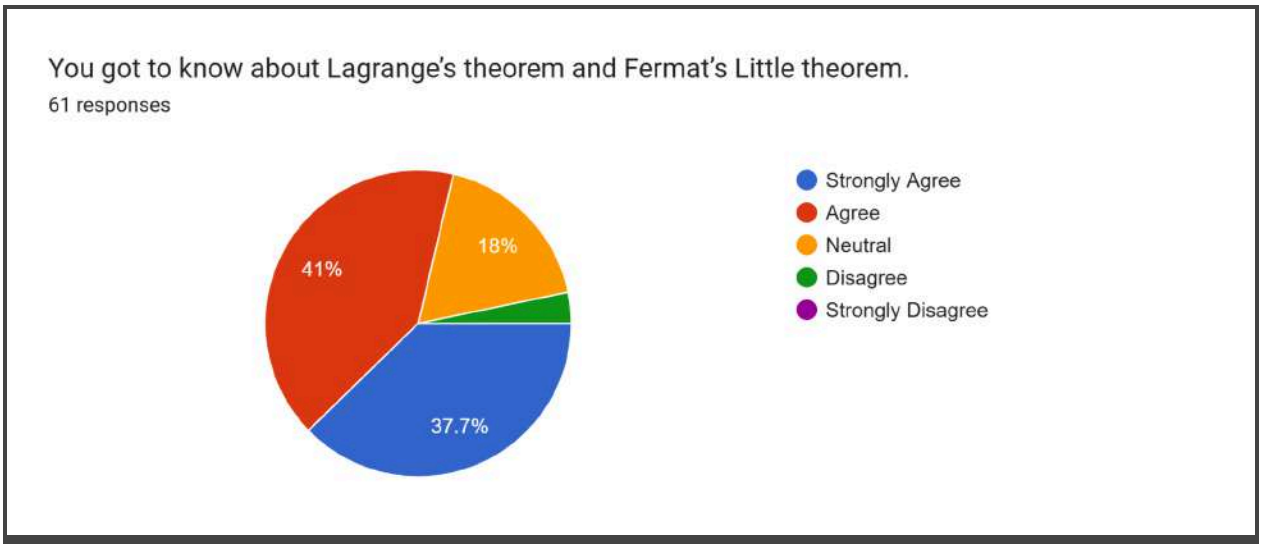
61 responses

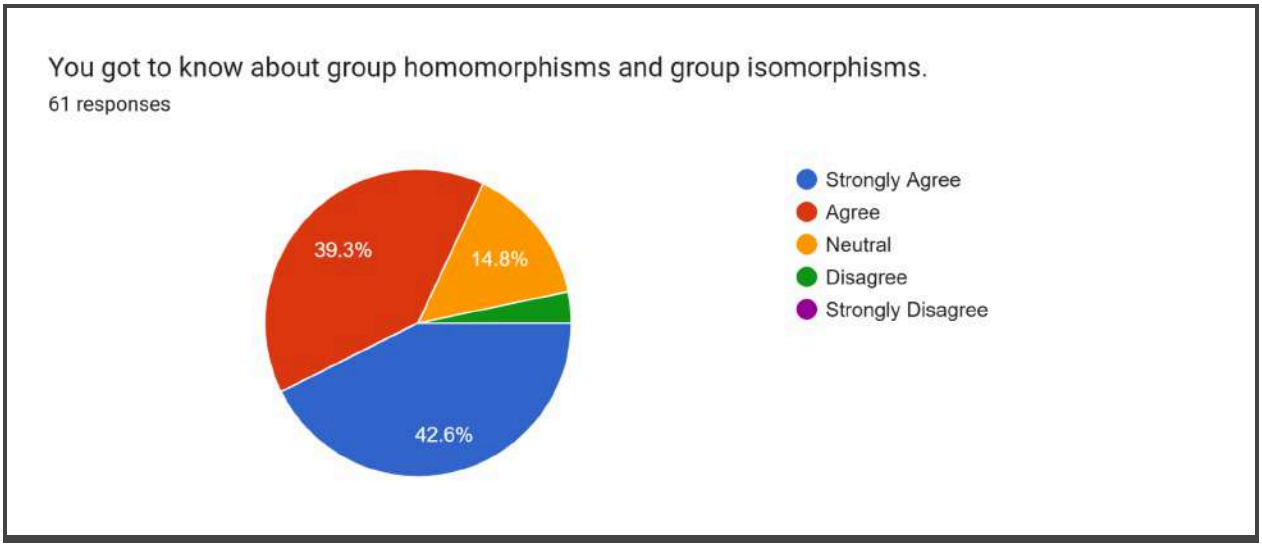


You were able to explain the significance of the notion of cosets, normal subgroups and factor groups.

61 responses







Observations:

From the given responses, it is observed that more than 80% of students strongly agreed and agreed that they understood the fundamental properties of group,Symmetric group, Normal group, Factor group and direct product of groups. Also knows about the Homomorphism and Isomorphism between two groups.

Action Taken:

For moderate responses, topics will be discussed more with the students in tutorials. For the weak students, special classes will be held to discuss important questions with them. Measures will be taken to make the subject more engaging and appealing to the students to ensure higher attendance. Assessments would also be done at regular intervals.

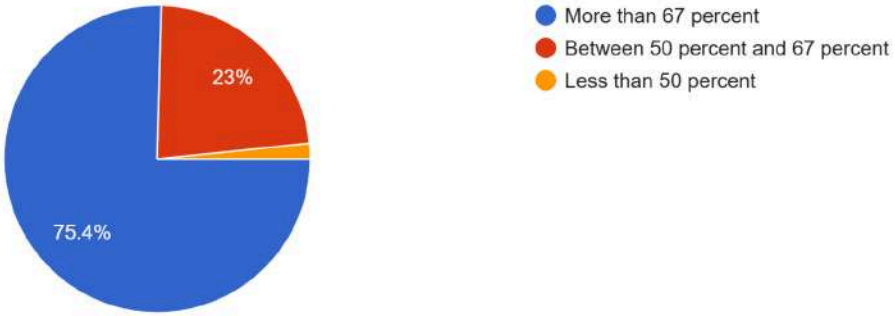
Department: Mathematics **Program: B.Sc.(H) Mathematics**

Semester: 3

Paper Name: Discipline Specific Core Course – 9: DISCRETE MATHEMATICS

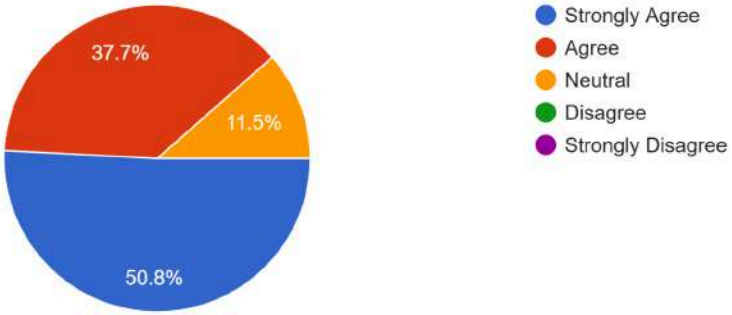
Percentage of Classes Attended

61 responses



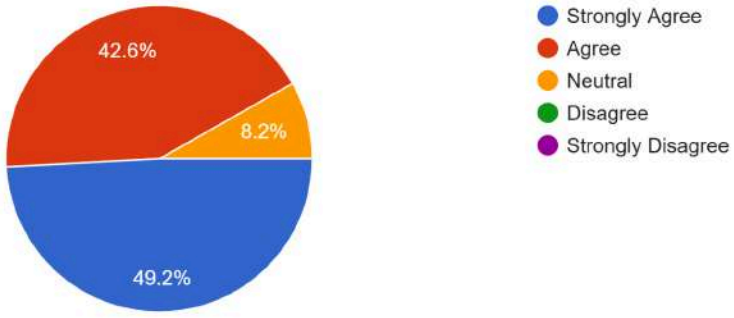
You were able to understand the notion of partially ordered set, lattice, Boolean algebra with applications.

61 responses



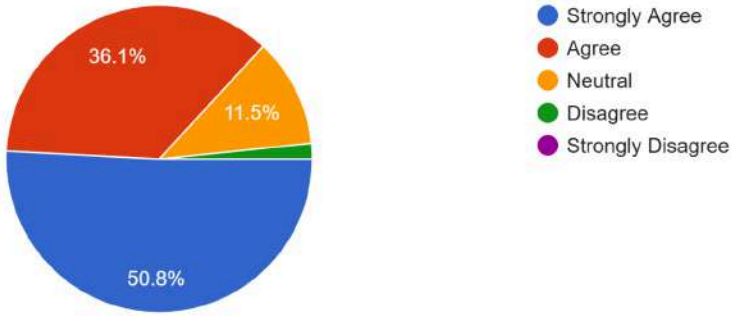
You were able to handle the practical aspect of minimization of switching circuits to a great extent with the methods discussed in this course.

61 responses



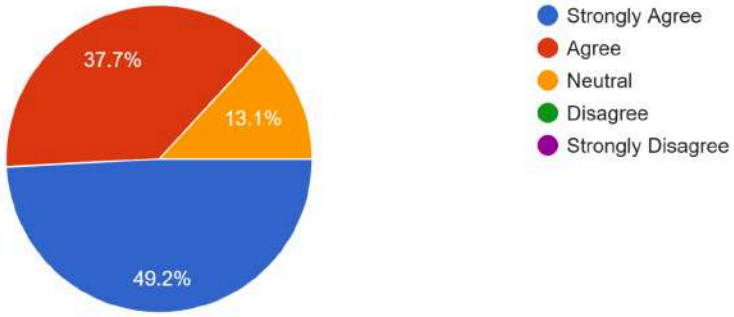
You were able to learn about the knowledge of Boolean algebras to logic.

61 responses



You were able to familiarize with set theory and probability theory.

61 responses



Observations:

From the given responses, it is observed that more than 89% of students strongly agreed and agreed that they understood some basic concepts and terminology of partially ordered sets, ordered isomorphism, Bottom and Top elements, Maximal and Minimal elements, complemented lattice, Relative Complemented lattice and Sectionally Complemented lattice.

Action Taken:

For moderate responses, topics will be discussed more with the students in tutorials. For the weak students, special classes will be held to discuss important questions with them. Measures will be taken to make the subject more engaging and appealing to the students to ensure higher attendance. Assessments would also be done at regular intervals.

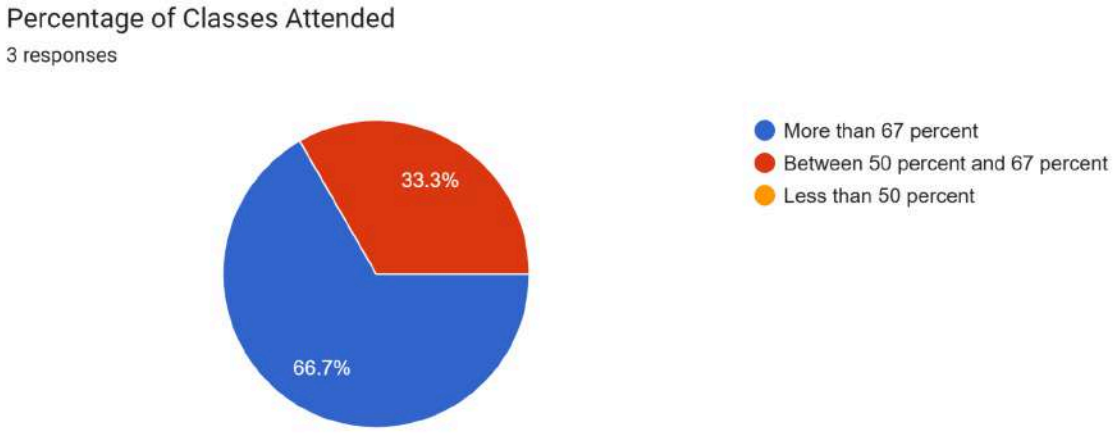
COURSE EXIT SURVEY: Analysis Report
Academic Session: 2024-25

Department: Mathematics

Program: B.A. (P) Major

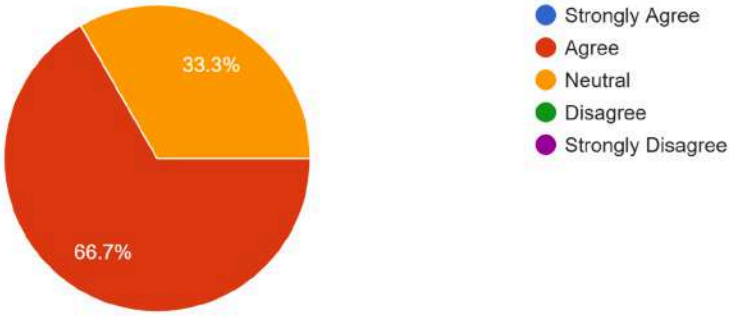
Semester: 3

Paper Name: GE I-Theory of Equations and Symmetries



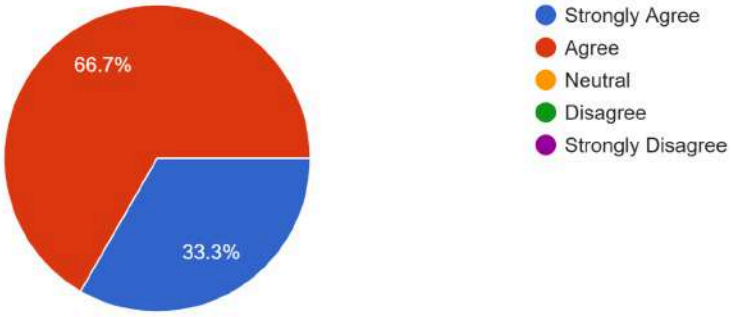
You are able to understand the nature of the roots of polynomial equations and their symmetries.

3 responses



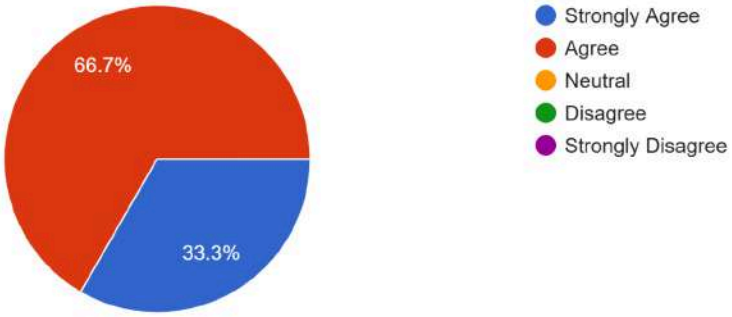
You are able to solve cubic and quartic polynomial equations with special condition on roots and in general.

3 responses



You were able to find symmetric functions in terms of the elementary symmetric polynomials.

3 responses



Observations: From the given responses, it is observed that more than 88% of students strongly agreed or agreed that they were able to learn the concepts of polynomial equations and their properties, cubic equations, quartic equations, and Symmetric Functions.

It is also observed that students need to be motivated to choose this subject.

Action Taken: Measures will be taken to make the subject more interesting to the students to ensure more no. of students take this subject next time.

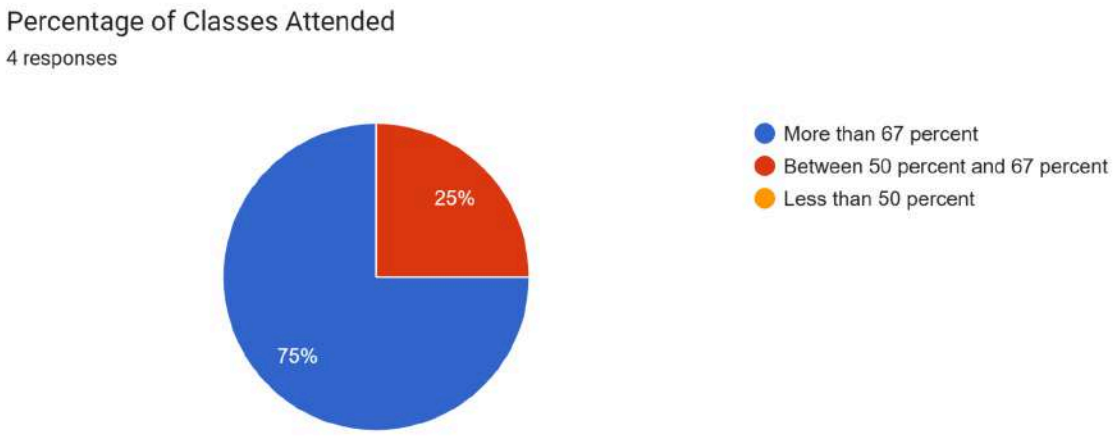
COURSE EXIT SURVEY: Analysis Report
Academic Session: 2024-25

Department: Mathematics

Program: B.A. (P) Minor

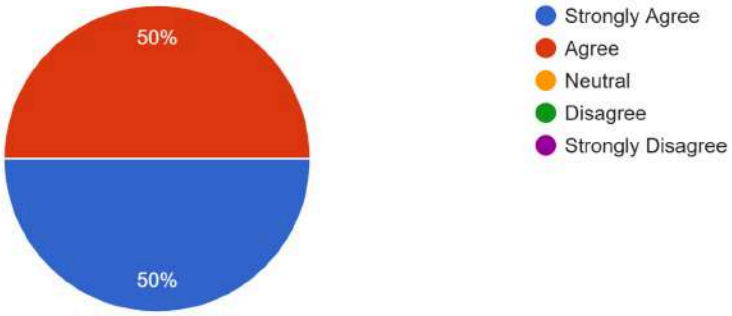
Semester: 3

Paper Name: GE II-Differential Equations



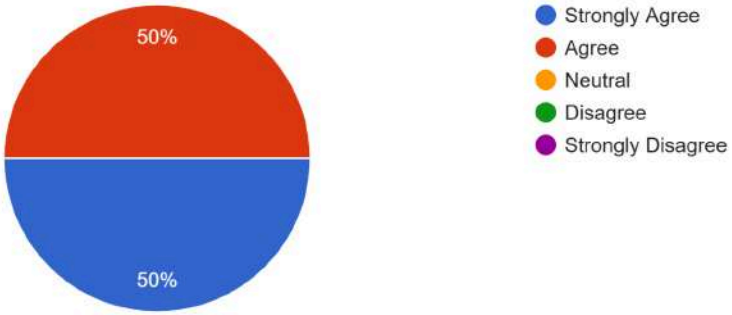
You are able to solve the exact, linear, Bernoulli equations, find orthogonal trajectories and solve rate problems.

4 responses



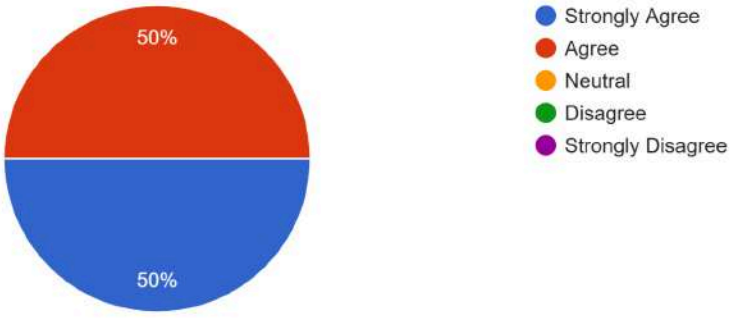
You are able to understand the undetermined coefficients, variation of parameters to solve linear differential equations, Cauchy-Euler equations and System of linear differential equations.

4 responses



You were able to formulate and solve various types of first and second order partial differential equations.

4 responses



Observations: From the given responses, it is observed that 100% of students strongly agreed or agreed that they were able to learn the concept of ordinary differential equations, Explicit methods of solving higher order linear differential equations. Also learn about First and Second order Partial differential equations.

Action Taken: Measures will be taken to make the subject more interesting to the students to ensure higher attendance.

COURSE EXIT SURVEY: Analysis Report
Academic Session: 2024-25

Department: Mathematics

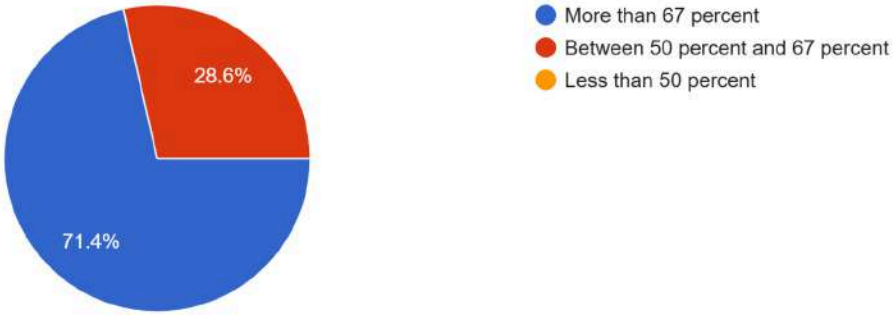
Semester: 3

Paper Name: SEC: Statistics with R

UPC: 2926001005

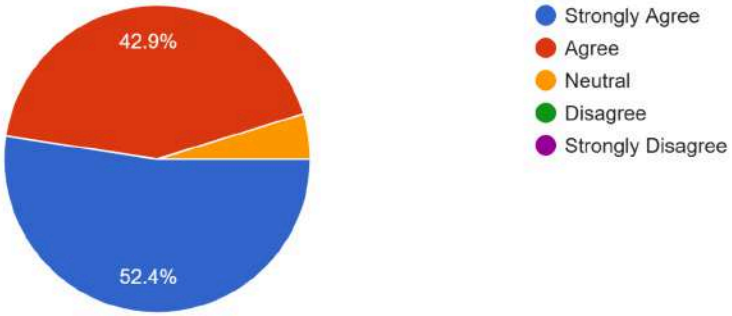
Percentage of Classes Attended

21 responses



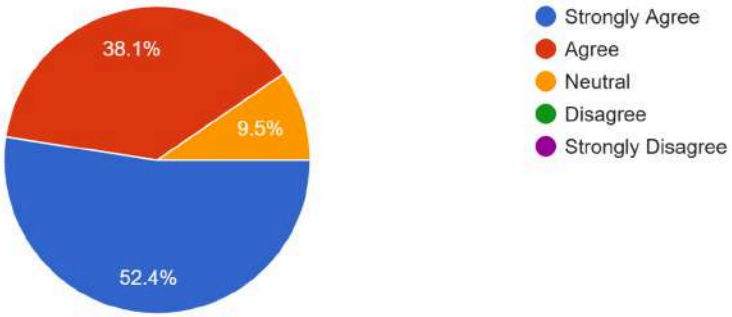
You are able to extract and read data into R, manipulate, and analyse it.

21 responses



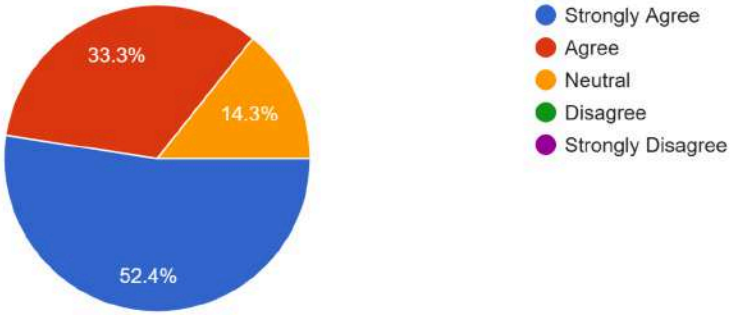
You understood how to debug, organize, and comment R code.

21 responses



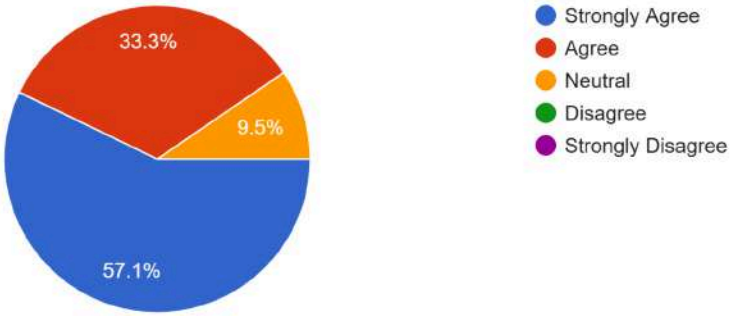
You are able to understand the R environment for downloading, installing, and using packages.

21 responses



You learnt the basic programming to write own functions.

21 responses



Observations:

From the given responses, it is observed that more than 90% of the students strongly agreed and agreed that they are able to extract, read data, manipulate, and analyze data into R and they are able to understand the R environment for downloading, installing, and using packages. Also, they are able to do basic programming to write their own functions. Also, they are able to perform basic statistical operations and regressions.

Actions Taken

The response to this paper has been encouraging. More efforts will be made to keep students intrigued. For the moderate responses, topics will be discussed more with the students in practicals. For the weak students, special classes will be held to

discuss important practicals with them. Assessments like quiz, presentations would also be done at regular intervals.

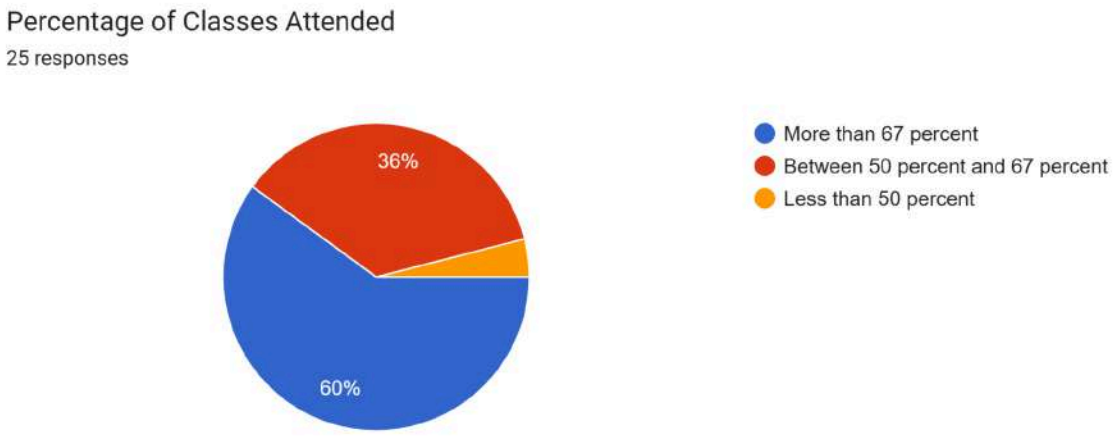
COURSE EXIT SURVEY: Analysis Report
Academic Session: 2024-25

Department: Mathematics

Semester-3 (NEP-2020), Year-2

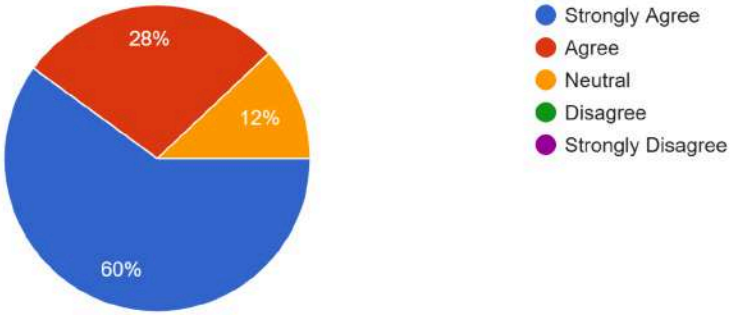
Paper:VAC: Vedic Mathematics I

Paper Code: 6967001020



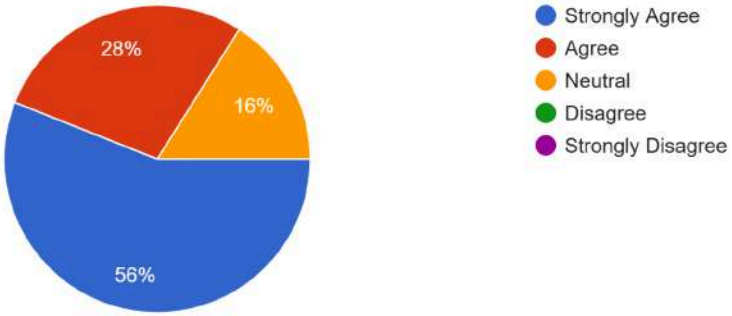
You are familiarized with the mathematical underpinnings and techniques.

25 responses



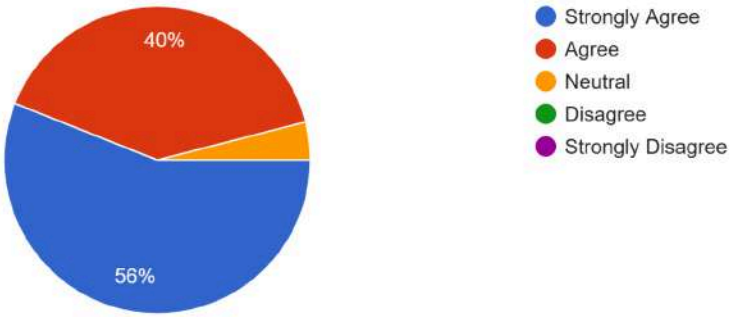
You are able to do basic maths faster and with ease.

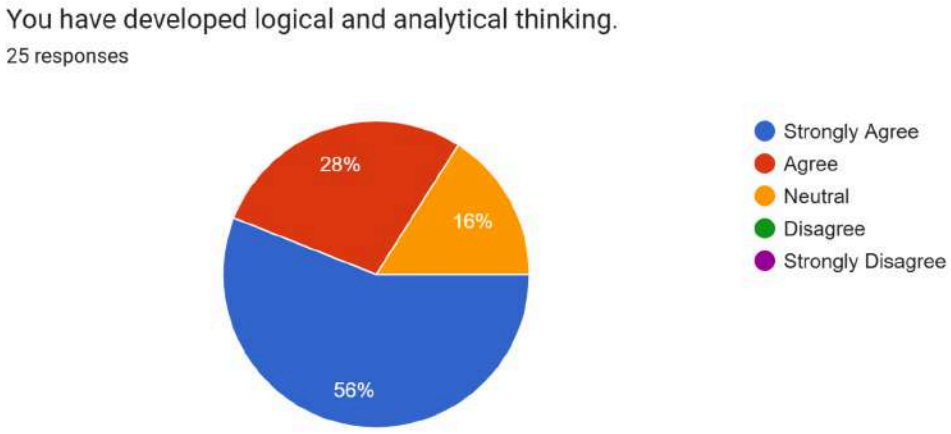
25 responses



You have experienced joyful learning of Mathematics

25 responses





Observations:

From the given responses, it is observed that more than 88% of the students strongly agreed and agreed that they were familiarized with mathematical underpinnings and techniques. They were able to do basic math faster and with ease. About more than 88% students experienced joyful learning of mathematics.

Actions Taken

The response to this paper has been encouraging. More efforts will be made to keep students intrigued. For moderate responses, topics will be discussed more with the students. Assessments like tests, assignments, and Viva would also be done at regular intervals.

COURSE EXIT SURVEY: Analysis Report
Academic Session: 2024-25

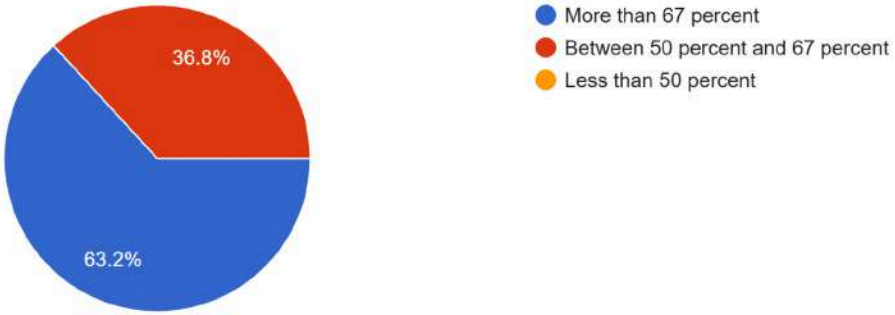
Department: Mathematics

Semester: 3

Paper Name: SEC: IT Skills and Data Analysis-II

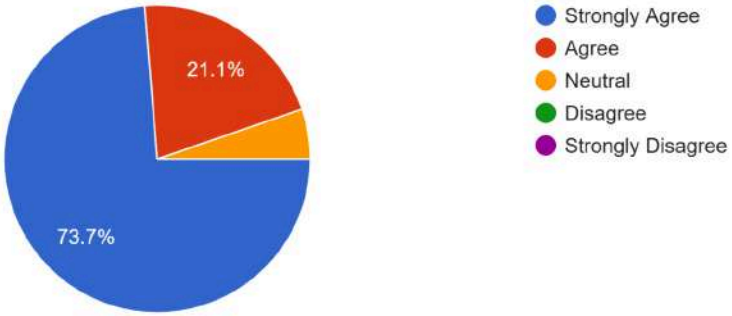
Percentage of Classes Attended

19 responses



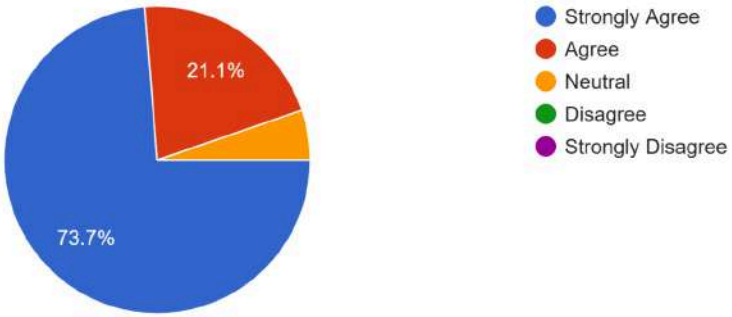
You are able to establish relationship between variables using correlation and regression analysis.

19 responses



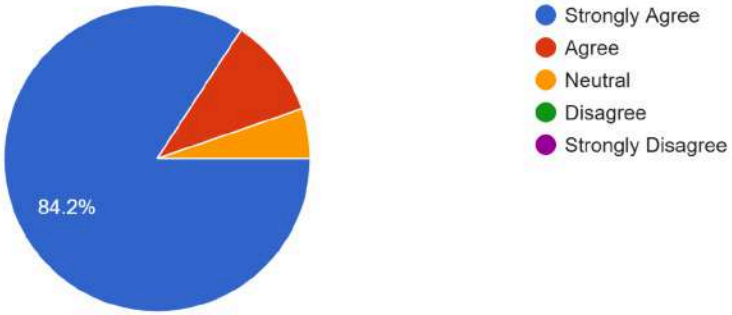
You are able to visualize functions.

19 responses



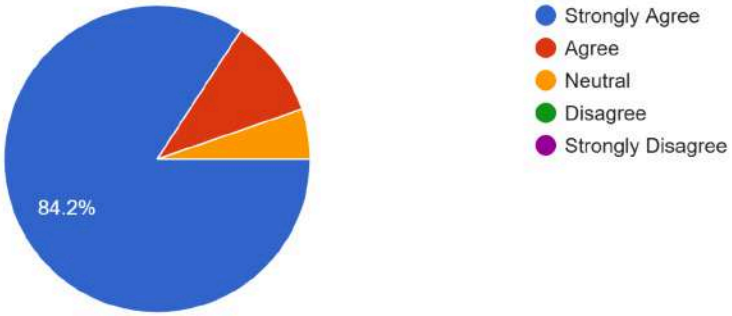
You can use IT tools such as spreadsheets to visualise and analyse data.

19 responses



You can differentiate between linear and non-linear functions.

19 responses



Observations:

From the given responses, it is observed that more than 94% of the students strongly agreed and agreed that they were able to represent and interpret data in tabular and graphical forms. About more than 90% understood and can interpret the measures of central tendency and dispersion. They are equipped with some fundamental concepts which play a critical role in understanding and visualizing real world data.

Actions Taken

The response to this paper has been encouraging. More efforts will be made to keep students intrigued. For moderate responses, topics will be discussed more with the students. Assessments like tests, assignments and internal practicals would also be done at regular intervals.

COURSE EXIT SURVEY: Analysis Report
Academic Session: 2024-25

Department: Mathematics

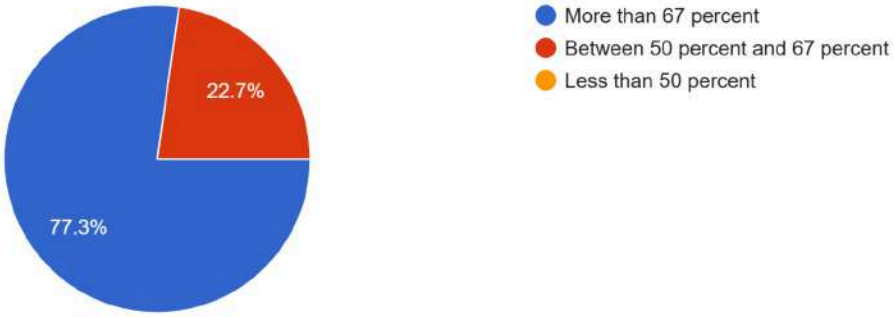
Semester-3 (NEP-2020)

Year-2

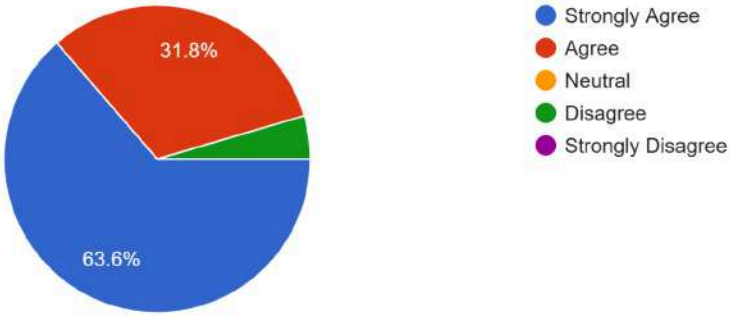
Paper Name: Vedic Mathematics II

Paper Type: VAC

Percentage of Classes Attended
22 responses

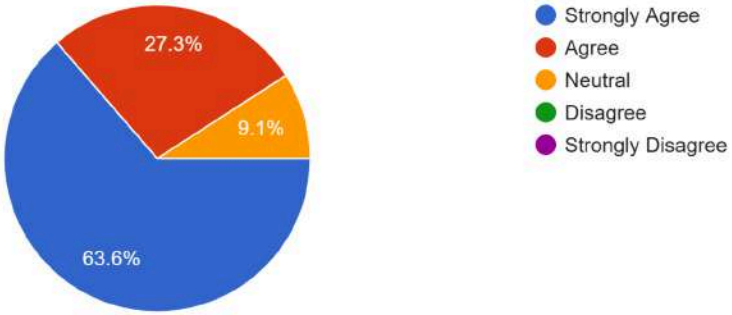


You are able to find the mathematical solution of algebraic expressions.
22 responses



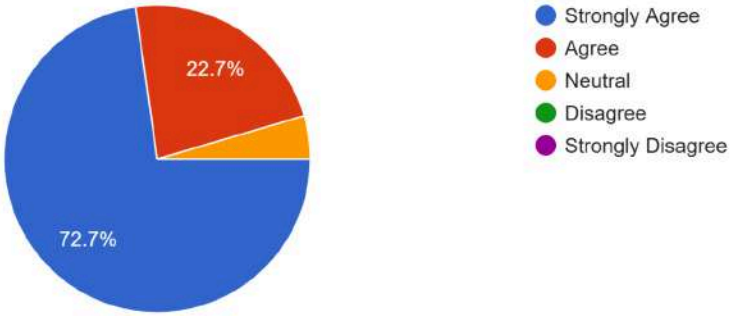
You are able to do basic maths faster and with ease.

22 responses



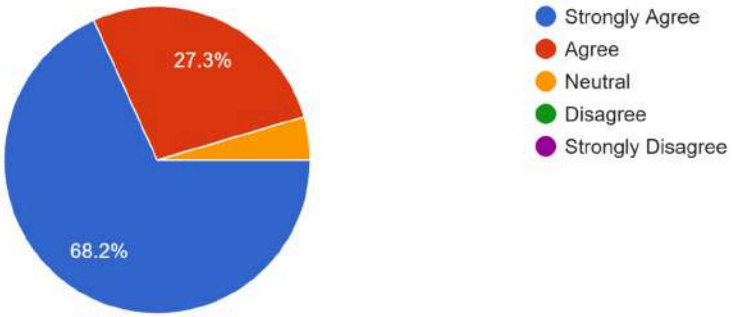
You are able to solve system of linear equations and matrices faster and with ease.

22 responses



You have developed logical and analytical thinking.

22 responses



Observations:

From the given responses, it is observed that more than 94% of the students strongly agreed and agreed that they were able to learn about Python's main features and how they make Python a great tool for financial analysts. Also, they were able to workout using the core data structure as lists, dictionaries, tuples and sets.

It is also observed that students need to be motivated to attend the course, as 77% of students had more than 67% of attendance.

Action Taken: Measures will be taken to make the subject more interesting to the students to ensure higher attendance.

COURSE EXIT SURVEY: Analysis Report

Academic Session: 2024-25

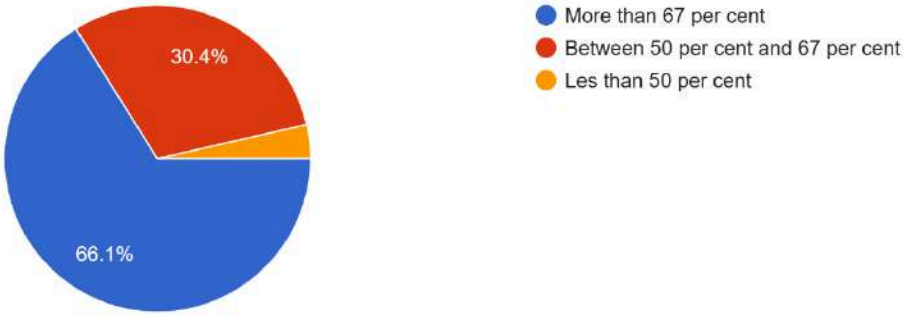
Department: Mathematics **Program: B.Sc.(H) Mathematics**

Semester: 4

DSC 10: SEQUENCES AND SERIES OF FUNCTIONS

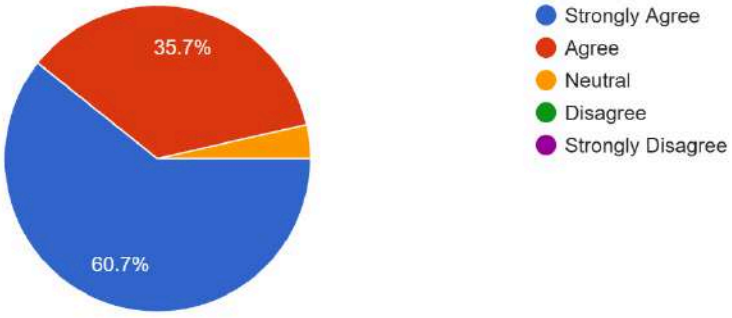
Percentage of classes attended

56 responses



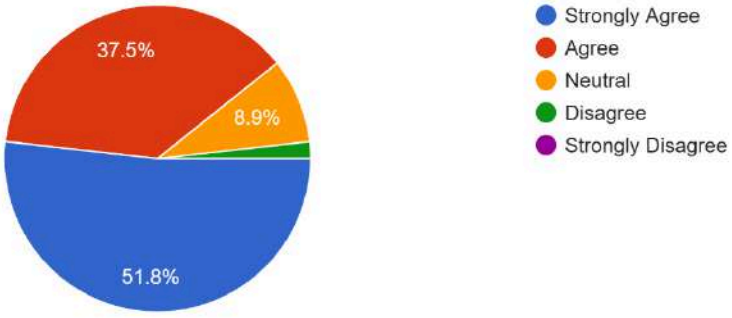
You have learned Cauchy criterion for uniform convergence and Weierstrass M-test for uniform convergence of series of real-valued functions.

56 responses



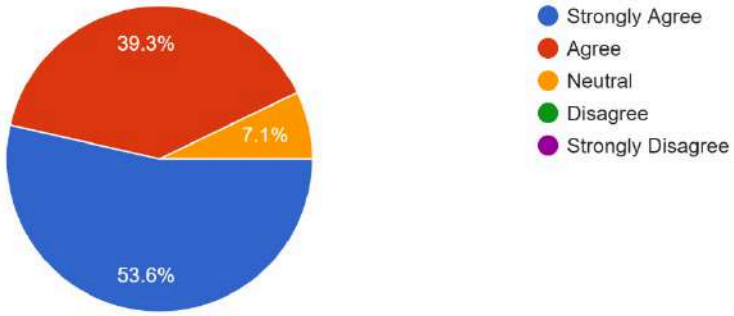
You have learned about the constraints for the inter-changeability of differentiation, and integration with infinite sum of a series of functions.

56 responses



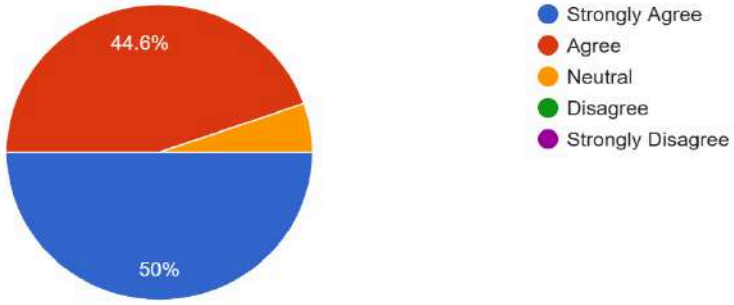
You have understood the convergence of power series and properties of the limit function, including differentiation and integration of power series.

56 responses



You have learned about appreciate utility of polynomials in the space of continuous functions.

56 responses



Observations:

From the given responses, it is observed that around 94% of students strongly agreed and agreed that they got an understanding the Cauchy criterion for uniform convergence and Weierstrass M-test for uniform convergence of series of real-valued functions, maximization and minimization of multivariable functions, inter-relationship amongst the line integral, double, and triple integral formulations and Green's, Stokes' and Gauss divergence theorems, and learn applications. It is also observed that students had keen interest in the paper as 67% of students had more than 67% of attendance.

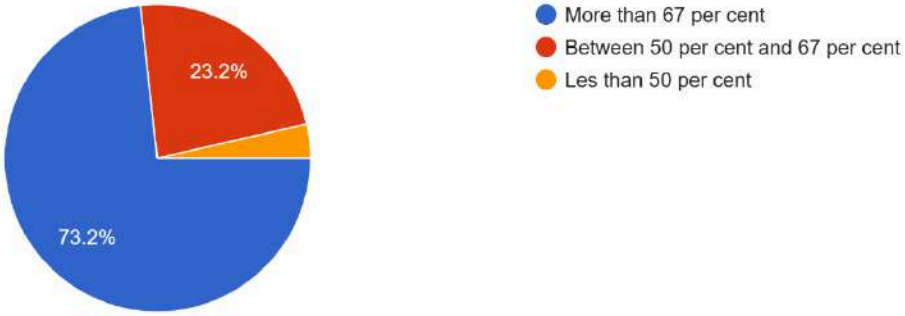
Action Taken:

The response to this paper has been encouraging. More efforts will be made to keep students intrigued.

DSC11: MULTIVARIATE CALCULUS

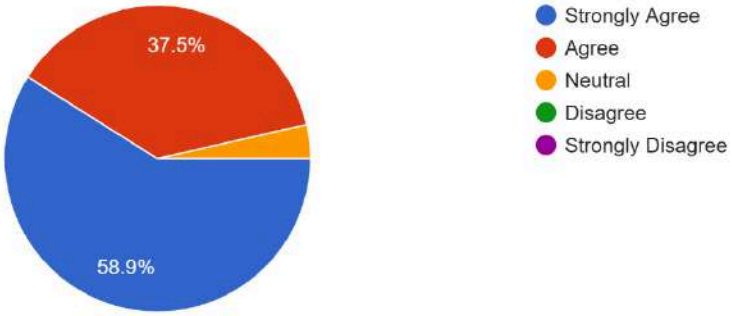
Percentage of classes attended

56 responses



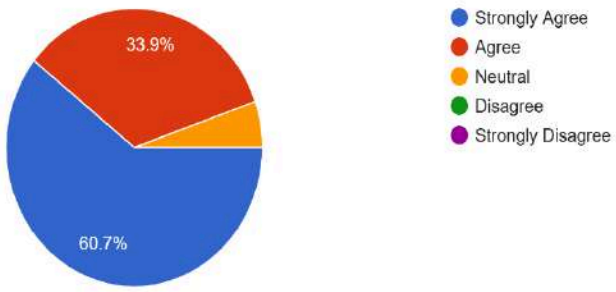
You have learned about the conceptual variations when advancing in calculus from one variable to multivariable discussion.

56 responses



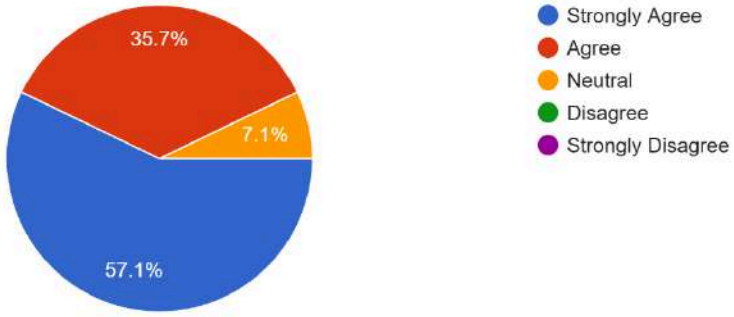
You understood to about about inter-relationship amongst the line integral, double, and triple integral formulations.

56 responses



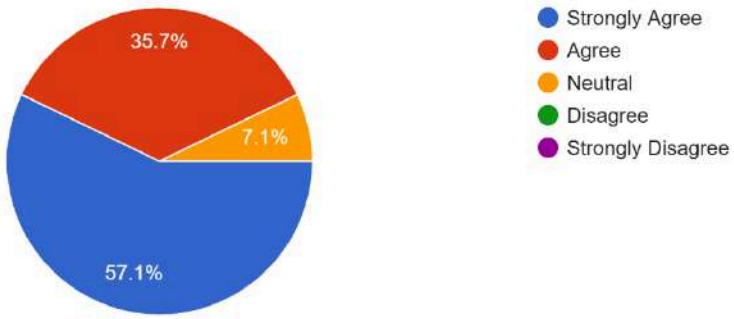
You have learned about the maximization and minimization of multivariable functions subject to the given constraints on variables.

56 responses



You are familiarize with Green's, Stokes' and Gauss divergence theorems, and learn applications.

56 responses



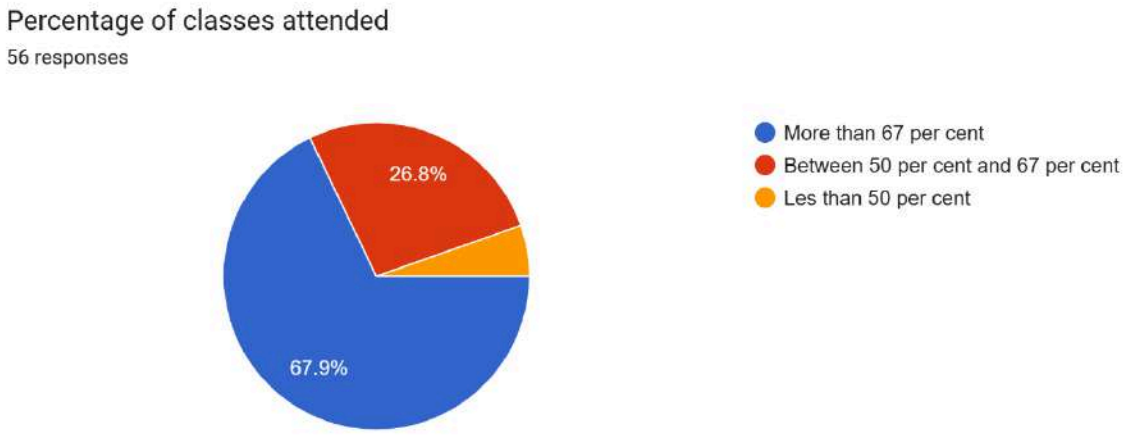
Observations:

From the given responses, it is observed that around 95% of students strongly agreed and agreed that they got an understanding conceptual variations when advancing in calculus from one variable to multivariable discussion, maximization and minimization of multivariable functions subject to the given constraints on variables, inter-relationship amongst the line integral, double, and triple integral formulations and Green's, Stokes' and Gauss divergence theorems, and learn applications. It is also observed that students had keen interest in the paper as 74% of students had more than 67% of attendance.

Action Taken:

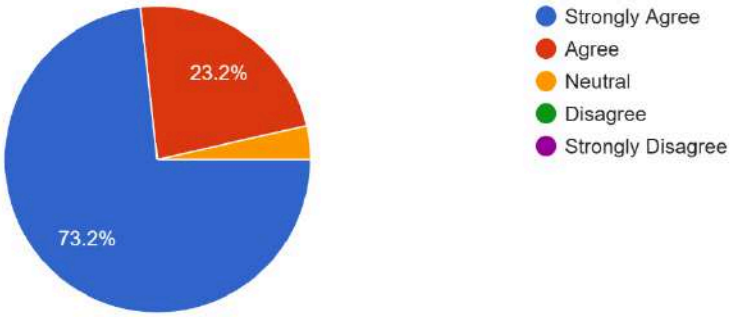
For the moderate responses, the topic will be discussed more with the students in tutorials. For the weak students, remedial classes will be held to discuss important topics and questions with them. The topic of representation of a linear code by matrices should be explained by an innovative and practical approach so that students are able to learn easily. Measures will be taken to make the subject more engaging and appealing to the students in order to ensure higher attendance on their part. Assessments would also be done at regular intervals.

DSE12: NUMERICAL ANALYSIS



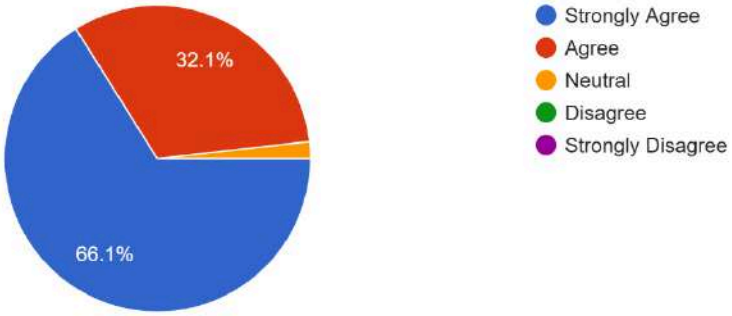
You have learned about the numerical methods to find the zeroes of nonlinear functions of a single variable, up to a certain given level of precision.

56 responses



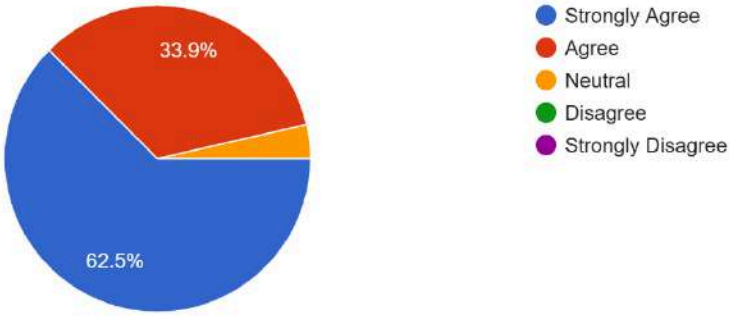
You have learned about the Gauss–Jacobi, Gauss–Seidel methods to solve system of linear equations.

56 responses



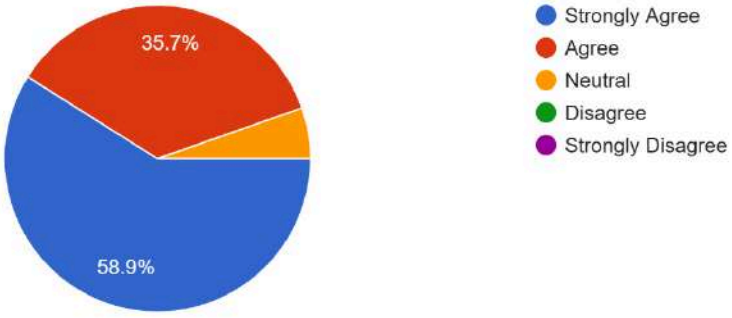
You are aware of interpolation techniques.

56 responses



You have learned about to finding numerical solutions of difference equations which are obtained converting differential equations using techniques from calculus.

56 responses



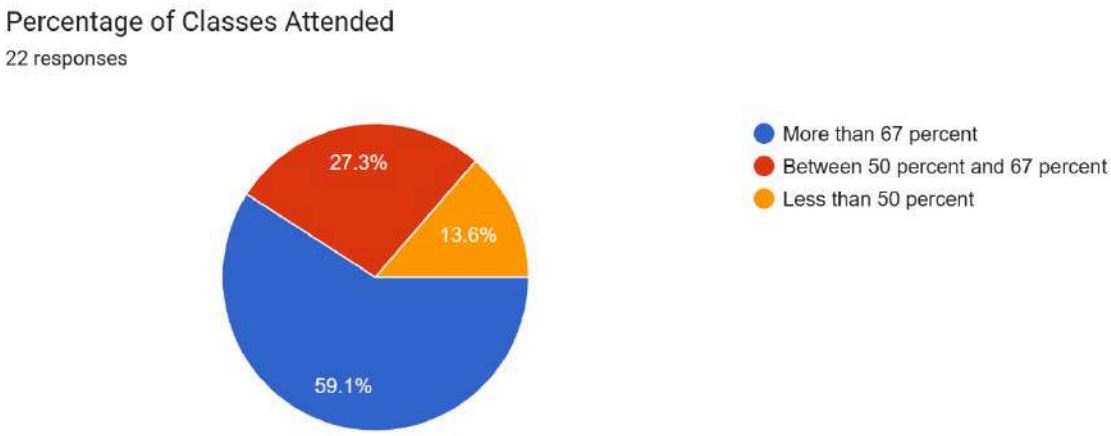
Observations:

From the given responses, it is observed that around 97% of students strongly agreed and agreed that they got an understanding the zeros of nonlinear functions of a single variable, up to a certain given level of precision, Gauss−Jacobi, Gauss−Seidel methods to solve system of linear equations, interpolation techniques and numerical solutions of difference equations which are obtained converting differential equations using techniques from calculus. It is also observed that students had keen interest in the paper as 81% of students had more than 67% of attendance.

Action Taken:

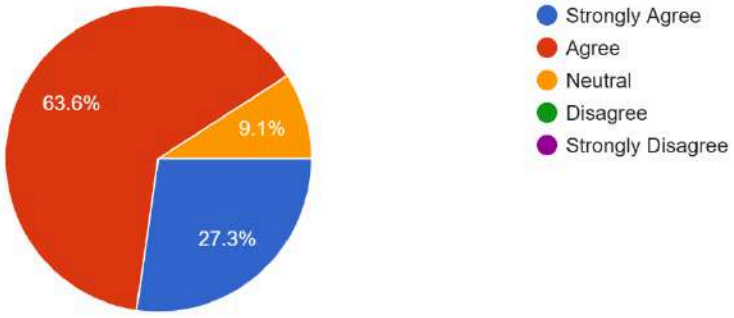
For improving attendance, the topics should be discussed in innovative ways so that students find the subject more interesting. For weaker students topics should be discussed more with the students in tutorials. Measures will be taken to make the subject more engaging and appealing to the students in order to ensure higher attendance on their part. Assessments would also be done at regular intervals. Remedial classes will be taken for topics that students found a little difficult to understand.

SEC 1: IT Skills and Data Analysis 1



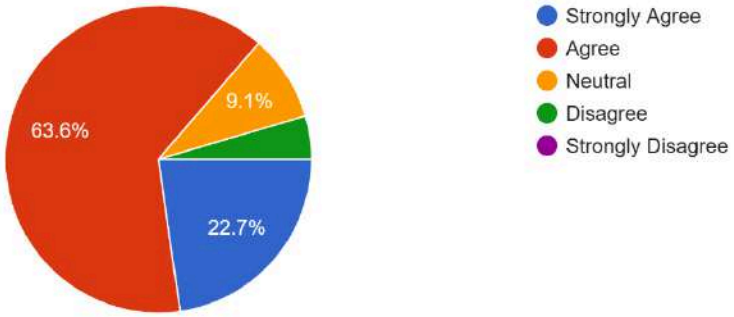
You are able to represent and interpret data in tabular and graphical forms.

22 responses



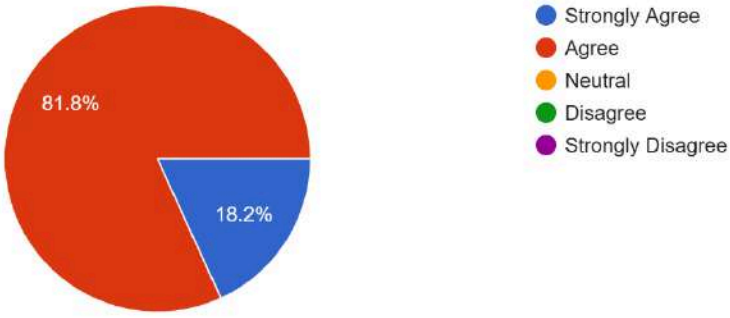
You have understood and can interpret the measures of central tendency and dispersion.

22 responses



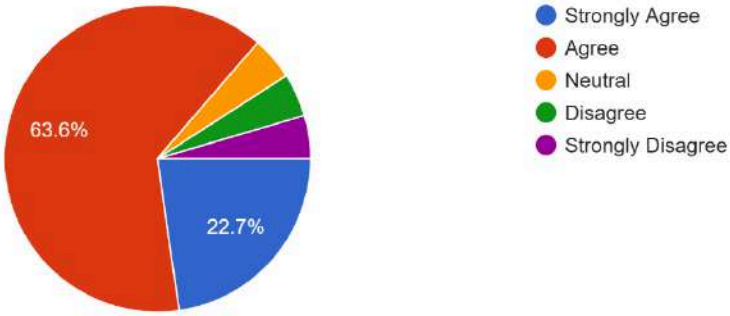
You can use IT tools such as spreadsheets to visualise and analyse data.

22 responses



You are equipped with some fundamental concepts, which play a critical role in understanding and visualizing real world data.

22 responses



Observations:

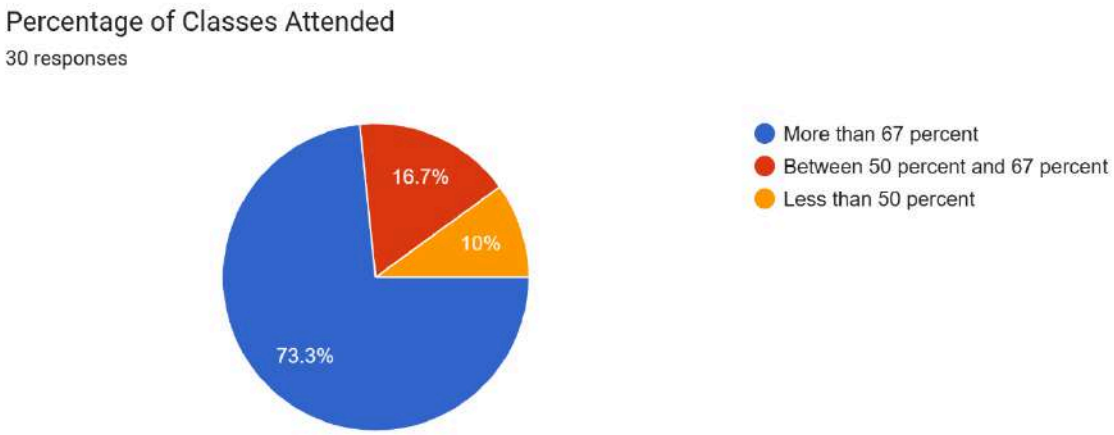
From the given responses, it is observed that around 91% of students strongly agreed and agreed that they got an understanding about how to represent and interpret data in tabular and graphical forms, measures of central tendency and dispersion, IT tools such as spreadsheets to visualise and analyse data, and some fundamental concepts, which play a critical role in understanding and visualizing real world data.

It is also observed that students had keen interest in the paper as 59% of students had more than 67% of attendance.

Action Taken

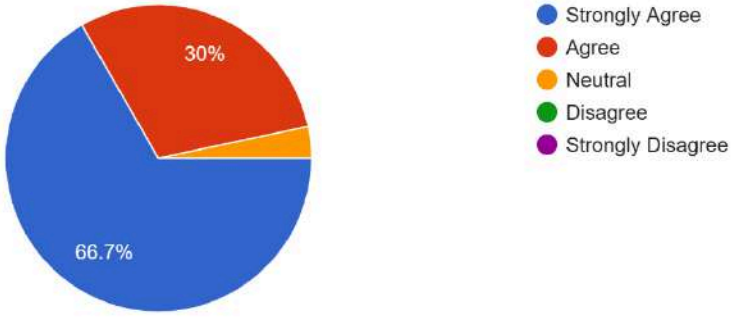
The response to this paper has been encouraging. More efforts will be made to keep students intrigued.

SEC 2: Document Preparation and Presentation Software



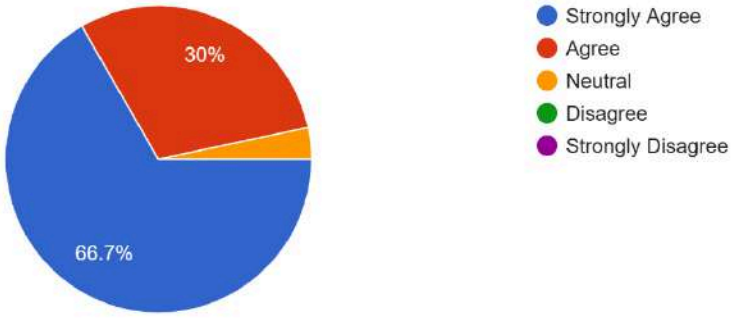
You are able to create a well-formatted LaTeX document.

30 responses



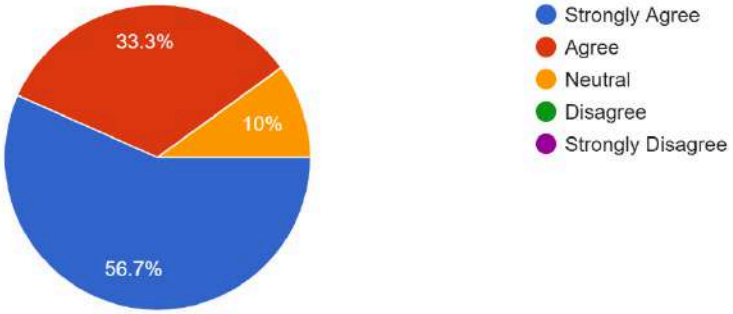
you are able to use LaTeX to incorporate mathematical equations, figures, tables, and references.

30 responses



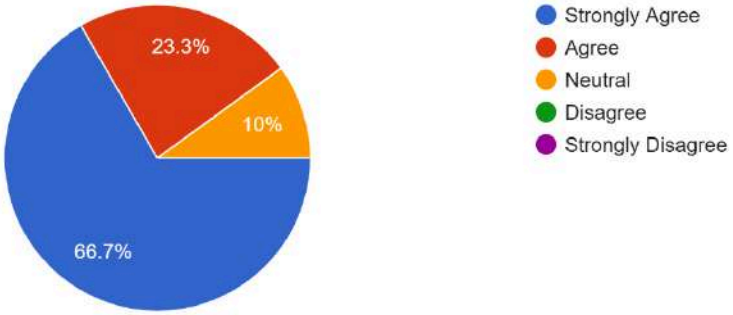
you are able to manage references using Latex.

30 responses



you are able to write format text and structure a document effectively.

30 responses



Observations:

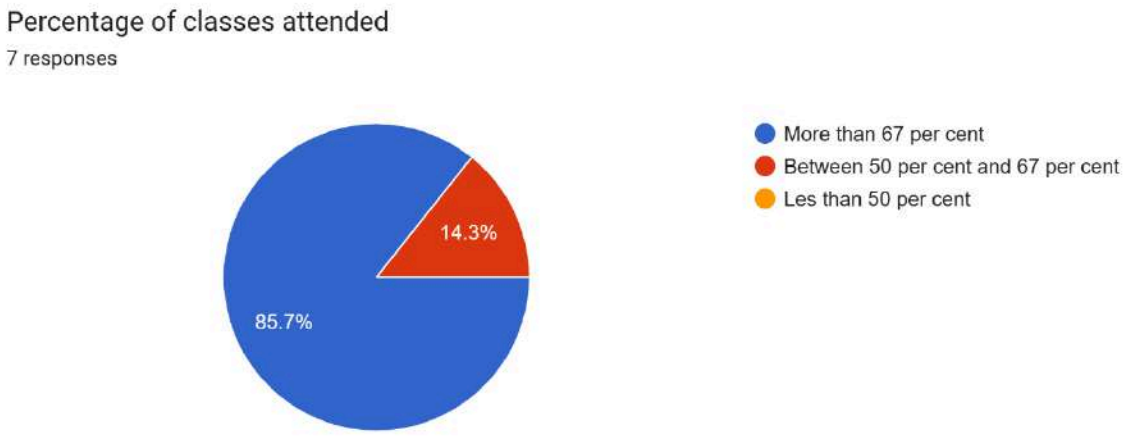
From the given responses, it is observed that around 94% of students strongly agreed and agreed that they are able to create a well-formatted LaTeX document, LaTeX to incorporate mathematical equations, figures, tables, and references, manage references and are able to write format text and structure a document effectively.

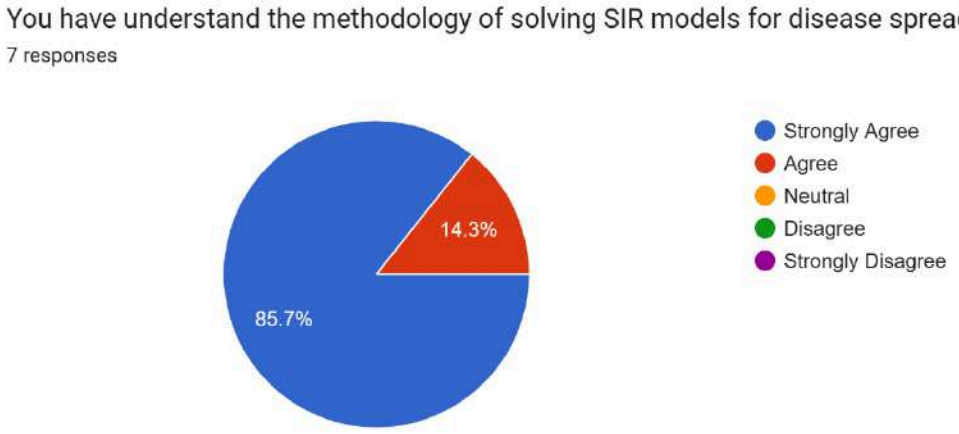
It is also observed that students had keen interest in the paper as 73% of students had more than 67% of attendance.

Action Taken

The response to this paper has been encouraging. More efforts will be made to keep students intrigued.

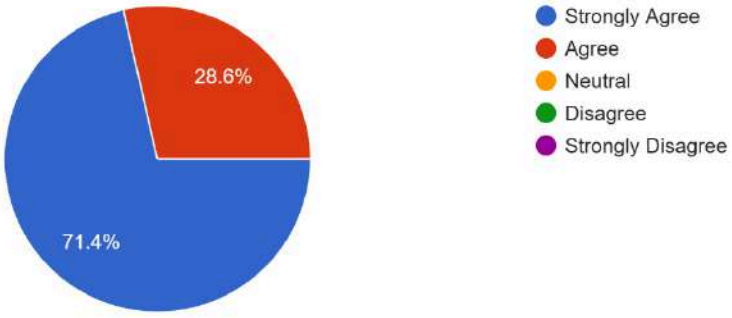
DSE- 2(ii) : MATHEMATICAL MODELING





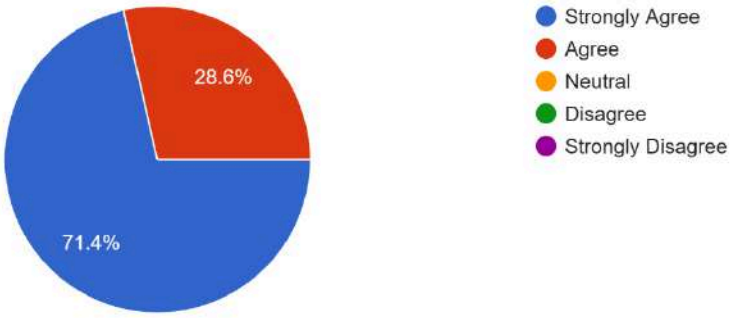
You have learn the significance of dieting model that provides important insights and guides to a biomedical issue that is of interest to the general public.

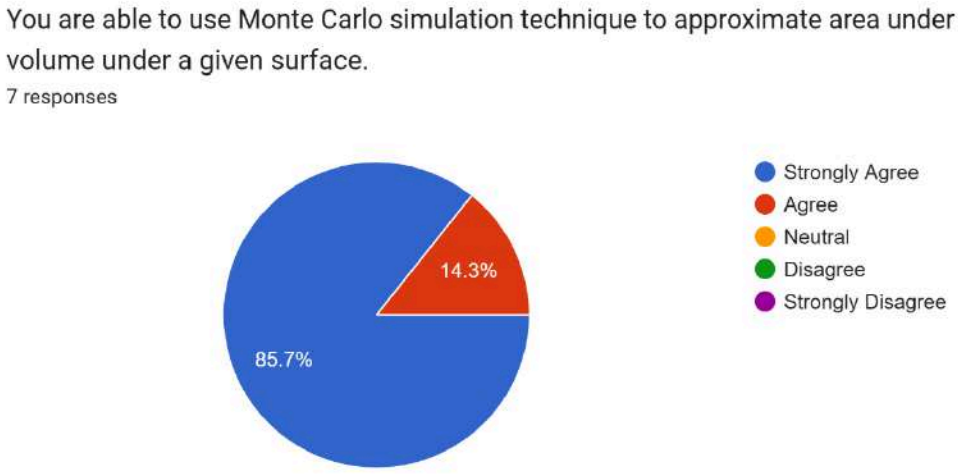
7 responses



You have understand nonlinear systems and phenomena with stability analysis ranges from phase plane analysis to ecological and mechanical systems.

7 responses





Observations:

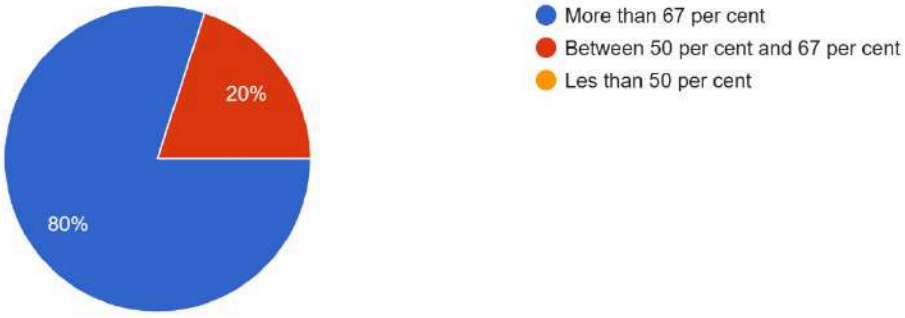
From the given responses, it is observed that around 100% of students strongly agreed and agreed that they are able to understand the methodology of solving SIR models for disease spread, significance of dieting model that provides important insights and guides to a biomedical issue that is of interest to the general public, understand nonlinear systems and phenomena with stability analysis ranges from phase plane analysis to ecological and mechanical systems and the use Monte Carlo simulation technique to approximate area under a given curve, and volume under a given surface.

It is also observed that students had keen interest in the paper as 86% of students had more than 67% of attendance.

DSE- – 2(i): BIOMATHEMATICS

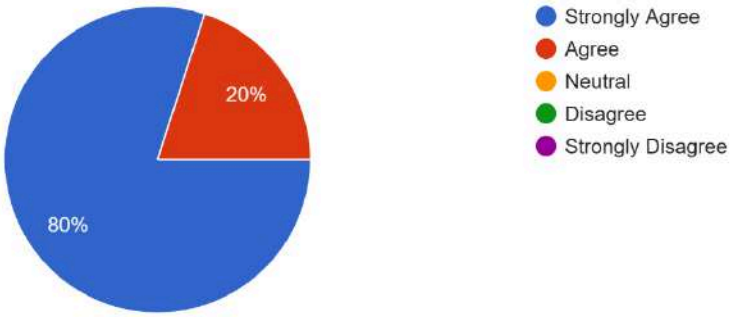
Percentage of classes attended

5 responses



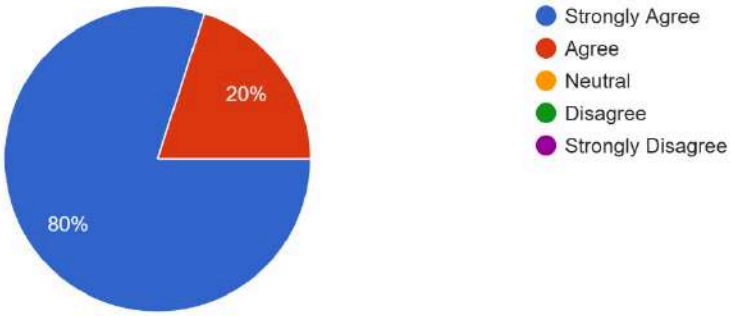
You are able to learn and appreciate study of long-term behavior arising naturally in study of mathematical models and their impact on society at large.

5 responses



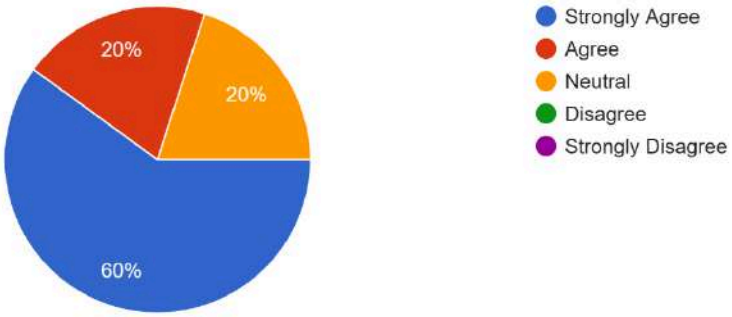
You are able to understand spread of epidemic technically through various models and impact of recurrence phenomena.

5 responses



you are able to learn what properties like Chaos and bifurcation means through various examples and their impact in Bio-Sciences.

5 responses



Observations:

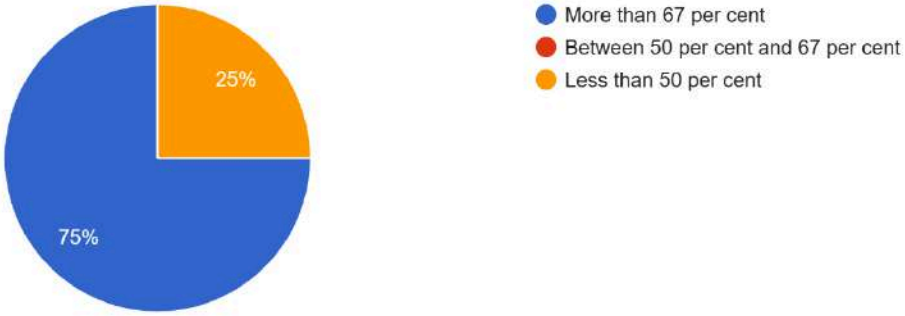
From the given responses, it is observed that around 94% of students strongly agreed and agreed that they are able to understand the appreciate study of long-term behaviour arising naturally in study of mathematical models and their impact on society at large, understand spread of epidemic technically through various models and impact of recurrence phenomena and able to learn the properties like Chaos and bifurcation means through various examples and their impact in Bio-Sciences.

It is also observed that students had keen interest in the paper as 80% of students had more than 67% of attendance.

DISCIPLINE SPECIFIC CORE COURSE 4: ABSTRACT ALGEBRA

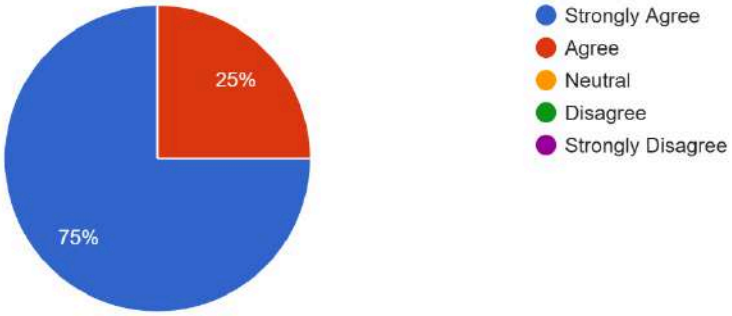
Percentage of classes attended

4 responses



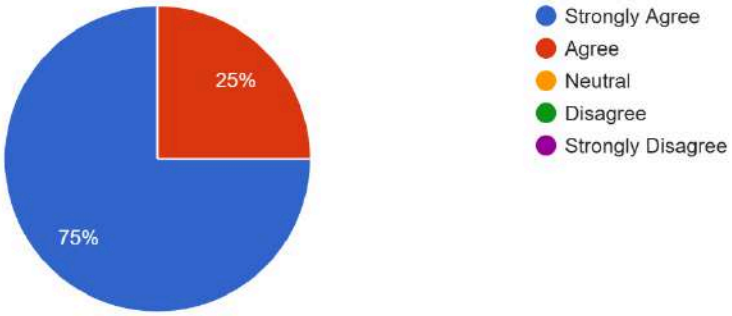
You have learned the concept of Modular arithmetic, fundamental theory of groups, rings, integral domains, and fields.

4 responses



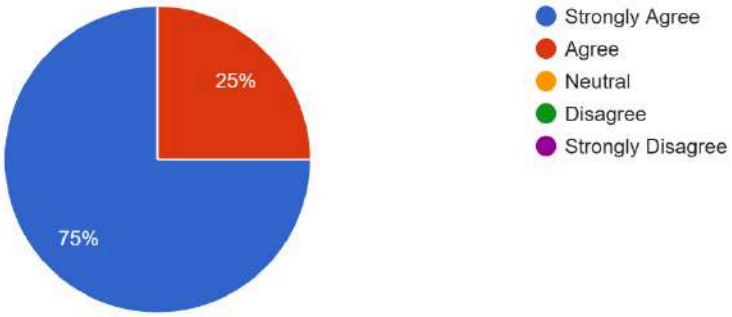
You have understood the concepts of symmetry group of a plane figure, and basic concepts of cyclic groups.

4 responses



You understood the concept of Cosets of a group and its properties, Lagrange's theorem, and quotient groups.

4 responses



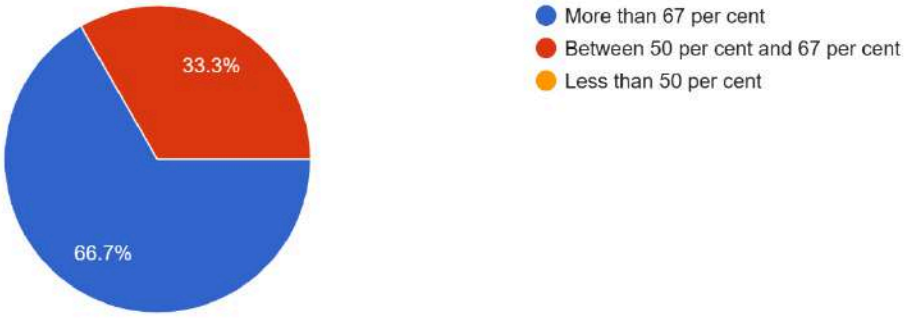
Observations:

From the given responses, it is observed that 100 % of students strongly agreed and agreed that they were able to learn modular arithmetic, fundamental theory of groups, rings, integral domains, and fields, symmetry group of a plane figure, and basic concepts of cyclic groups and the concept of Cosets of a group and its properties, Lagrange's theorem, and quotient groups.

DISCIPLINE SPECIFIC CORE COURSE 4: INTRODUCTION TO GRAPH THEORY

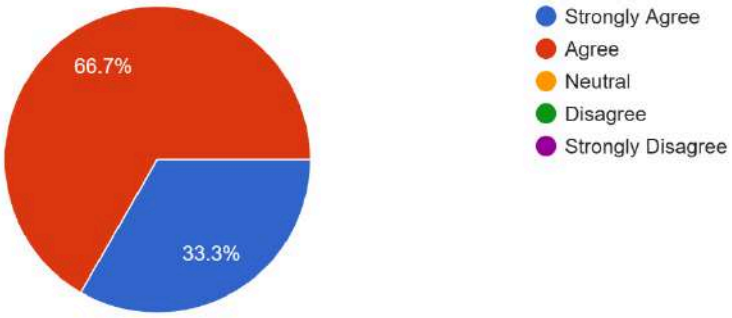
Percentage of classes attended

3 responses



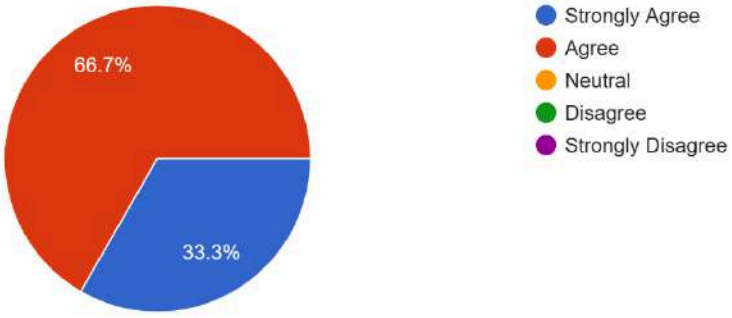
You have familiar with all initial notions of graph theory and related results and seeing them used for some real-life problems

3 responses



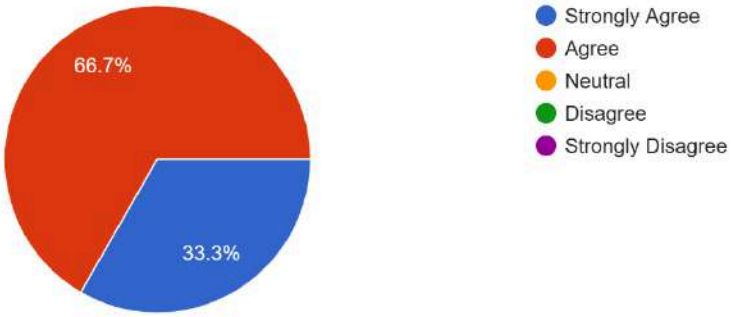
You have learning the notion of trees and their enormous usefulness in various problems.

3 responses



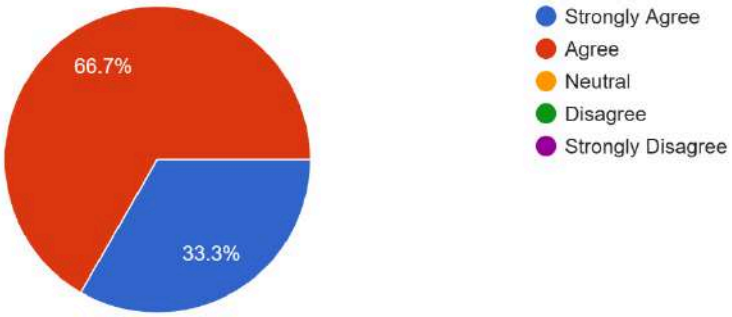
You understood the concept of various algorithms and their applicability in graph theory.

3 responses



You have learned the Studying planar graphs, Euler theorem associated to such graphs and some useful applications like coloring of graphs.

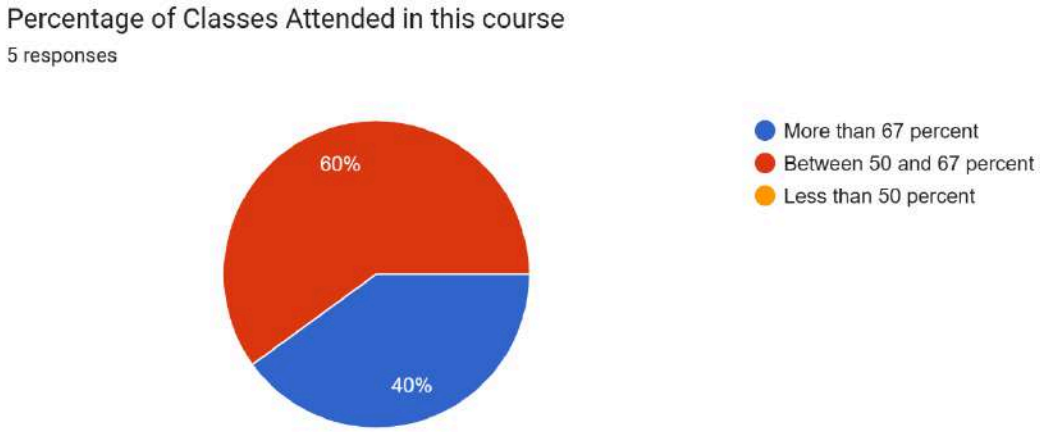
3 responses

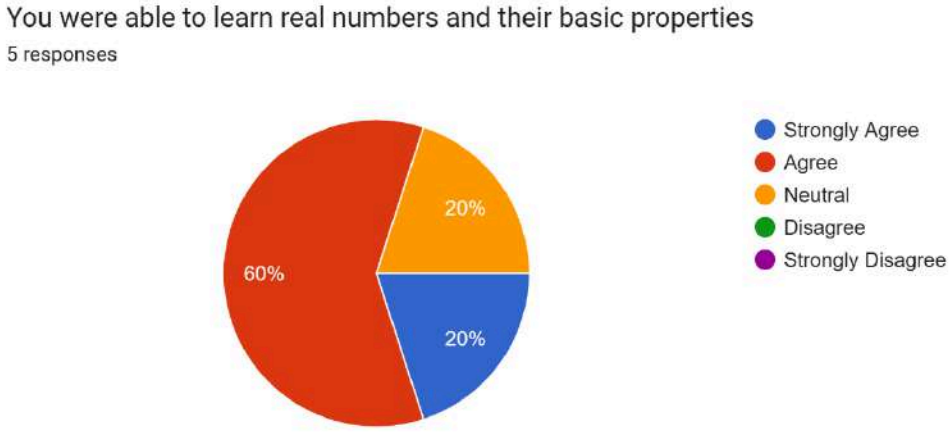


Observations:

From the given responses, it is observed that 100 % of students agreed that they were able to learn all initial notions of graph theory and related results and seeing them used for some real-life problems, the notion of trees and their enormous usefulness in various problems, the concept of various algorithms and their applicability in graph theory and the Studying planar graphs, Euler theorem associated to such graphs and some useful applications like colouring of graphs.

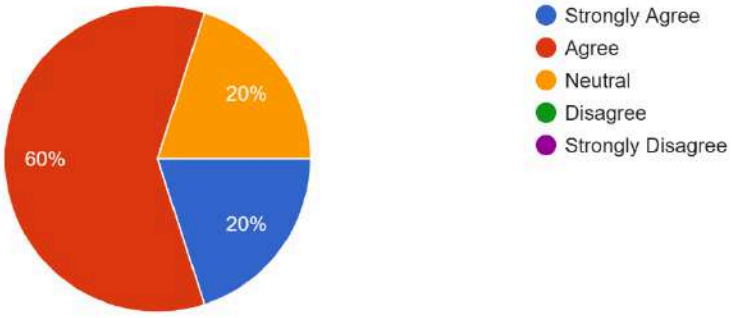
GE-4 Mathematics: Elements of Analysis





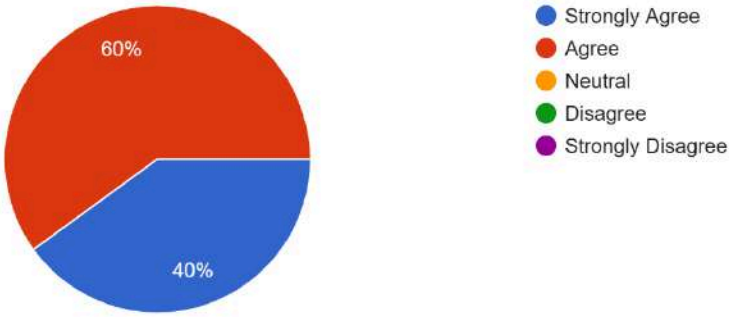
You were able to be familiar with convergent and Cauchy sequences.

5 responses



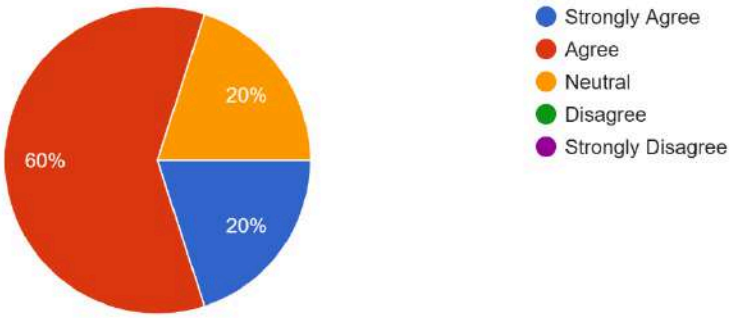
You learned about the test of convergence and divergence of infinite series of real numbers

5 responses



You learned about power series expansion of some elementary functions

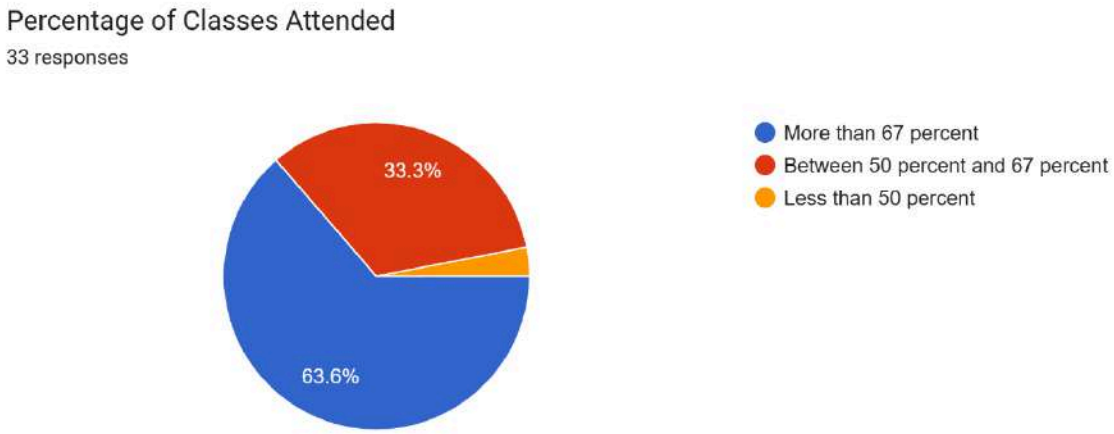
5 responses

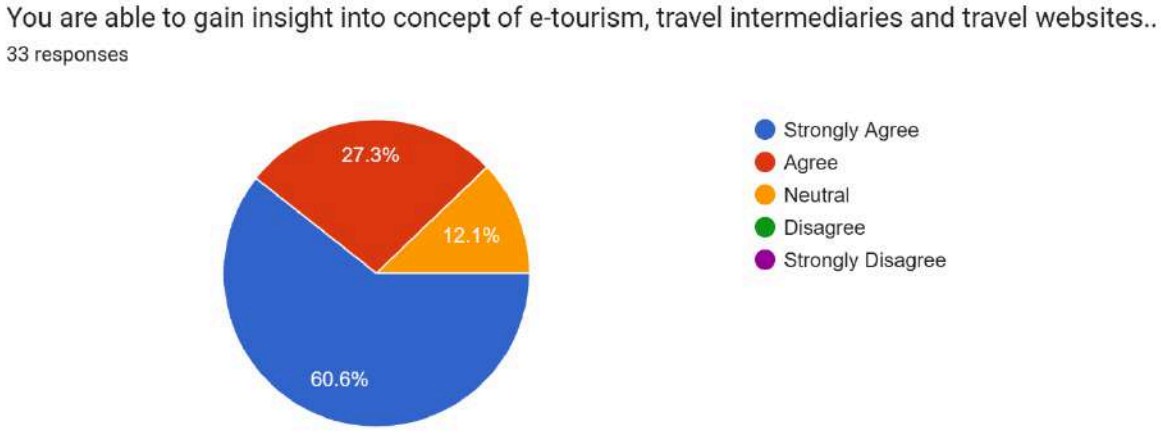


Observations:

From the given responses, it is observed that 85 % of students agreed that they were able to learn real numbers and their basic properties, convergent and Cauchy sequences, the test of convergence and divergence of infinite series of real numbers and power series expansion of some elementary functions.

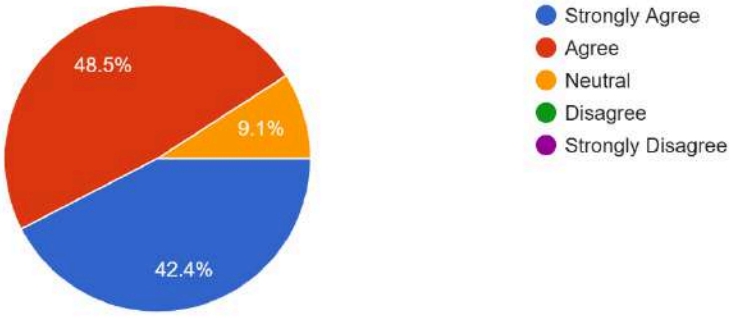
SEC: E – Tourism





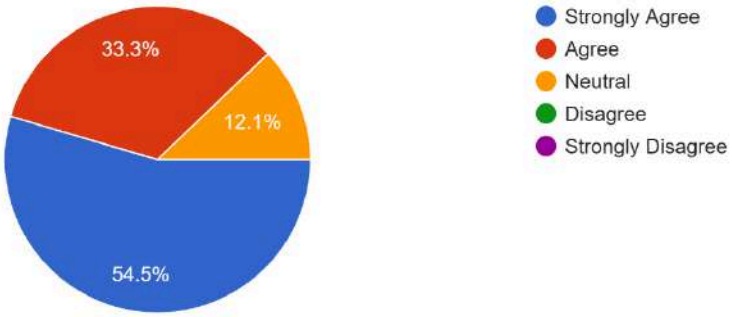
you will be able to learn and explain the emerging ICT tools and its impact in the industry.

33 responses



you are able to understand and implement the use of social media platforms/artificial intelligence in e-tourism.

33 responses



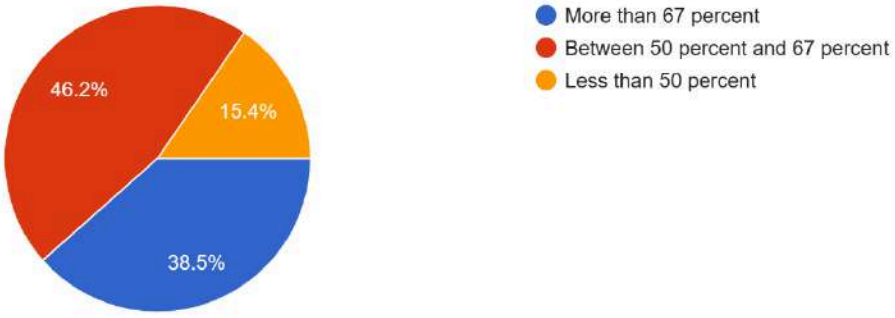
Observations:

From the given responses, it is observed that 89 % of students agreed that they were able to gain insight into concept of e-tourism, travel intermediaries and travel websites, explain the emerging ICT tools and its impact in the industry and implement the use of social media platforms/artificial intelligence in e-tourism.

VAC: Digital Empowerment

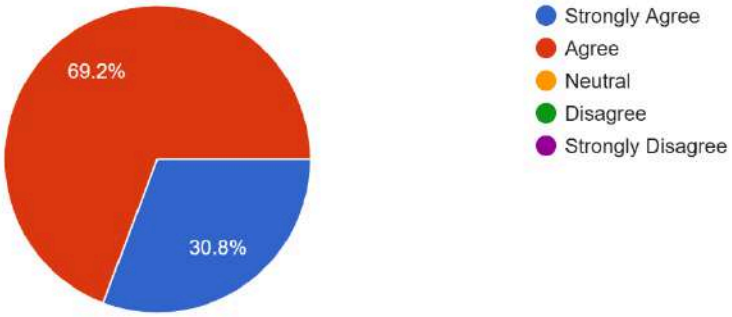
Percentage of Classes Attended

13 responses



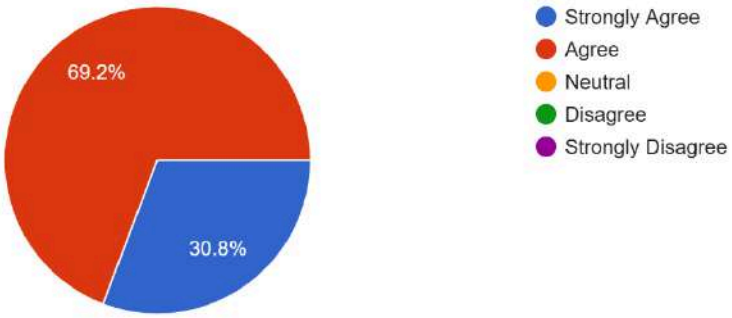
You are able to use ICT and digital services in daily life.

13 responses



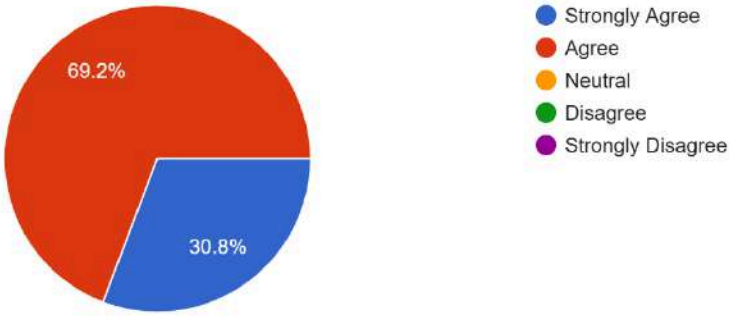
You are able to communicate and collaboration in cyberspace using social platforms.

13 responses



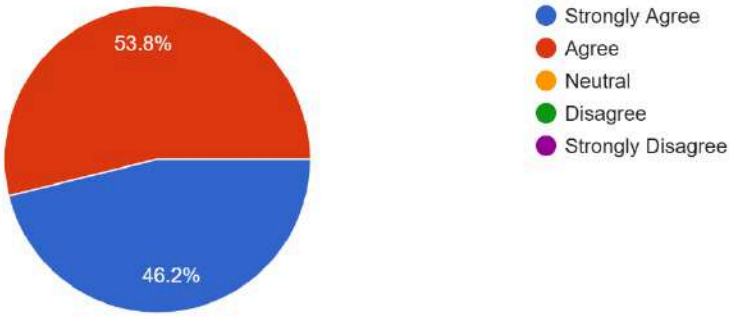
You are able to understand the significance of security and privacy in digital world.

13 responses



Are you able to spread awareness about cyber safety and security?

13 responses



Observations:

From the given responses, it is observed that 100 % of students agreed that they were able to use ICT and digital services, communicate and collaborate in cyberspace using social platforms, significance of security and privacy in the digital world and spread awareness about cyber safety and security.

COURSE EXIT SURVEY: Analysis Report

Academic Session: 2024-25

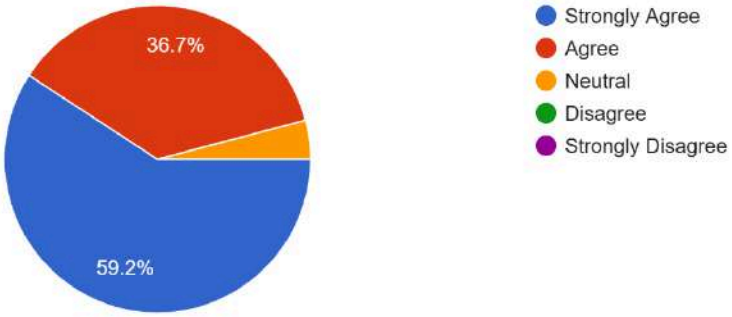
Department: Mathematics **Program: B.Sc.(H) Mathematics**

Semester: V

Paper Name: Metric Spaces (UPC: 32351501)

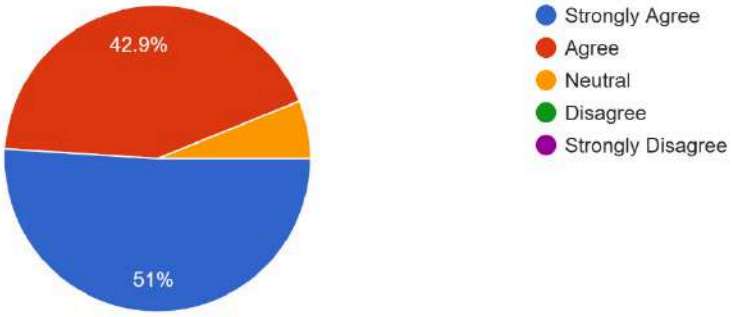
The course taught you the basic ideas of Metric Spaces.

49 responses



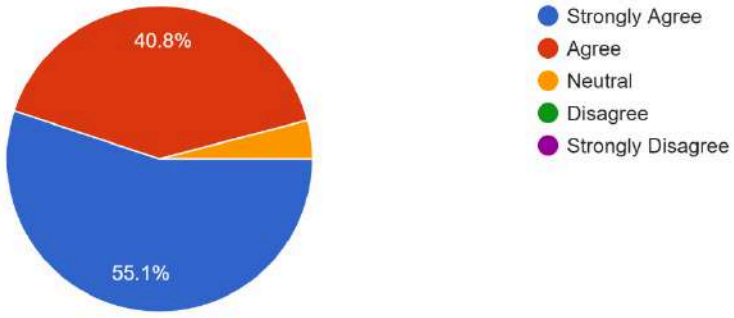
The course helped you to learn the significance of neighborhood in Real analysis through different metrics.

49 responses



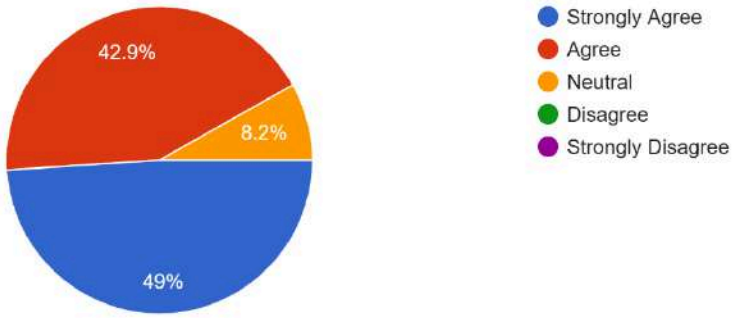
The course helped you to reframe your thinking about many so called definitions like open set, sequences etc.

49 responses



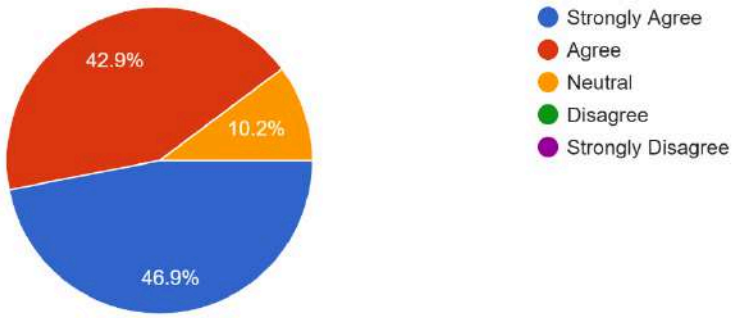
The course helped you to understand the role of Compactness Connectedness.

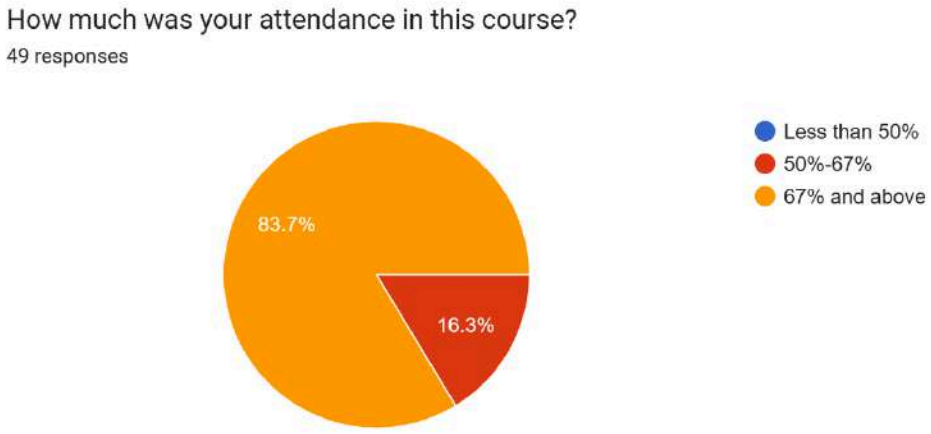
49 responses



The course helped you to learn another space named as Metric Spaces like vector Spaces with different feeling.

49 responses





Observations:

From the given responses, it is observed that around 80% - 85% of students strongly agreed and agreed that they got an understanding of the concept of Metric Spaces from start to end. They were able to analyze how to use the concept of metric spaces in Real Analysis and how to use the different types of metrics (Distance functions) in analysis. The majority of students understood the concept of two important topological properties, namely connectedness and compactness of metric spaces. It is also observed that students had an interest in the paper as 59% of students had more than 67% of attendance.

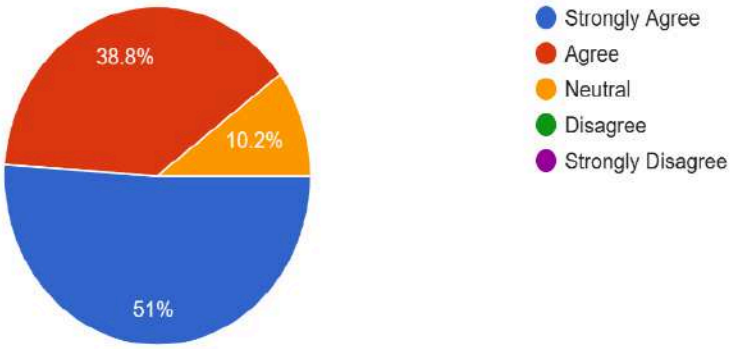
Action Taken:

For moderate responses, topics will be discussed more with the students in tutorials. For the weak students, special classes will be held to discuss important questions with them. Measures will be taken to make the subject more engaging and appealing to the students in order to ensure higher attendance on their part. Assessments would also be done at regular intervals.

Paper Name: Ring Theory

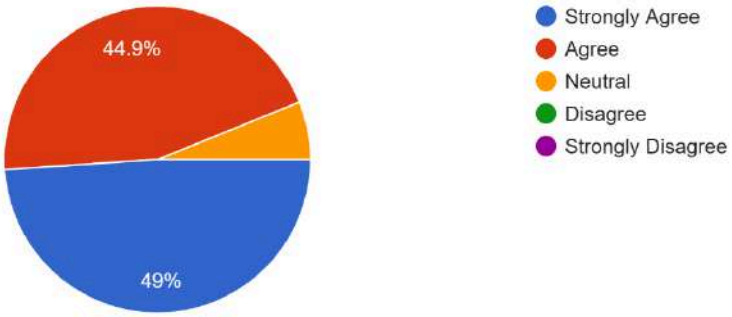
The course helped you to appreciate the significance of Rings, Properties of Rings, Subrings, Integral domains and fields .

49 responses



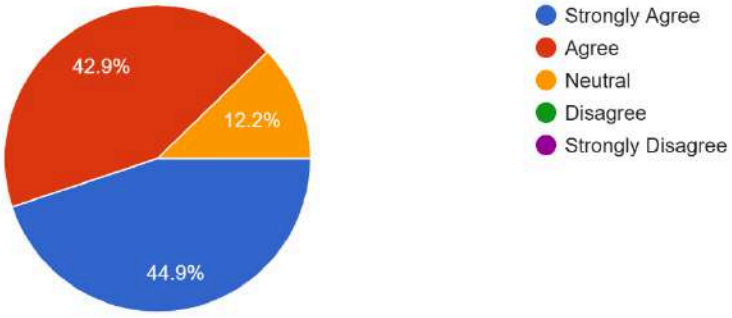
The course helped you to analyze the properties of ring homomorphisms; First, second and third isomorphism theorems for rings.

49 responses



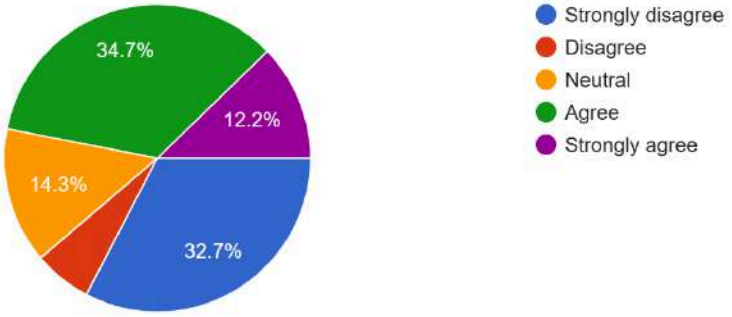
The course helped you to understand Factorization of polynomials, Reducibility tests.

49 responses



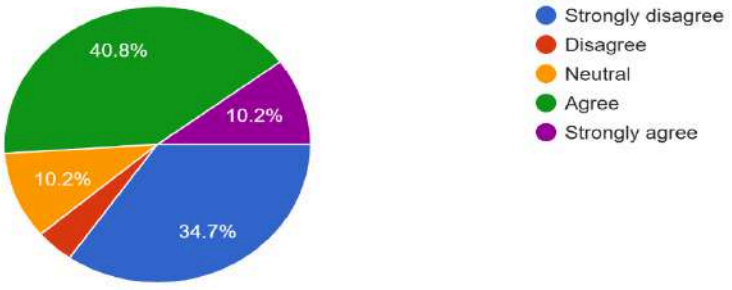
The course helped you to learn Unique factorization theorem.

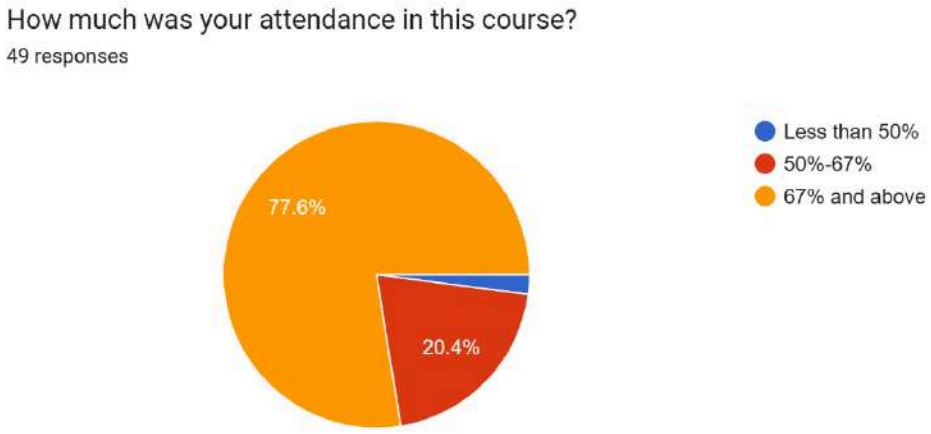
49 responses



The course helped you to understand about the Divisibility in integral domains, Irreducible, Primes, Unique factorization domains, Euclidean domains

49 responses





Observations:

From the given responses, it is observed that around 80% - 90% of students strongly agreed and agreed that they got an understanding about automorphisms for constructing new groups from the given group, fundamental theorem of finite abelian groups and became familiar with group actions and conjugacy in Sn. Majority were able to understand Sylow theorems and their applications in checking non simplicity. It is also observed that students had an interest in the paper as 58.1% of students had more than 67% of attendance.

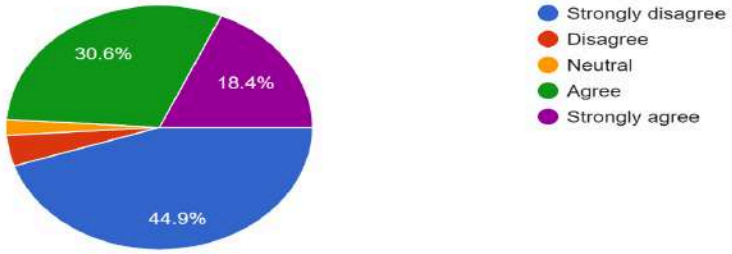
Action Taken:

For the moderate responses, topics will be discussed more with the students in tutorials. For the weak students, special classes will be held to discuss important questions with them. Measures will be taken to make the subject more engaging and appealing to the students in order to ensure higher attendance on their part. Assessments would also be done at regular intervals.

Paper Name: DSC-15: Partial Differential Equation

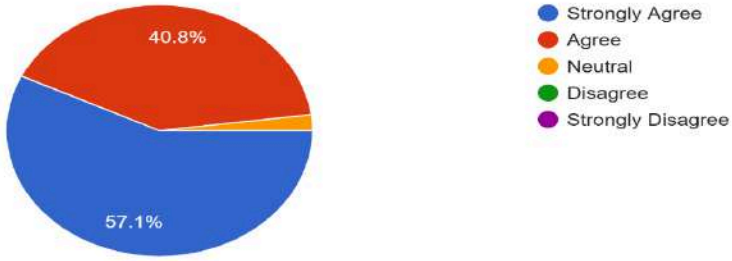
The course helped you to know the Basic concepts, classification, construction, and geometrical interpretation.

49 responses



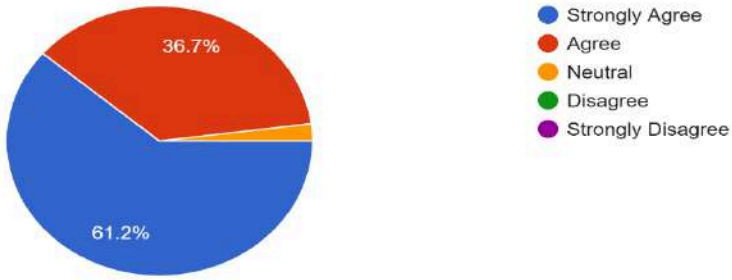
The course helped you to know the Method of separation of variables; Charpit's method for solving non-linear PDEs.

49 responses



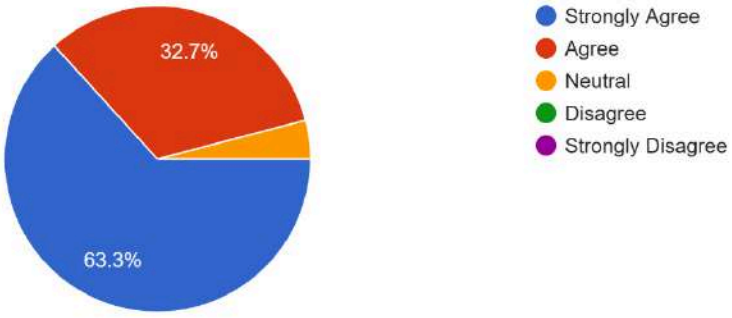
The course helped you to learn Classification (hyperbolic, parabolic, and elliptic), reduction to canonical forms.

49 responses



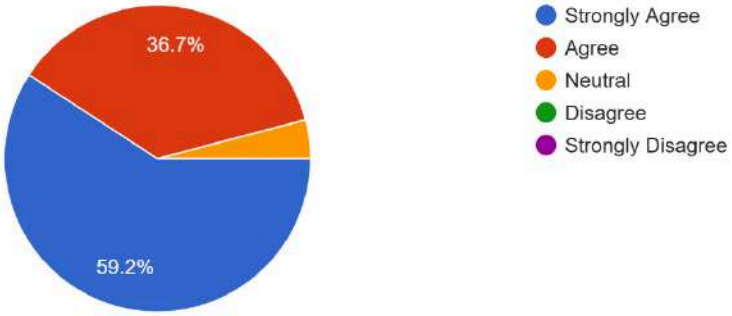
The course helped you to learn about the Mathematical models: The vibrating string, vibrating membrane,.

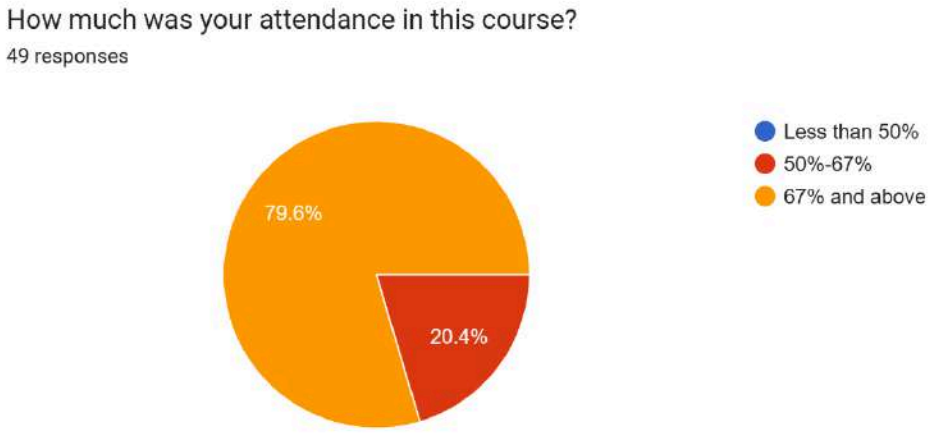
49 responses



The course helped you to understand the Solutions of homogeneous wave equations with initial boundary-value problems, and non-homogeneous boundary conditions.

49 responses





Observations:

From the given responses, it is observed that more than 80-85% of students who opted for this course strongly agreed and agreed that they got an understanding of the numerical methods to find the zeros of nonlinear functions of a single variable and solution of a system of linear equations, up to a certain given level of precision. They got to know about methods to solve systems of linear equations, such as Gauss−Jacobi, Gauss−Seidel and SOR methods. They were able to understand Interpolation techniques to compute the values for a tabulated function at points not in the table. It is also observed that students had an interest in the paper as more than 72.7% of students had more than 67% of attendance.

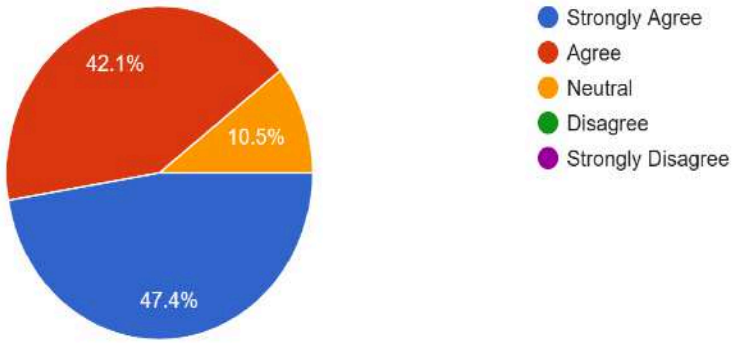
Action Taken:

For the moderate responses, topics will be discussed more with the students in tutorials. For the weak students, special classes will be held to discuss important questions with them. Measures will be taken to make the subject more engaging and appealing to the students in order to ensure higher attendance on their part. Assessments would also be done at regular intervals.

Paper Name: DSE-3(i): Mathematical Data Science

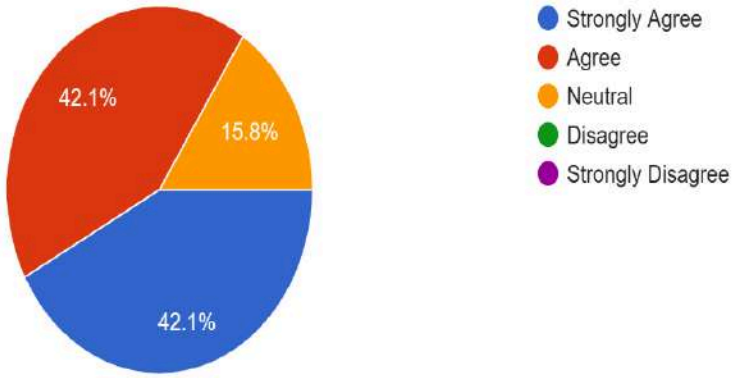
The course helped you to learn about the Types of Data: nominal, ordinal, interval, and ratio; Steps involved in data science case study.

19 responses



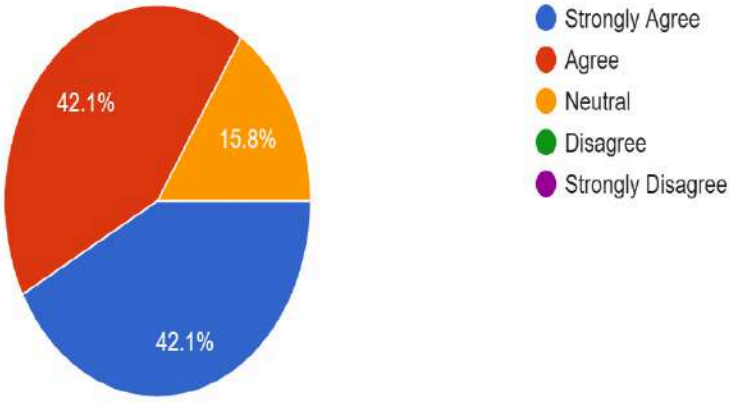
The course helped you to learn about the Structured and unstructured data: streams, frames, series, survey results, scale and source of data.

19 responses



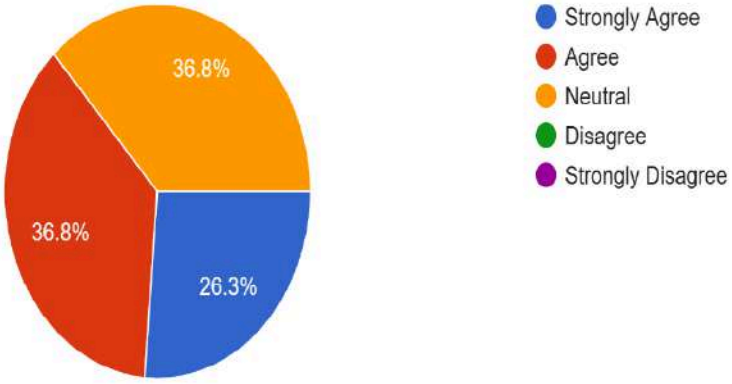
The course helped you to learn about the Types of distances: Manhattan, Hamming, Mahalanobis, Cosine and angular distances, KL divergence

19 responses



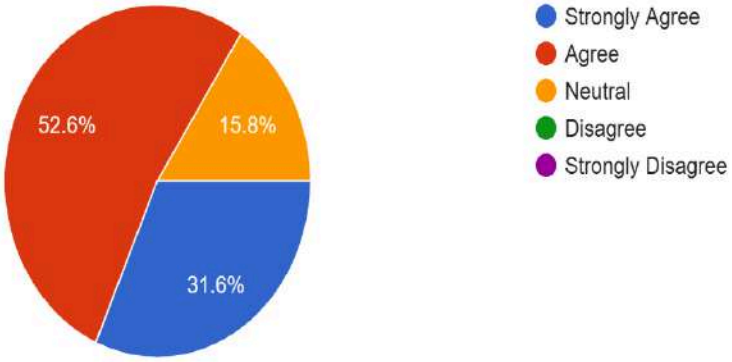
The course helped you to learn about the Problem of dimensionality, Principal component analysis.

19 responses



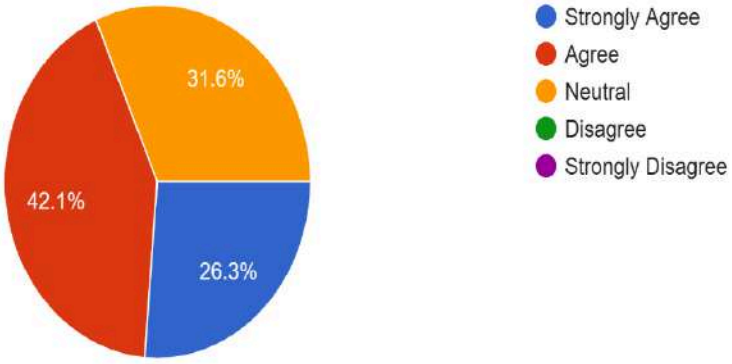
The course helped you to learn about the Eigenvector and eigenvalues relation to SVD, Multidimensional scaling, Linear discriminant analysis.

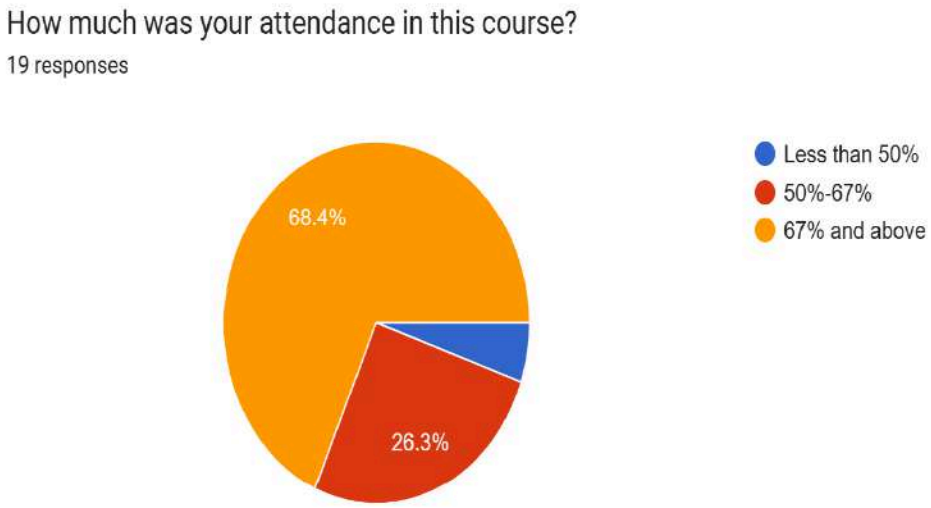
19 responses



The course taught you to about the Classification: Linear classifiers, Perceptron algorithm, Kernels, Support vector machines, and k-nearest neighbors (k-NN) classifiers.

19 responses





Observations:

From the given responses, it is observed that 75%-85% of students who opted for this course strongly agreed and agreed that they were able to understand and apply the programming concepts of C++ which is important to mathematical investigation and problem solving. They were able to understand structured data-types in C++ and learned about applications in factorization of an integer and understanding Cartesian geometry and Pythagorean triples. They were able to use mathematical libraries for computational objectives. It is also observed that students had an interest in the paper as more than 42.6% of students had more than 67% of attendance.

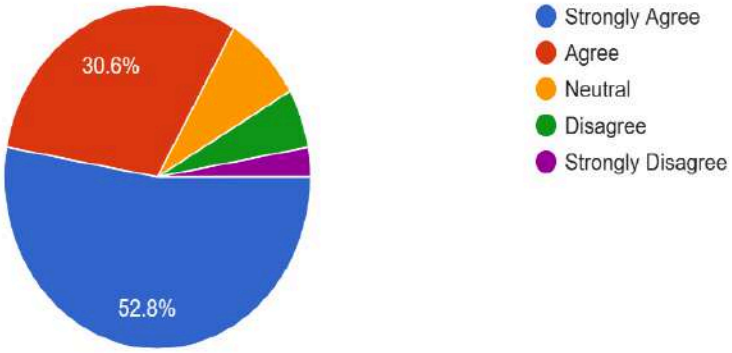
Action Taken:

For the moderate responses, topics will be discussed more with the students in tutorials. For the weak students, special classes will be held to discuss important questions with them. Measures will be taken to make the subject more engaging and appealing to the students in order to ensure higher attendance on their part. Assessments would also be done at regular intervals.

Paper Name: DSE-3(ii): Linear Programming and Applications

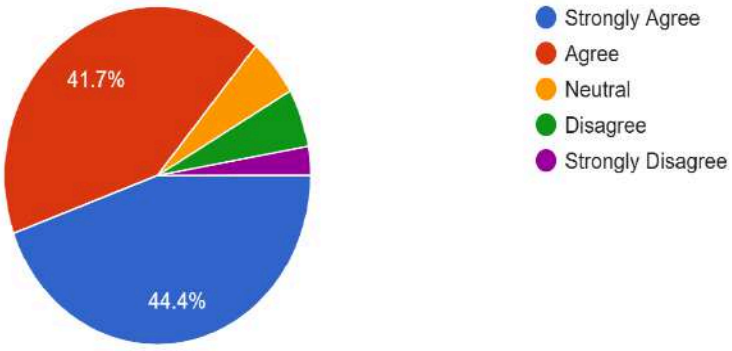
The course helped you to learn the Linear programming problem: Standard, Canonical and matrix forms

36 responses



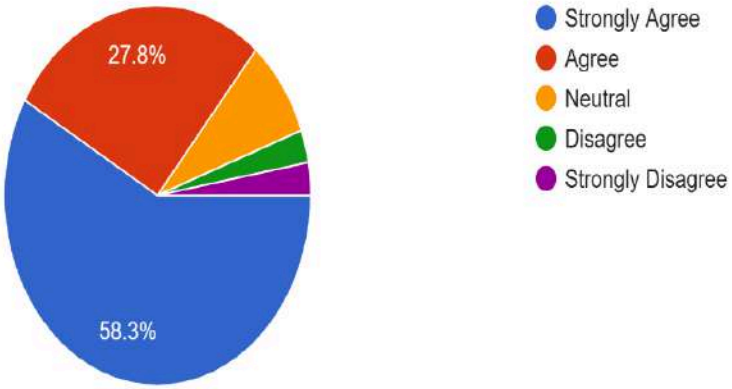
The course helped you to learn about Simplex method: Optimal solution, Termination criteria for optimal solution of the linear programming problem,

36 responses



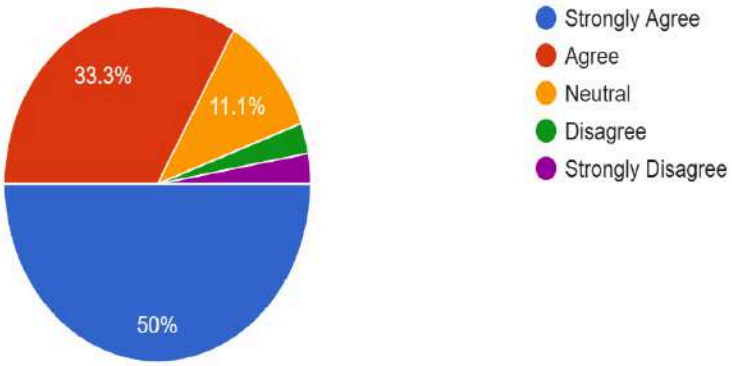
The course helped you to learn about Simplex algorithm and its tableau format; Artificial variables, Two-phase method, Big-M method.

36 responses



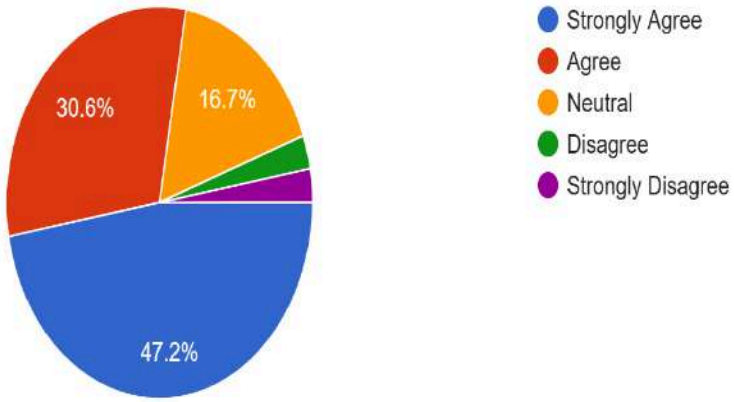
The course helped you to learn about Transportation Problem: Definition and formulation, Northwest-corner, Least- cost.

36 responses



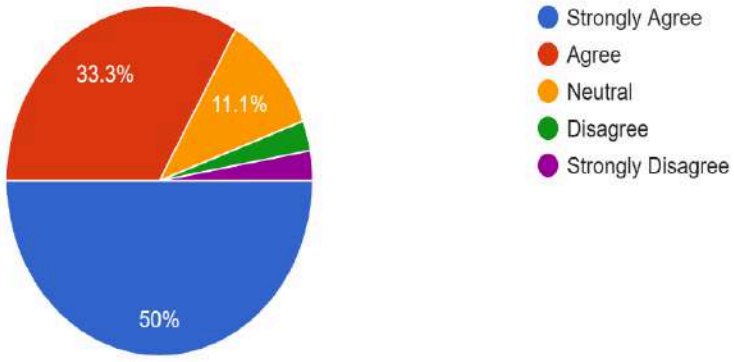
The course helped you to learn about Assignment Problem: Mathematical formulation and Hungarian method of solving.

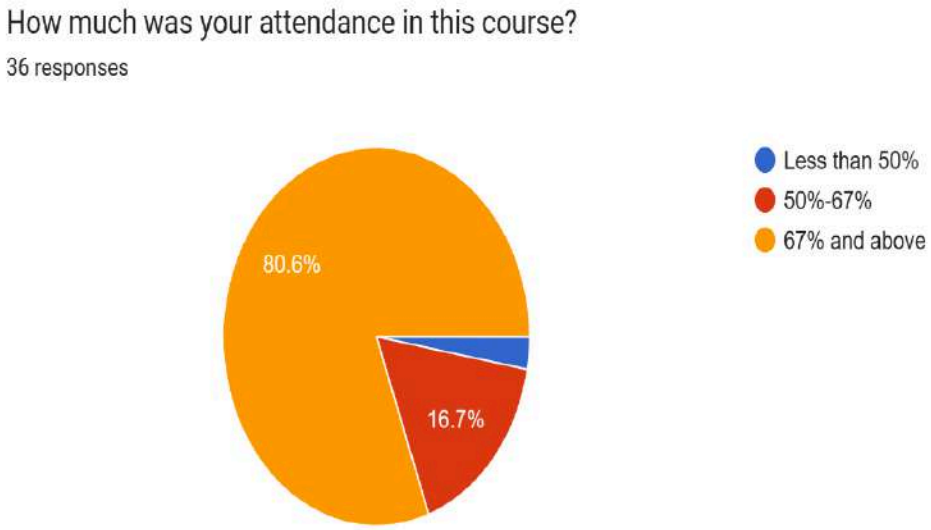
36 responses



The course taught you to solve Game Theory: Two-person zero sum game, Games with mixed strategies, Formulation of game to primal and dual linear programming problems

36 responses





Observations:

From the given responses, it is observed that more than 85%-95% of students who opted for this course strongly agreed and agreed that they learned about probability density and moment generating functions, various univariate distributions such as Bernoulli, Binomial, Poisson, gamma and exponential distributions and joint behavior of two random variables. The majority of students were able to Measure the scale of association between two variables, and to establish a formulation helping to predict one variable in terms of the other, i.e., correlation and linear regression. It is also observed that students had an interest in the paper as about 59% of students had more than 67% of attendance.

Action Taken: For the moderate responses, topics will be discussed more with the students in tutorials. For the weak students, special classes will be held to discuss important questions with them. Measures will be taken to make the subject more engaging and appealing to the students in order to ensure higher attendance on their part. Assessments would also be done at regular intervals.

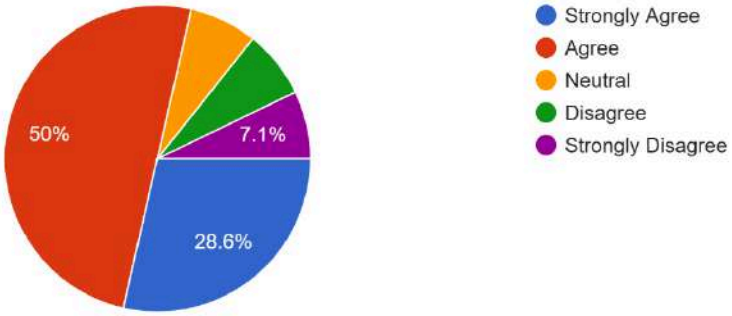
GENERIC ELECTIVES(GE) COURSES OFFERED BY DEPARTMENT OF MATHEMATICS

Semester: V

Paper Name GE- Sem.-5: Numerical Methods

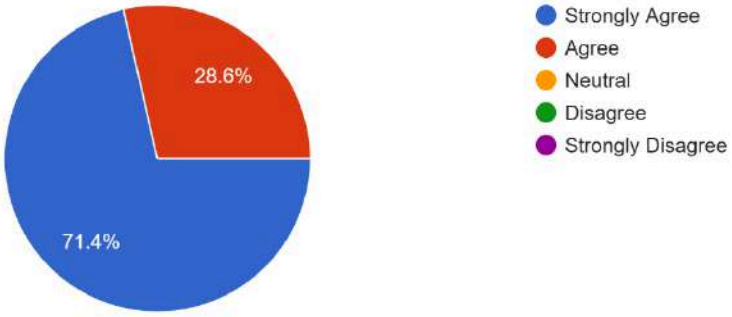
The course taught you the basic ideas of Errors: Roundoff error, Local truncation error, Global truncation error.

14 responses



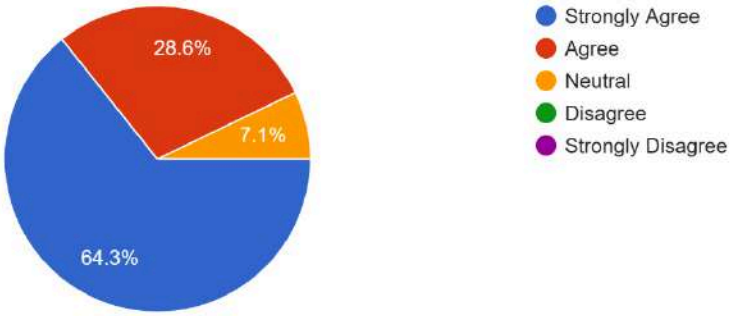
The course helped you to learn the significance of Bisection method, Secant method, Regula–Falsi method, Newton–Raphson method.

14 responses



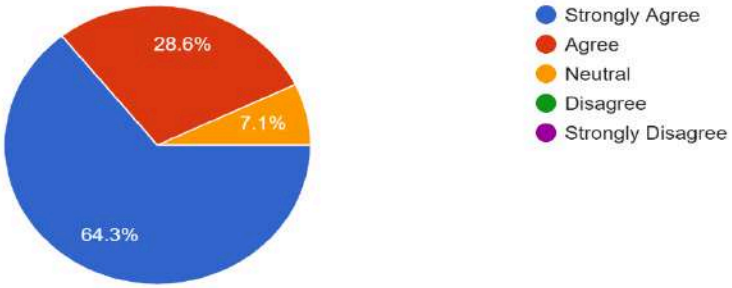
The course helped you to learn about Gaussian elimination method (with row pivoting); Iterative methods: Jacobi method, Gauss–Seidel method.

14 responses



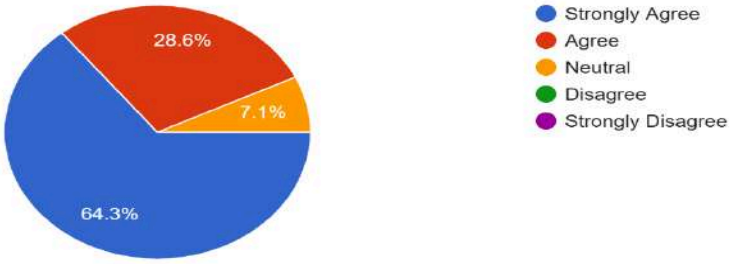
The course helped you to understand Interpolation: Lagrange form, Newton form, Finite difference operators.

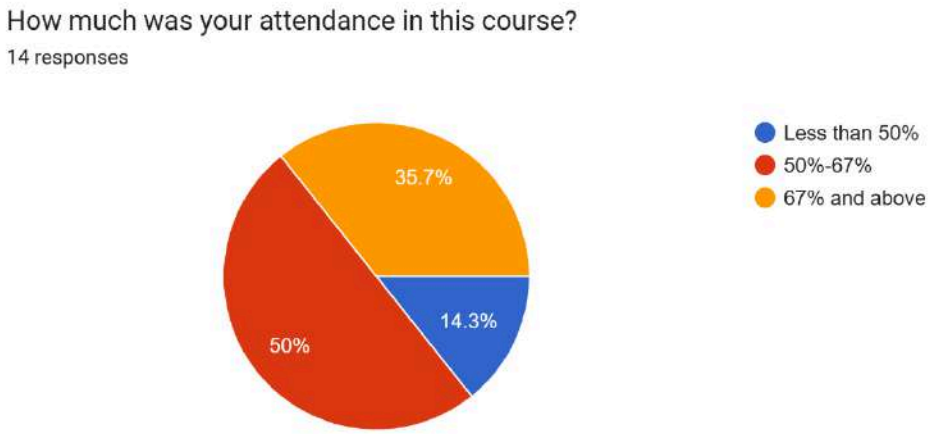
14 responses



The course helped you to understand Interpolation: Lagrange form, Newton form, Finite difference operators.

14 responses





Observations:

From the given responses, it is observed that 60% - 65% students agreed that they learned to visualize the space Rn in terms of vectors and their interrelation with matrices, understood the basic concepts of vector spaces, linear independence and span of vectors over a field, basis and dimension of a vector space and concepts of linear transformations, dimension theorem, matrix representation of a linear transformation with application to computer graphics. It is also observed that students had an interest in the paper as 75% of students had more than 67% of attendance.

Action Taken:

For moderate responses, topics will be discussed more with the students in tutorials. For the weak students, special classes will be held to discuss important questions with them. Measures will be taken to make the subject more engaging and appealing to the students to ensure higher attendance. Assessments would also be done at regular intervals.

COURSE EXIT SURVEY: Analysis Report

Academic Session: 2024-25

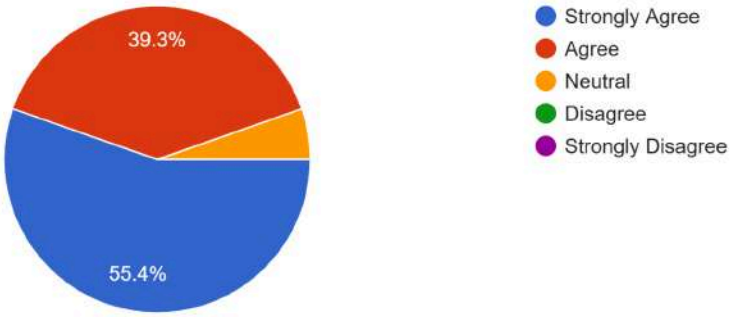
Department: Mathematics **Program: B.Sc.(H) Mathematics**

Semester: VI

Paper Name: DSC-18: COMPLEX ANALYSIS

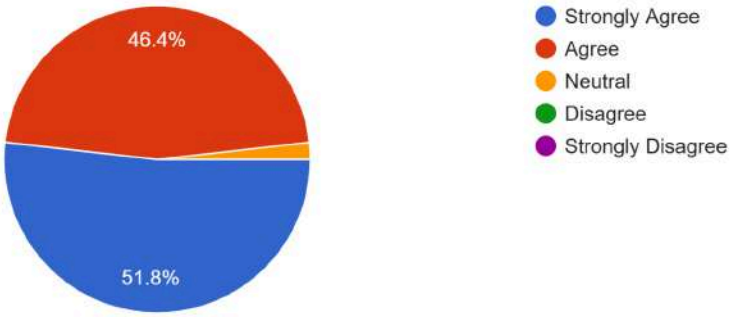
The course taught you the basic ideas of analysis for complex functions in complex variables with visualization through relevant practicals.

56 responses



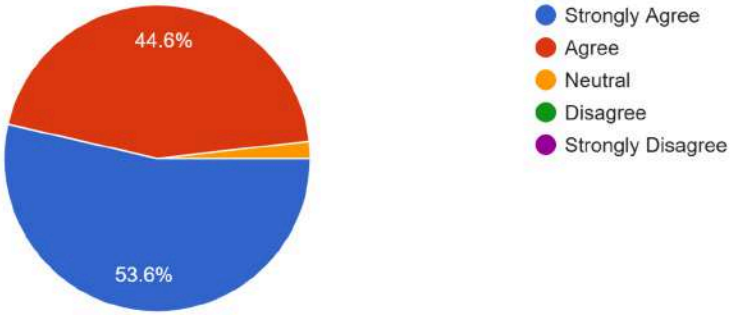
The course helped you to learn the significance of differentiability of complex functions leading to the understanding of Cauchy–Riemann equations.

56 responses



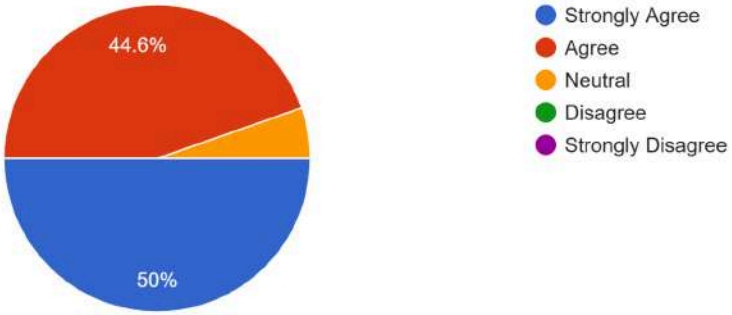
The course helped you to understand the elementary functions and evaluate the contour integrals.

56 responses



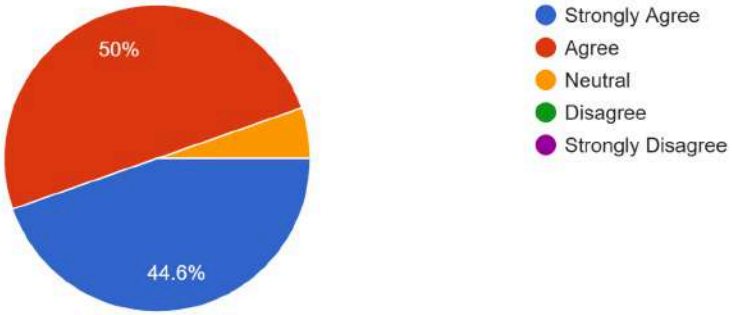
The course helped you to understand the role of Cauchy–Goursat theorem and the Cauchy integral formula.

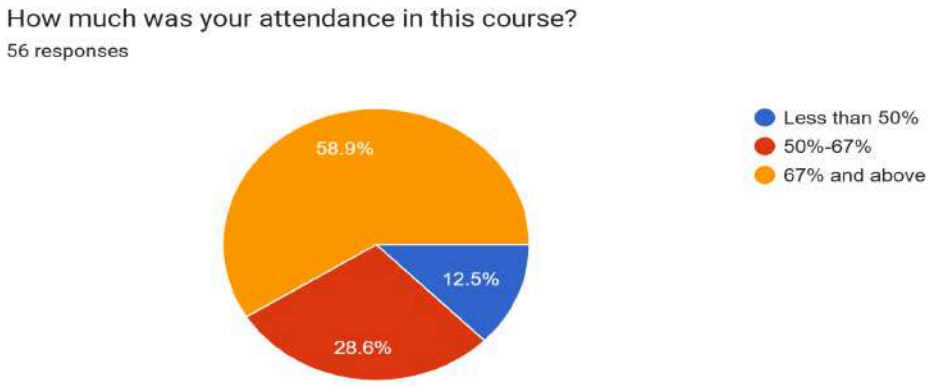
56 responses



The course helped you to learn the expansion of simple functions as their Taylor and Laurent series, classify the nature of singularities, find residues ... apply Cauchy Residue theorem to evaluate integrals.

56 responses





Observations:

From the given responses, it is observed that around 90% - 95% of students strongly agreed and agreed that they got an understanding of the concept of Complex analysis from start to end. They were able to analyze how to use the concept of Complex analysis for solving the rare and simple integration and how to use the different types of theorems and formulas in Integrations. The majority of students understood the concept of two important theorems, namely Cauchy Gourset theorem, Cauchy Integral formula, Cauchy Residue Theorem etc.. It is also observed that students had an interest in the paper as 59% of students had more than 67% of attendance.

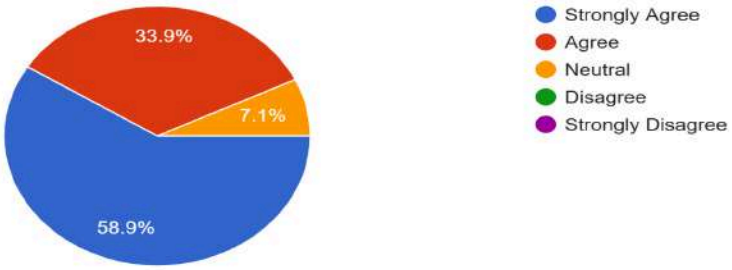
Action Taken:

For moderate responses, topics will be discussed more with the students in extra classes. For the weak students, special classes will be held to discuss important questions with them. Measures will be taken to make the subject more engaging and appealing to the students in order to ensure higher attendance on their part. Assessments would also be done at regular intervals.

Course 2: DSC-17: Advanced Linear Algebra

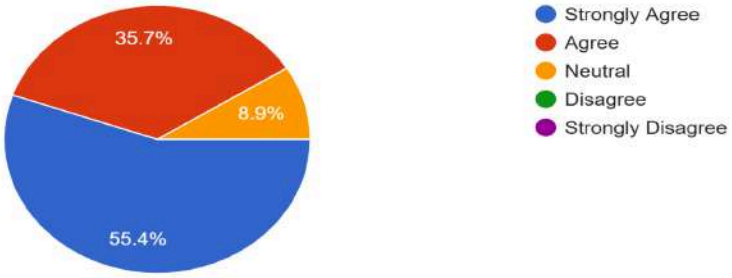
The course helped you to appreciate the significance of Eigenvalues, eigenvectors, eigenspaces and the characteristic polynomial of a linear operator.

56 responses



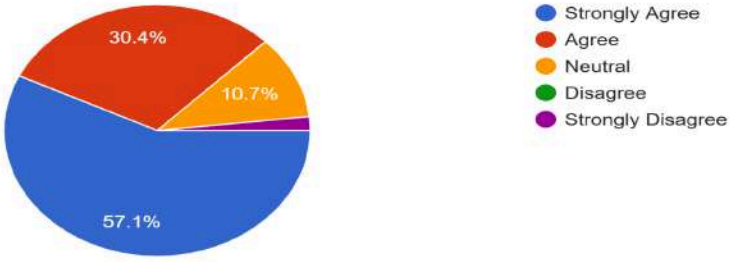
The course helped you to compute the Cayley-Hamilton theorem; The Jordan canonical form and the minimal polynomial of a linear operator.

56 responses



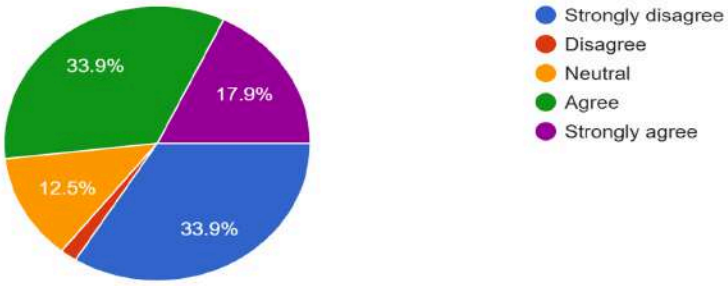
The course helped you to understand and compute Inner products and norms, Orthonormal basis, Gram-Schmidt orthogonalization process.

56 responses



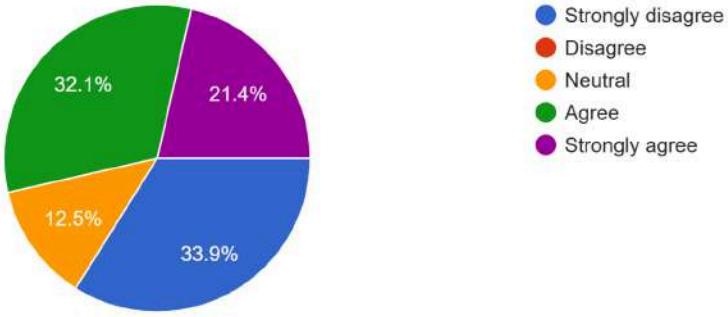
The course helped you to learn least squares approximation and minimal solutions to systems of linear equations.

56 responses



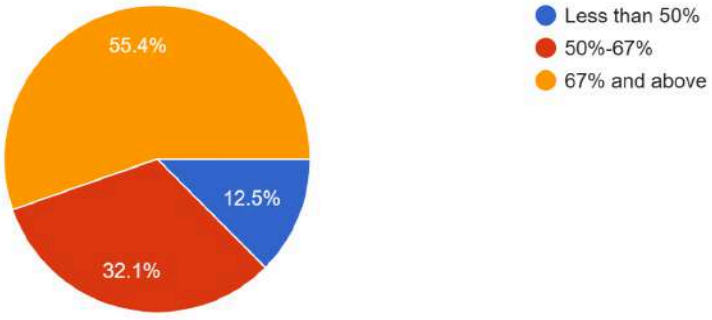
The course helped you to find the Normal, self-adjoint, unitary and orthogonal operators and their properties; Orthogonal, projections and the spectral theorem

56 responses



How much was your attendance in this course?

56 responses



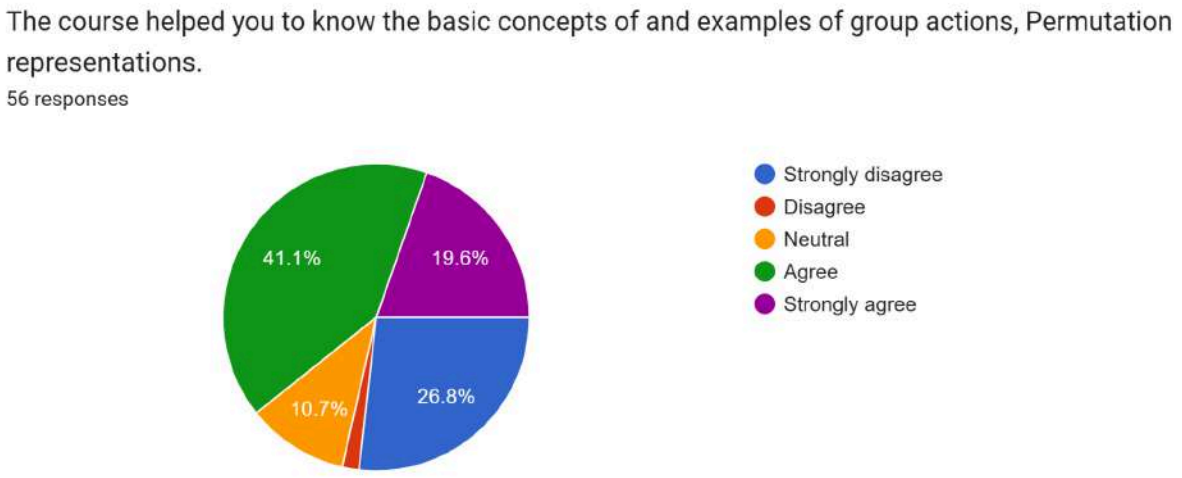
Observations:

From the given responses, it is observed that around 90% - 95% of students strongly agreed and agreed that they got an understanding about Unique factorization domains, Euclidean domains, Dual Spaces and Diagonalizable Operators. Majority were able to understand Inner Product Spaces, Inner product spaces and norms, Orthonormal basis, Gram−Schmidt orthogonalization process, Orthogonal complements, Bessel's inequality. It is also observed that students had an interest in the paper as 55.5% of students had more than 67% of attendance.

Action Taken:

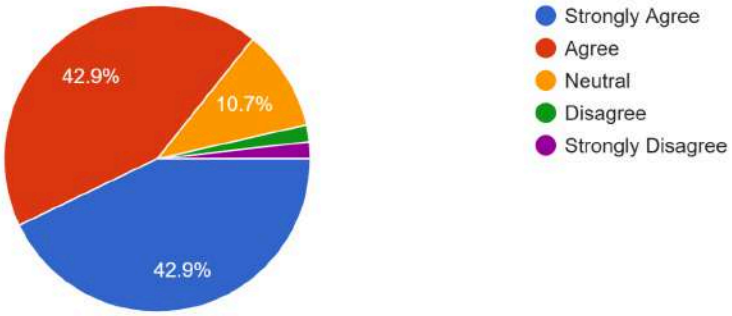
For the moderate responses, topics will be discussed more with the students in tutorials. For the weak students, special classes will be held to discuss important questions with them. Measures will be taken to make the subject more engaging and appealing to the students in order to ensure higher attendance on their part. Assessments would also be done at regular intervals.

Course 3: DSC-16: Advanced Group Theory



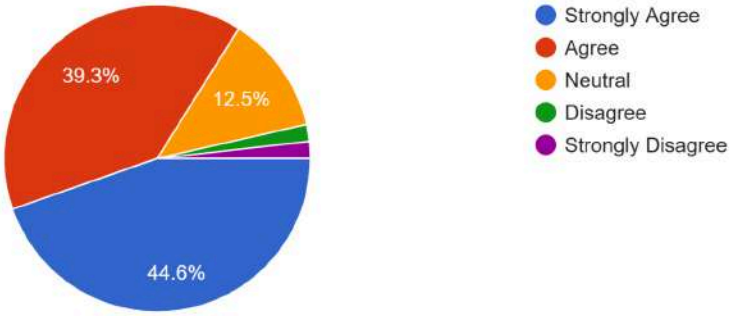
The course helped you to know about Cayley's theorem, Conjugacy classes, Class equation, Conjugacy in Sn, Simplicity of $A5$.

56 responses



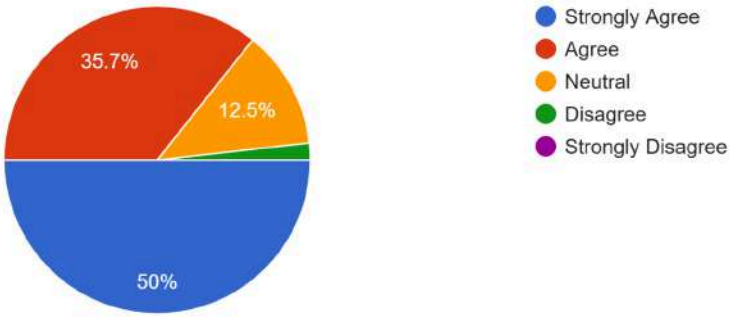
The course helped you to learn about the p-groups, Sylow p-subgroups, Sylow's theorem, Applications of Sylow's theorem.

56 responses



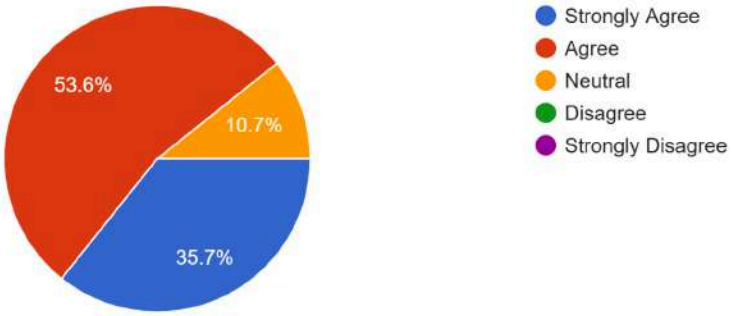
The course helped you to learn about the Finite simple groups, Non-simplicity tests.

56 responses



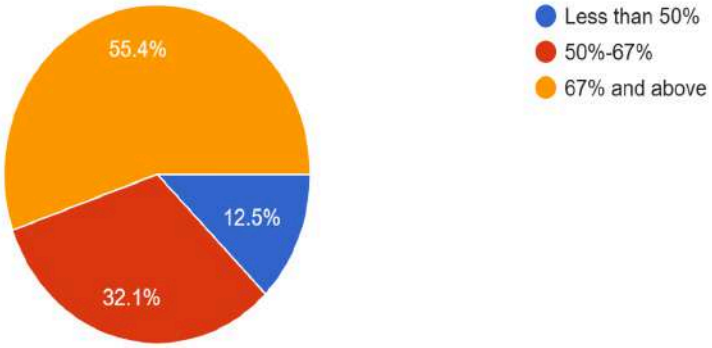
The course helped you to understand the concepts of Solvable groups and their properties, Commutator subgroups.

56 responses



How much was your attendance in this course?

56 responses



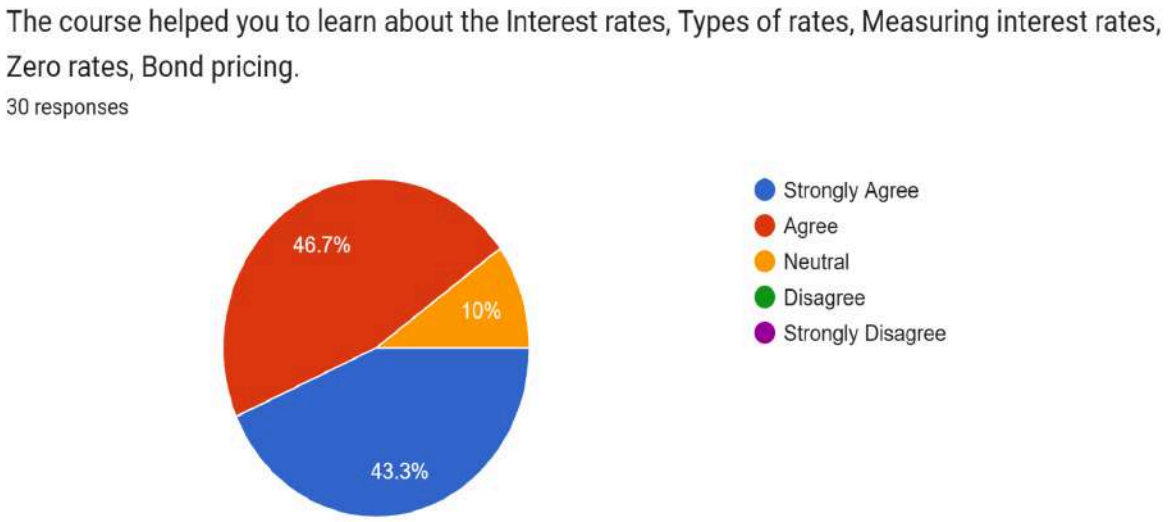
Observations:

From the given responses, it is observed that more than 70-85% of students who opted for this course strongly agreed and agreed that they got an understanding of concepts of and examples of group actions, Permutation representations, Cayley's theorem, Conjugacy classes, Class equation, Conjugacy in Sn, Simplicity of $A5$. They were able to understand the p-groups, Sylow p-subgroups, Sylow's theorem, Applications of Sylow's theorem, the Finite simple groups, Non-simplicity tests, the concepts of Solvable groups and their properties, Commutator subgroups. It is also observed that students had an interest in the paper as more than 55.4% of students had more than 67% of attendance.

Action Taken:

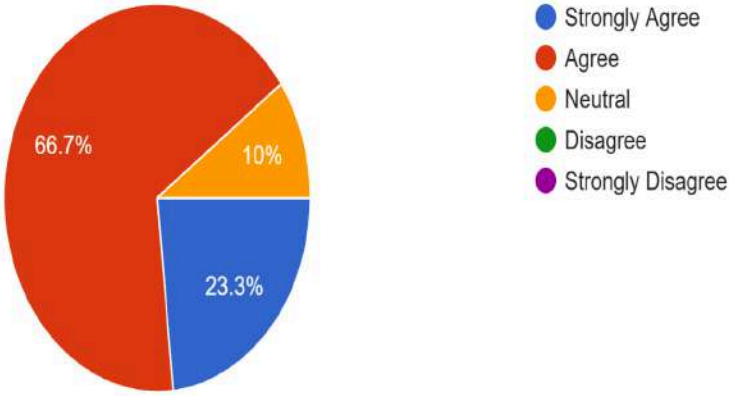
For the moderate responses, topics will be discussed more with the students in tutorials. For the weak students, special classes will be held to discuss important questions with them. Measures will be taken to make the subject more engaging and appealing to the students in order to ensure higher attendance on their part. Assessments would also be done at regular intervals.

Course 4: DSE-4 (i): Mathematical Finance



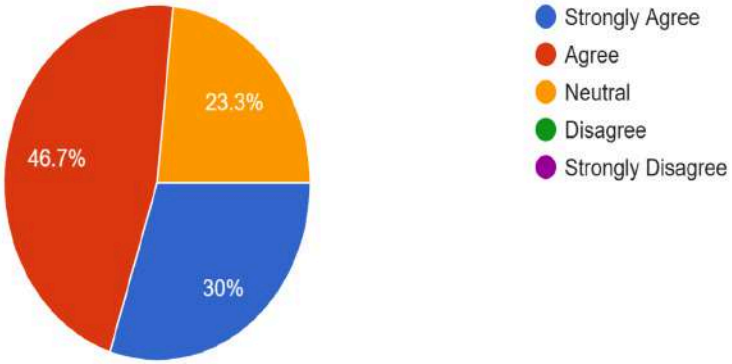
The course helped you to learn about the No Arbitrage principle, Short selling, Forward price for an investment asset.

30 responses



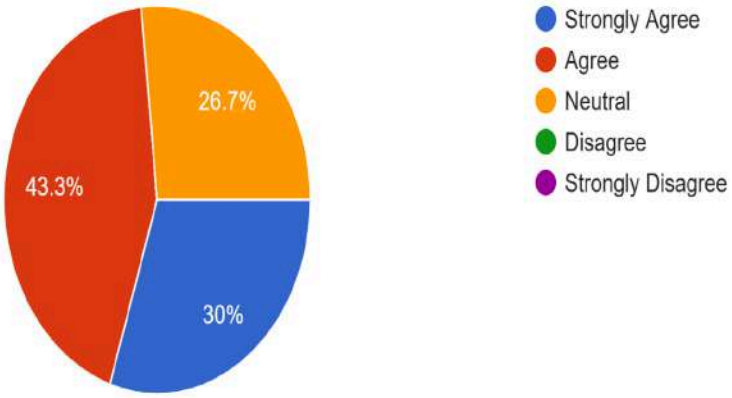
The course helped you to learn about the Binomial option pricing model, Risk-neutral valuation (for European and American options on assets following binomial tree model).

30 responses



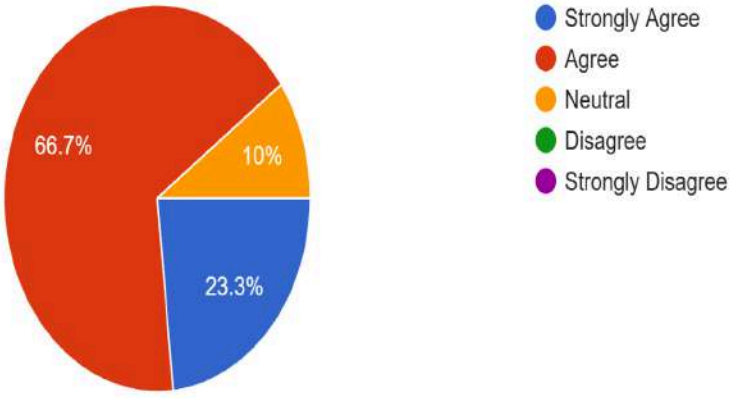
The course helped you to learn about Brownian motion (Wiener Process), Geometric Brownian Motion (GBM), The process for a stock price, Itô's lemma, Lognormal property of stock prices.

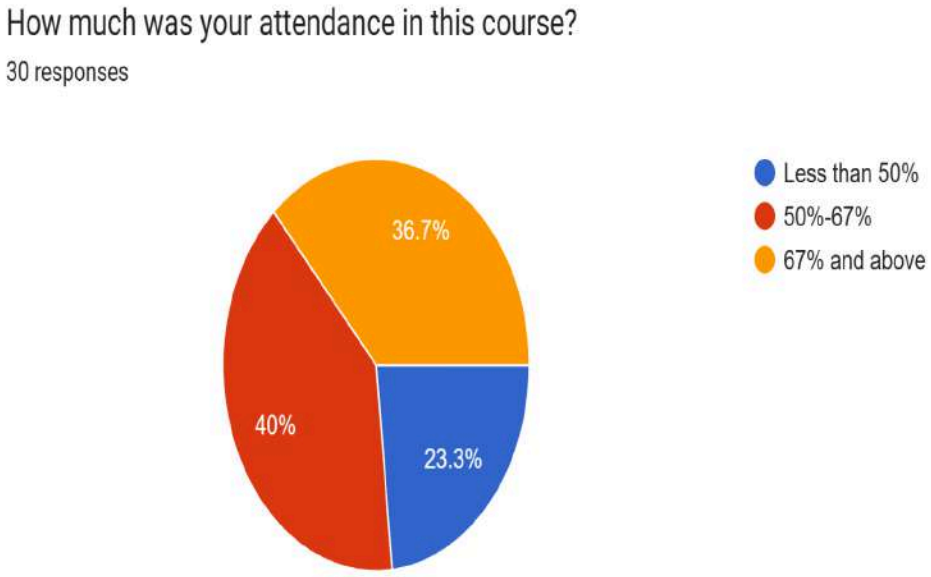
30 responses



The course helped you to learn about the Black-Scholes-Merton differential equation, Extension of risk-neutral valuation to assets following GBM.

30 responses





Observations:

From the given responses, it is observed that 70%-85% of students who opted for this course strongly agreed and agreed that they were able to understand the Interest rates, Types of rates, Measuring interest rates, Zero rates, Bond pricing, the Binomial option pricing model, Risk-neutral valuation, Brownian motion (Wiener Process), Geometric Brownian Motion (GBM). They were able to use the Black-Scholes-Merton differential equation, Extension of risk-neutral valuation to assets following GBM. It is also observed that students had an interest in the paper as more than 72% of students had more than 36.7% of attendance.

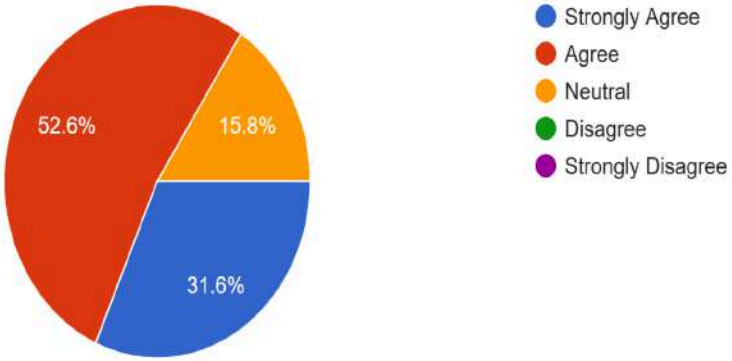
Action Taken:

For the moderate responses, topics will be discussed more with the students in tutorials. For the weak students, special classes will be held to discuss important questions with them. Measures will be taken to make the subject more engaging and appealing to the students in order to ensure higher attendance on their part. Assessments would also be done at regular intervals.

Course 4: DSE-4 (ii): Integral Transforms

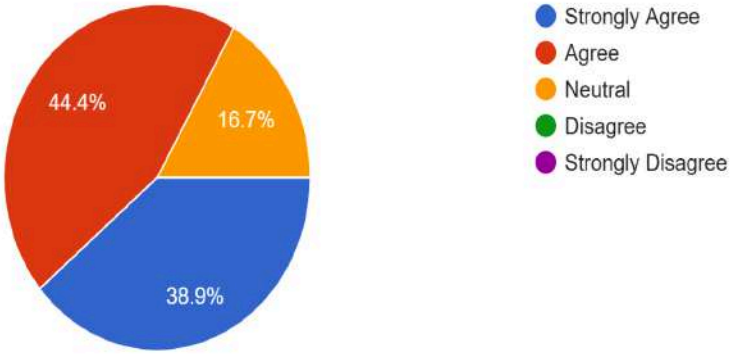
The course helped you to learn about the Piecewise continuous functions and periodic functions, Systems of orthogonal functions.

19 responses



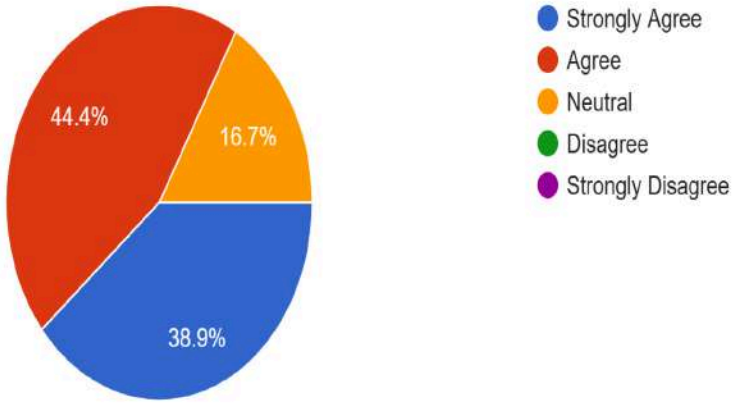
The course helped you to learn about the Pointwise convergence, uniform convergence, differentiation, and integration of Fourier series; Fourier integrals.

18 responses



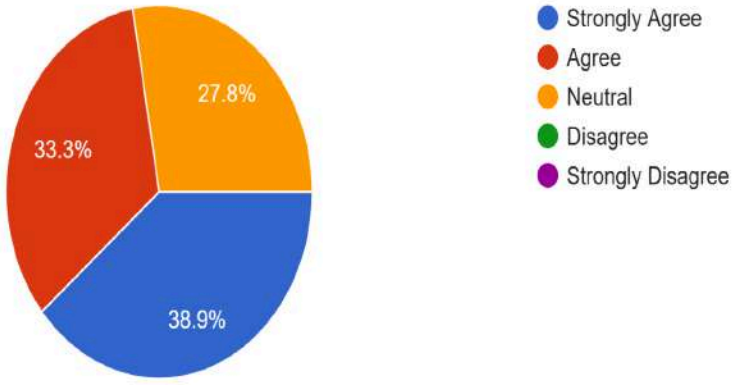
The course helped you to learn about the Fourier transforms, Properties of Fourier transforms, Convolution theorem of the Fourier transform.

18 responses



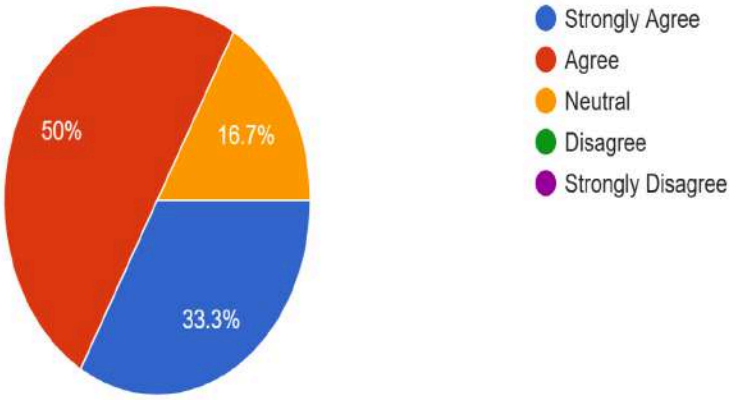
The course helped you to learn about Laplace transforms, Properties of Laplace transforms, Convolution theorem and properties of the Laplace transform.

18 responses



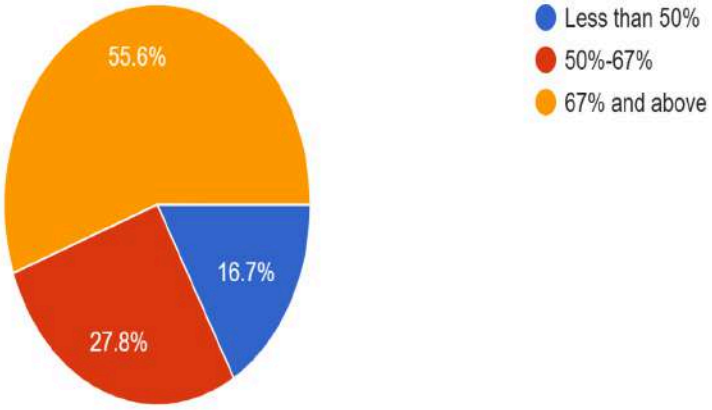
The course helped you to learn about the Applications of Fourier transform to ordinary and partial differential equations; Applications of Laplace tran...tial equations, initial and boundary value problems.

18 responses



How much was your attendance in this course?

18 responses



Observations:

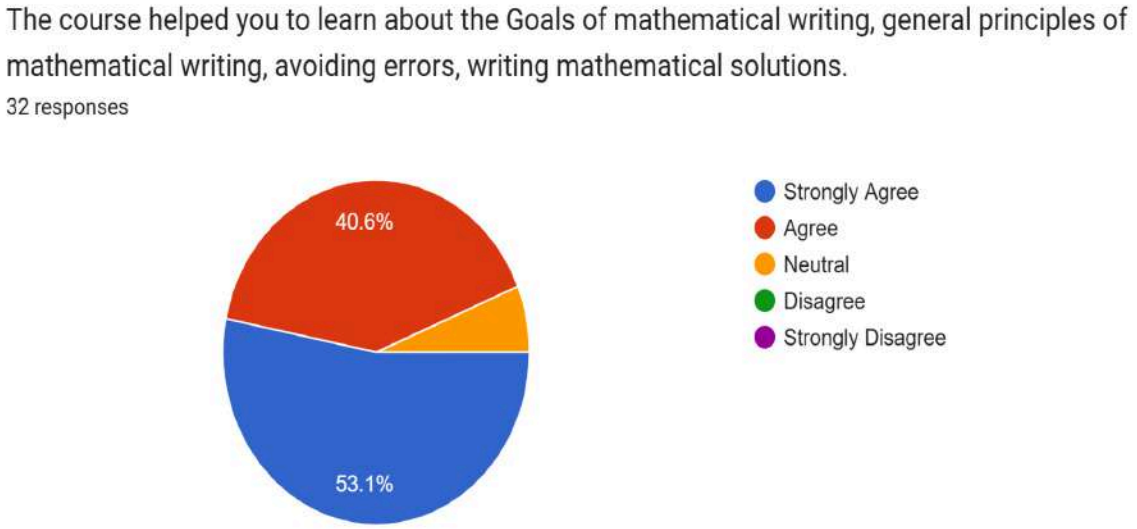
From the given responses, it is observed that 75%-85% of students who opted for this course strongly agreed and agreed that they were able to understand the Piecewise continuous functions and periodic functions, Systems of orthogonal

functions, the Pointwise convergence, uniform convergence, differentiation, and integration of Fourier series; Fourier integrals, the Fourier transforms, Properties of Fourier transforms, Convolution theorem of the Fourier transform, Laplace transforms, Properties of Laplace transforms, Convolution theorem and properties of the Laplace transform. They were able to use the Applications of Fourier transform to ordinary and partial differential equations; Applications of Laplace transform to ordinary differential equations, partial differential equations, initial and boundary value problems. It is also observed that students had an interest in the paper as more than 55.6% of students had more than 67% of attendance.

Action Taken:

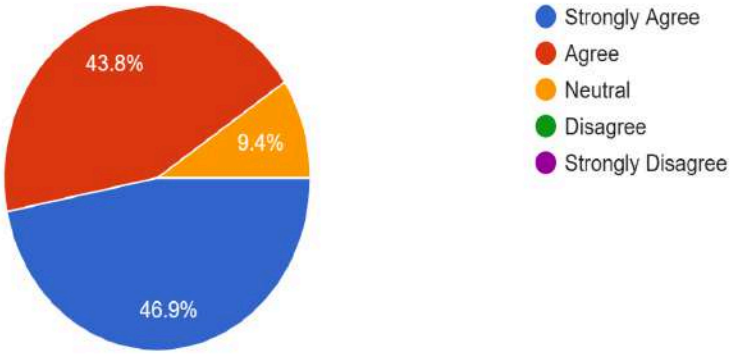
For the moderate responses, topics will be discussed more with the students in tutorials. For the weak students, special classes will be held to discuss important questions with them. Measures will be taken to make the subject more engaging and appealing to the students in order to ensure higher attendance on their part. Assessments would also be done at regular intervals.

Course 4: DSE-4 (iii): Research Methodology



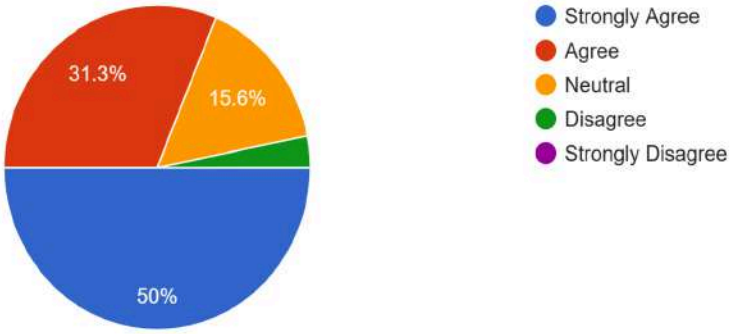
The course helped you to learn about the finding a research topic, Literature survey, Research Criteria, Format of a research article.

32 responses



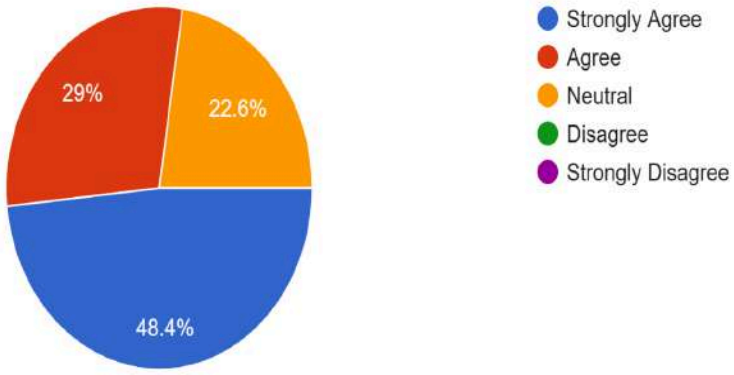
The course helped you to learn about the Preparing a mathematical talk, Oral presentation, Use of technology which includes LaTeX, PSTricks and Beamer; Poster presentation.

32 responses



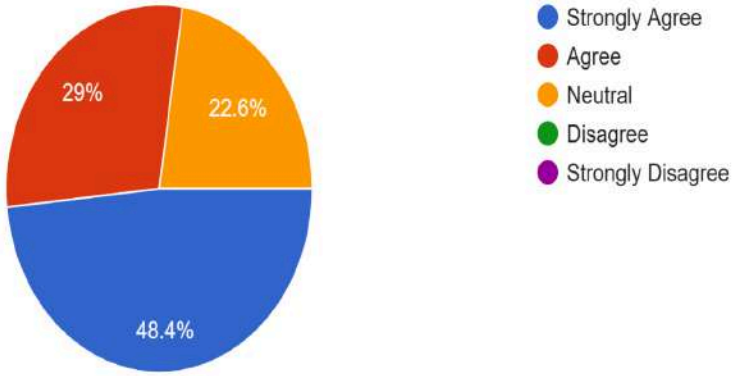
The course helped you to learn about Web resources- MAA, AMS, SIAM, arXiv, ResearchGate; Journal metrics

31 responses



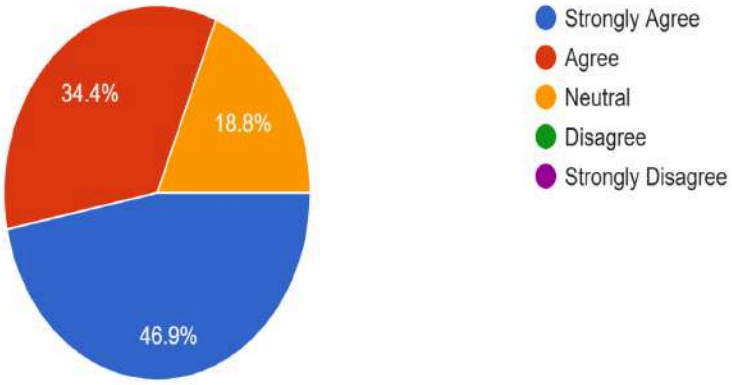
The course helped you to learn about Web resources- MAA, AMS, SIAM, arXiv, ResearchGate; Journal metrics

31 responses



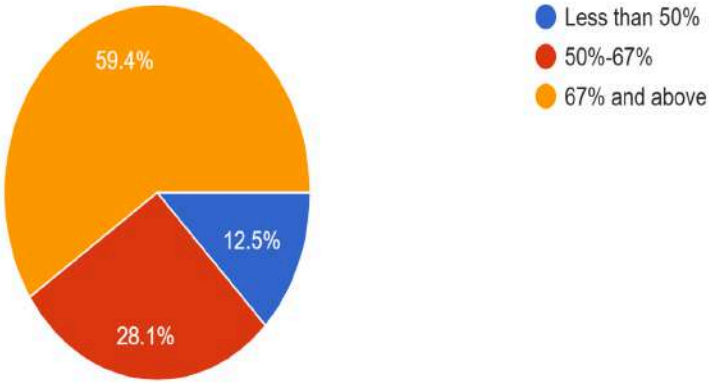
The course helped you to learn about the Impact factor of journal as per JCR, MCQ, SNIP, SJR, Google Scholar metric; Challenges of journal metrics

32 responses



How much was your attendance in this course?

32 responses



Observations:

From the given responses, it is observed that 75%-85% of students who opted for this course strongly agreed and agreed that they were able to understand and apply the Goals of mathematical writing, general principles of mathematical writing, avoiding errors, writing mathematical solutions, the finding a research topic,

Literature survey, Research Criteria, Format of a research article, the Preparing a mathematical talk, Oral presentation, Use of technology which includes LaTeX, PSTricks and Beamer; Poster presentation, Web resources- MAA, AMS, SIAM, arXiv, ResearchGate; Journal metrics.They were able to about the Impact factor of journal as per JCR, MCQ, SNIP, SJR, Google Scholar metric; Challenges of journal metrics. It is also observed that students had an interest in the paper as more than 59.4% of students had more than 67% of attendance.

Action Taken:

For the moderate responses, topics will be discussed more with the students in tutorials. For the weak students, special classes will be held to discuss important questions with them. Measures will be taken to make the subject more engaging and appealing to the students in order to ensure higher attendance on their part. Assessments would also be done at regular intervals.

Course Exit Survey: Analysis Report
Academic Session: 2024-25

Department: Mathematics

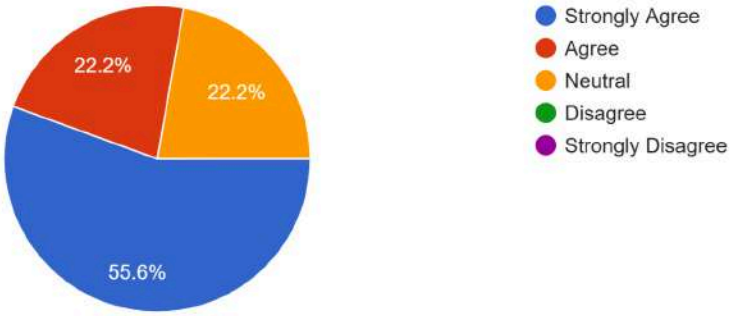
GENERIC ELECTIVES(GE) COURSES OFFERED BY DEPARTMENT OF MATHEMATICS

Semester: VI

Paper Name: GE- Sem.-VI Abstract Algebra

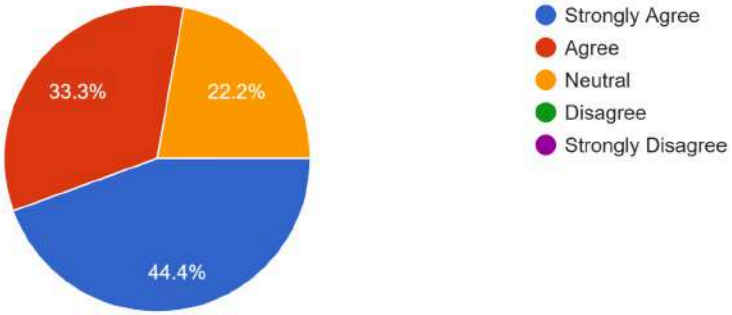
The course taught you the basic ideas of Definition and examples of groups, Elementary properties of groups, Order of a group and order of an element of a group; Subgroups and its examples.

9 responses



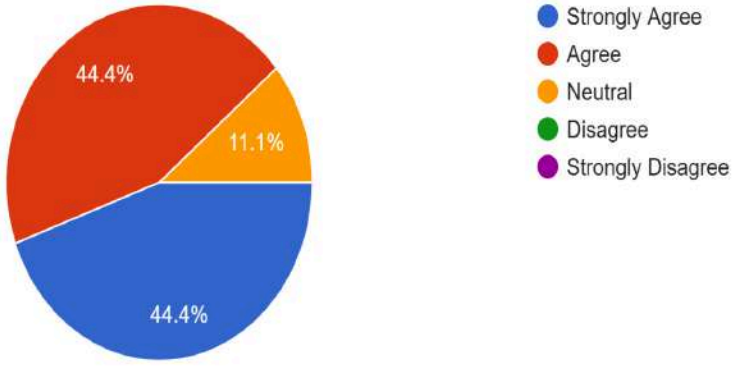
The course helped you to learn the Cyclic groups and its properties, Generators of a cyclic group; Group of symmetries; Permutation groups, Cyclic decomposition of permutations and its properties.

9 responses



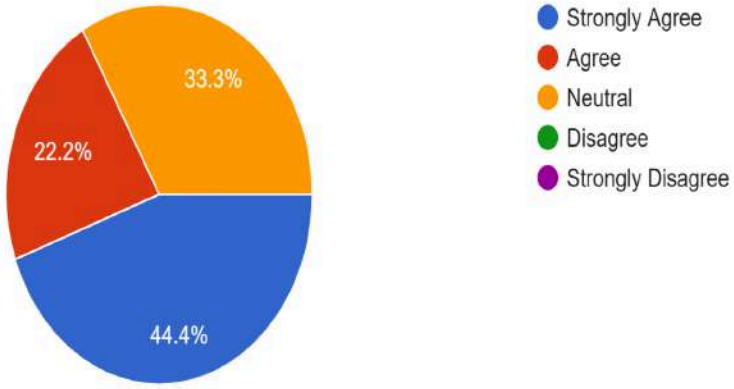
The course helped you to learn about Cosets and Lagrange's theorem; Definition and examples of normal subgroups, Quotient groups; Group homomorphisms and properties.

9 responses



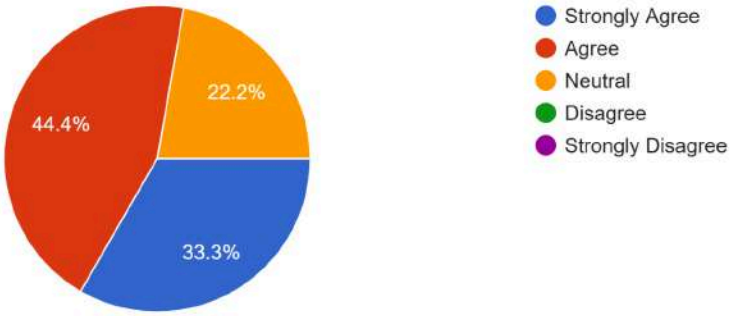
The course helped you to understand Definition, examples and properties of rings, subrings, integral domains.

9 responses



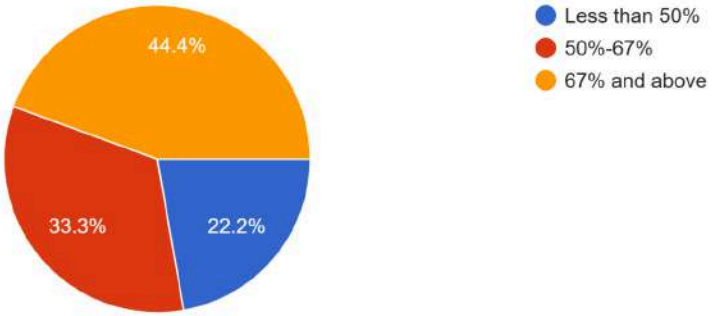
The course helped you to learn fields, ideals and factor rings; Characteristic of a ring; Ring homomorphisms and properties.

9 responses



How much was your attendance in this course?

9 responses



Observations:

From the given responses, it is observed that 75% - 85% students agreed that they learned to Elementary properties of groups, Order of a group and order of an element of a group; Subgroups, Cyclic groups and its properties, Generators of a cyclic group; Group of symmetries; Permutation groups, alternating group; Cosets and Lagrange's theorem, normal subgroups, Quotient groups; Group homomorphisms, properties of rings, subrings, integral domains, fields, ideals and factor ringsIt is also observed that students had an interest in the paper as 44.4% of students had more than 67% of attendance.

Action Taken:

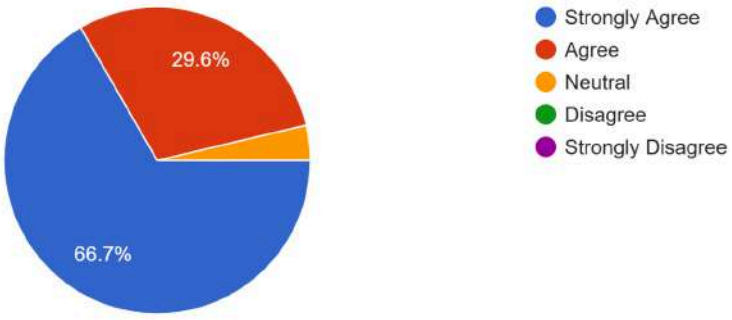
For moderate responses, topics will be discussed more with the students in tutorials. For the weak students, special classes will be held to discuss important questions with them. Measures will be taken to make the subject more engaging and appealing to the students to ensure higher attendance. Assessments would also be done at regular intervals.

Course Exit Survey: Analysis Report
Academic Session: 2024-25

SEC: Document Preparation and Presentation Software
Semester: VI

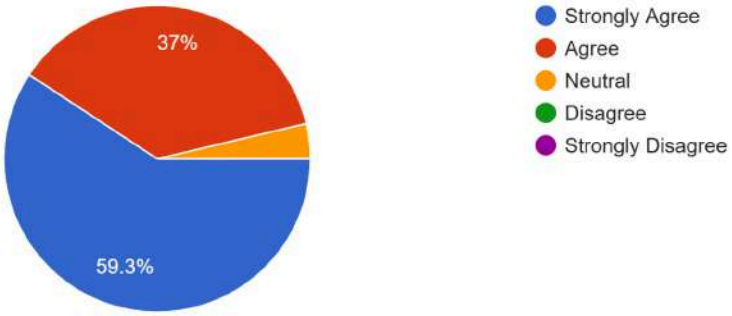
Paper Name: SEC: Document Preparation and Presentation Software

The course taught you the basic ideas of LaTeX/ LibreOffice document having several paragraphs, including comments in LaTeX.
27 responses



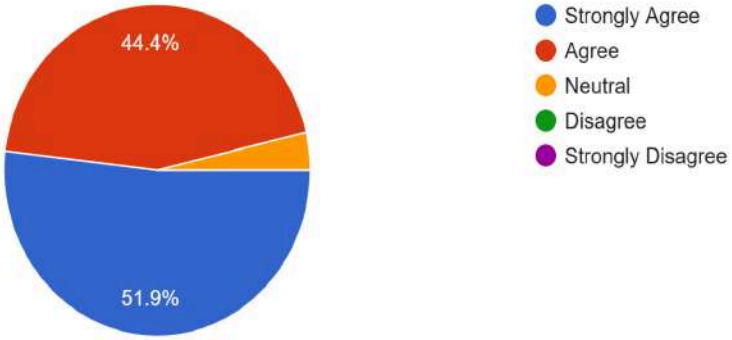
The course helped you to learn about the Organize content into sections, including preface/abstract. Using the article and book class of LaTeX. Handling errors.

27 responses



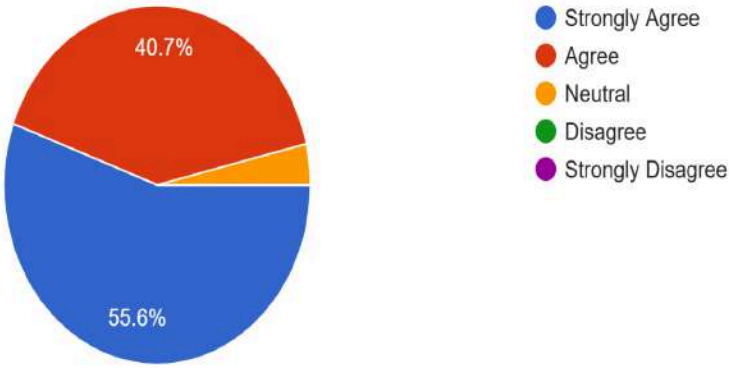
The course helped you to learn about Loading and using packages, setting margins, header and footer, and page orientation.

27 responses



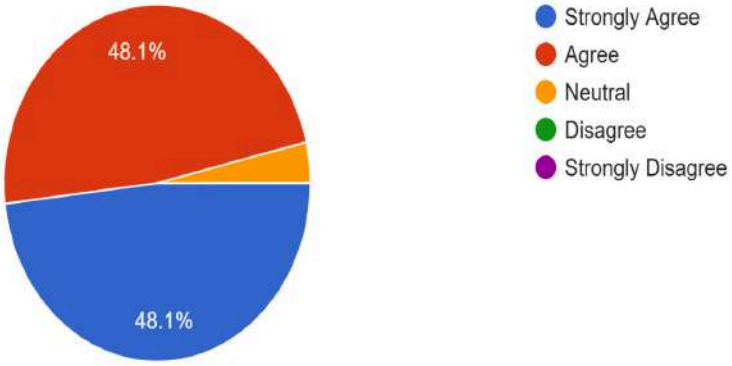
The course helped you to understand Inserting mathematical expressions – subscripts, superscripts, fractions, binomials, aligning equat...and mathematical symbols, and mathematical fonts.

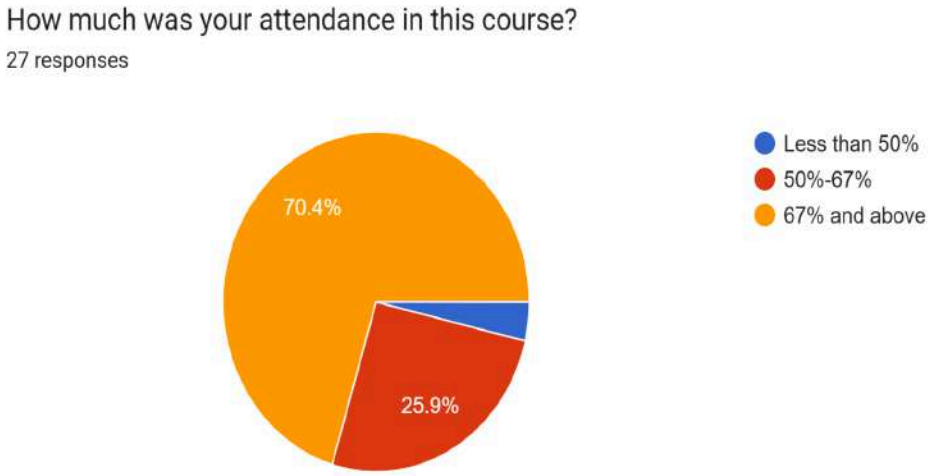
27 responses



The course helped you to learn Create basic tables, Adding different types of borders to a table, Merging rows and columns and Splitting tables across multiple pages.

27 responses





Observations:

From the given responses, it is observed that 90% - 95% students agreed that they learned to Create a LaTeX/ LibreOffice document having several paragraphs, including comments in LaTeX, Organize content into sections, including preface/abstract. Using the article and book class of LaTeX, Handling errors. Loading and using packages, setting margins, header and footer, and page orientation, Inserting mathematical expressions – subscripts, superscripts, fractions, binomials, aligning equations, operators, Greek and mathematical symbols, and mathematical fonts, Create basic tables, Adding different types of borders to a table, Merging rows and columns, Splitting tables across multiple pages. It is also observed that students had an interest in the paper as 70.4% of students had more than 67% of attendance.

Action Taken:

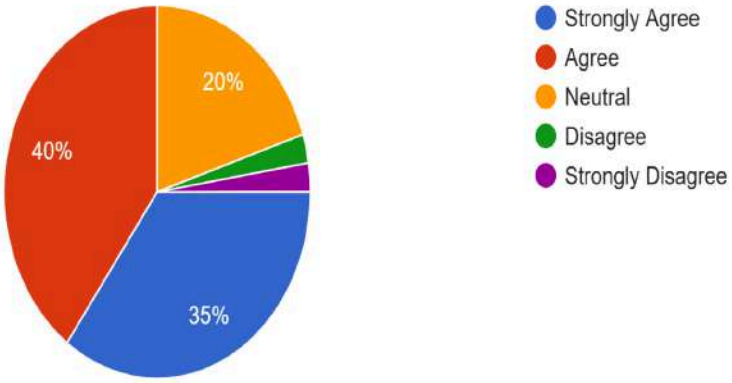
For moderate responses, topics will be discussed more with the students in tutorials. For the weak students, special classes will be held to discuss important questions with them. Measures will be taken to make the subject more engaging and appealing to the students to ensure higher attendance. Assessments would also be done at regular intervals.

SEC: E-Tourism
Semester: VI

Paper Name: SEC: E-Tourism

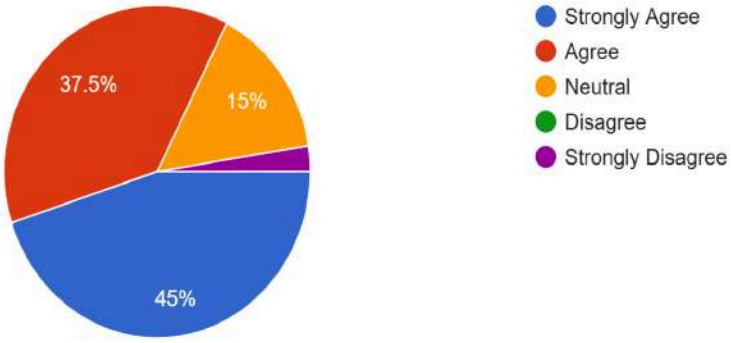
The course taught you the basic ideas of Introduction to E-tourism, stages of ICT revolution, ICTS and new business tools, Strategic and Operational use of IT in Tourism, The Internet and tourism

40 responses



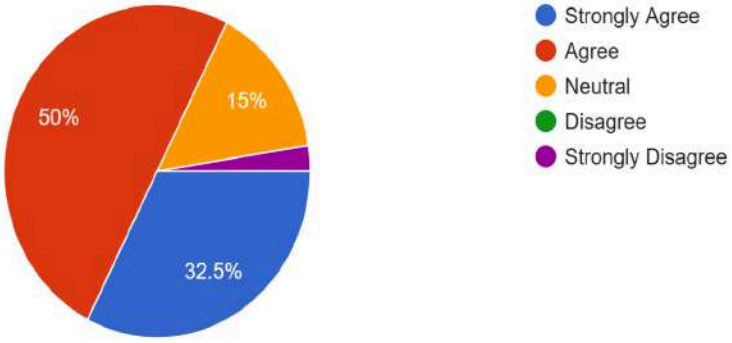
The course helped you to learn Travel trade intermediaries-Features of a travel trade web site, implementing a travel trade website, online travel intermediaries.

40 responses



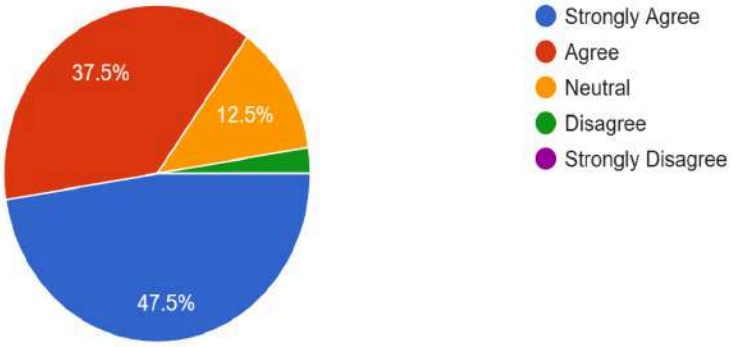
The course helped you to learn about E-business for Destination Management Organizations: Principles and concepts – Positioning.

40 responses



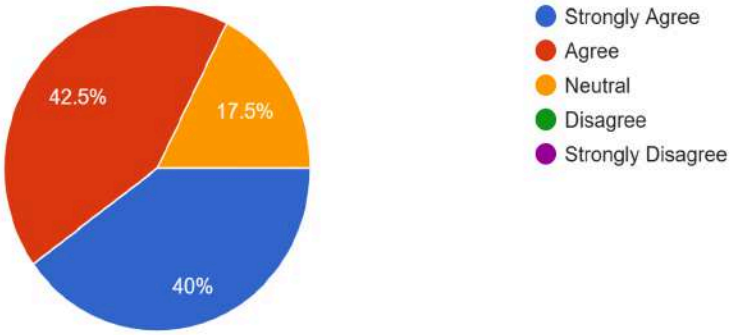
The course helped you to understand Social Media Marketing in Tourism - Facebook, Twitter, YouTube, WhatsApp - Travel Blogs

40 responses



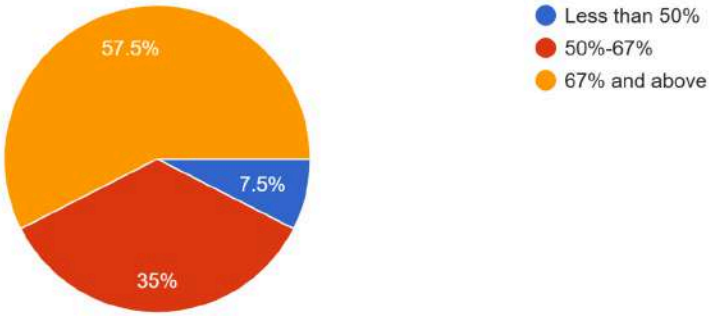
The course helped you to learn the Usage of Artificial Intelligence- Virtual Reality - Challenges for conventional business models and Competitive strategies.

40 responses



How much was your attendance in this course?

40 responses



Observations:

From the given responses, it is observed that 75% - 85% students agreed that they learned to E-tourism, stages of ICT revolution, ICTS and new business tools, Strategic and Operational use of IT in Tourism, The Internet and tourism, Travel trade intermediaries-Features of a travel trade website, implementing a travel trade website, online travel intermediaries, E-business for Destination Management Organizations: Principles and concepts – Positioning, Social Media Marketing in Tourism - Facebook, Twitter, YouTube, WhatsApp - Travel Blogs, Artificial Intelligence- Virtual Reality - Challenges for conventional business models and Competitive strategies. It is also observed that students had an interest in the paper as 57.5% of students had more than 67% of attendance.

Action Taken:

For moderate responses, topics will be discussed more with the students in tutorials. For the weak students, special classes will be held to discuss important questions with them. Measures will be taken to make the subject more engaging and appealing to the students to ensure higher attendance. Assessments would also be done at regular intervals.