

**COURSE EXIT SURVEY: Analysis Report**  
**Academic Session: 2019-20**

**Department: Mathematics**

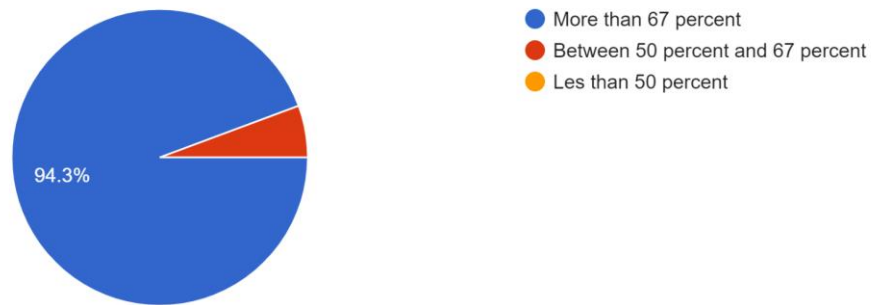
**Program: B.Sc.(H) Mathematics**

**Semester: 2**

**Paper Name: BMATH203: Real Analysis**

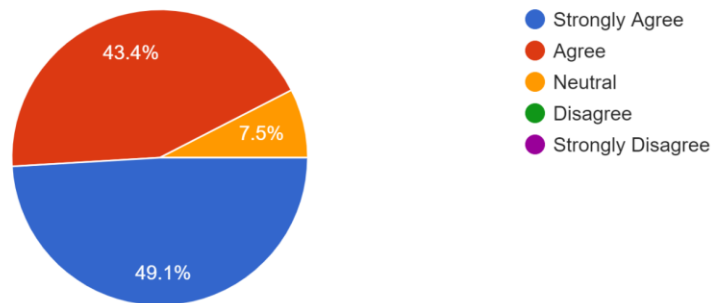
Percentage of classes attended

53 responses



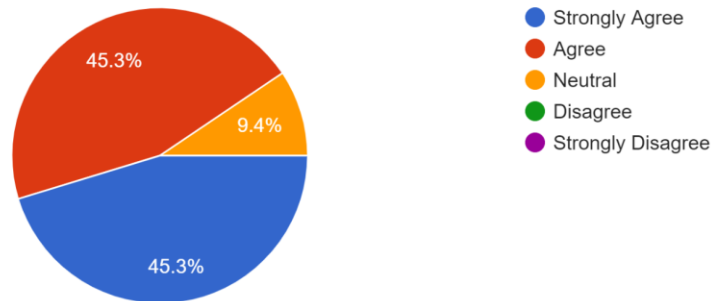
You have learned many properties of the real line  $\mathbb{R}$  including completeness and Archimedean properties.

53 responses



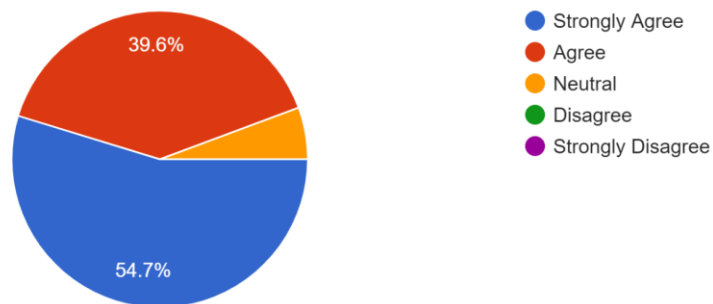
You are able to define sequences in terms of functions from the set of natural numbers to a subset of  $\mathbb{R}$ .

53 responses



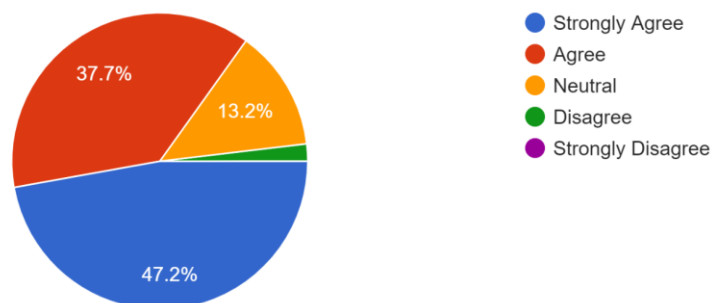
You are able to recognize bounded, convergent, divergent, Cauchy and monotonic sequences and are able to calculate limit superior, limit inferior and the limit of a bounded sequence.

53 responses



You are able to apply the ratio, root, alternating series and limit comparison tests for convergence and absolute convergence of an infinite series of real numbers.

53 responses



**Observations:** From the given responses, it is observed that around 85-95 % of students strongly agreed or agreed that they have learned many properties of the real line  $\mathbb{R}$  including

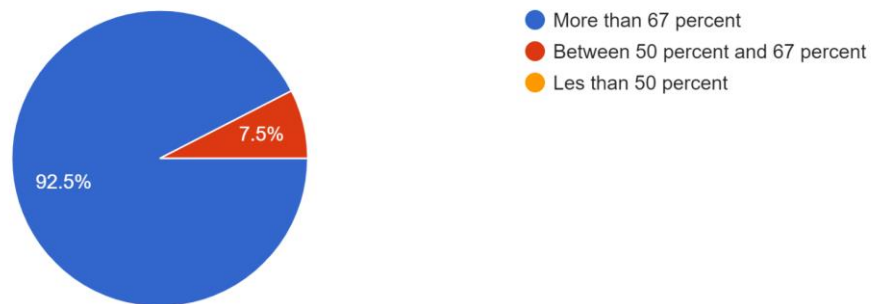
completeness and Archimedean properties, are able to define sequences in terms of functions from the set of natural numbers to a subset of  $\mathbb{R}$ , are able to recognize bounded, convergent, divergent, Cauchy and monotonic sequences and are able to calculate limit superior, limit inferior and the limit of a bounded sequence. They are able to apply the ratio, root, alternating series and limit comparison tests for convergence and absolute convergence of an infinite series of real numbers. It is also observed that students had an interest in the paper as 94.3% of students had more than 67% of attendance.

**Action Taken:**

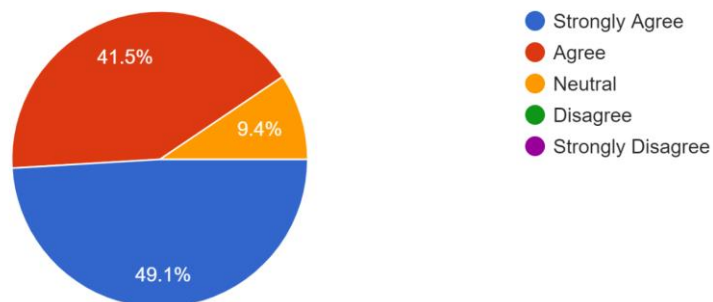
For the moderate responses, topics will be discussed more with the students in tutorials. For the weak students, special classes will be held to discuss important questions with them. Measures will be taken to make the subject more engaging and appealing to the students in order to ensure higher attendance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

**Paper Name: BMATH204: Differential Equations**

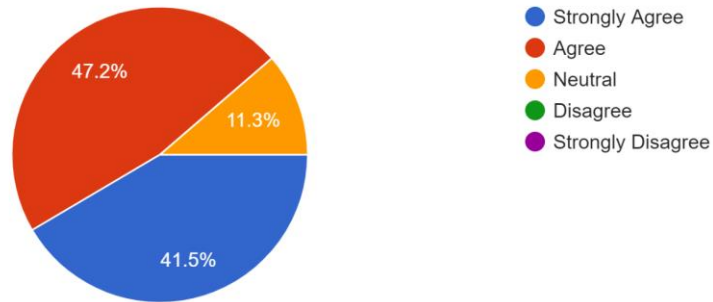
Percentage of classes attended  
53 responses



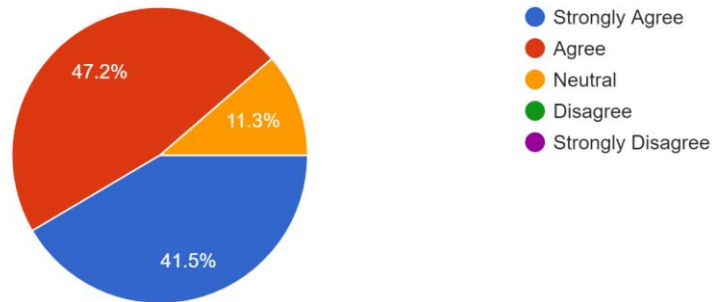
You have learned basics of differential equations and mathematical modeling.  
53 responses



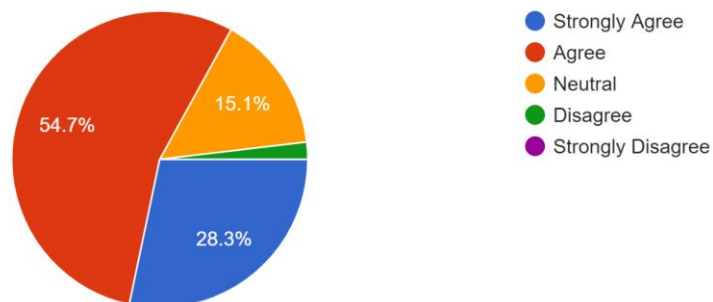
You have learned the formulation of differential equations for various mathematical models.  
53 responses



You have learned the formulation of differential equations for various mathematical models.  
53 responses



You are able to apply various techniques to solve and analyze different mathematical models.  
53 responses



**Observations:** From the given responses, it is observed that around 83-96.2 % of students strongly agreed or agreed that they have learned the basics of differential equations and mathematical modeling, and have learned the formulation of differential equations for various mathematical models. They are able to solve first order non-linear differential equations and linear differential equations of higher order using various techniques. They are able to apply various techniques to solve and analyze different mathematical models. It is also observed that students had an interest in the paper as 92.5% 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 like quiz, presentations would also be done at regular intervals.

**COURSE EXIT SURVEY: Analysis Report**  
**Academic Session: 2019-20**

**Department: Mathematics**

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

**Semester: 1**

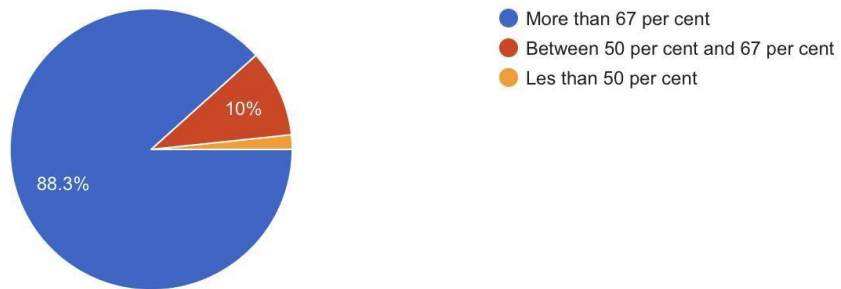
**Paper Name: BMATH101:Calculus**

BMATH101: Calculus

Percentage of classes attended

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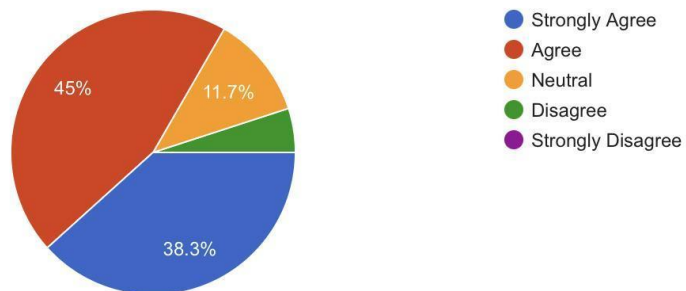
60 responses



You have learned to first and second derivative tests for relative extrema and apply the knowledge in problems in business, economics and life sciences

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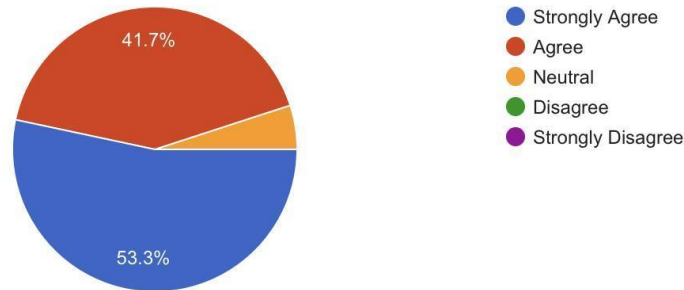
60 responses



You have learned to Sketch curves in a plane using its mathematical properties in the different coordinate systems of reference.



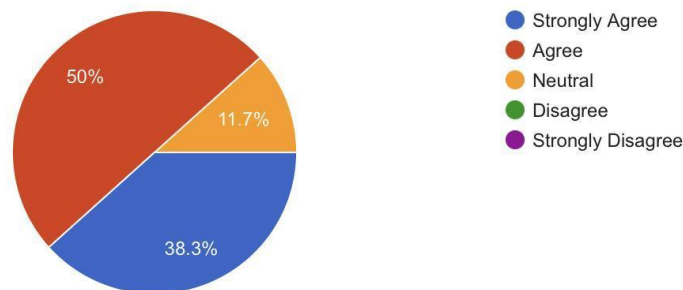
60 responses



You understood to Compute area of surfaces of revolution and the volume of solids by integrating over cross-sectional areas.



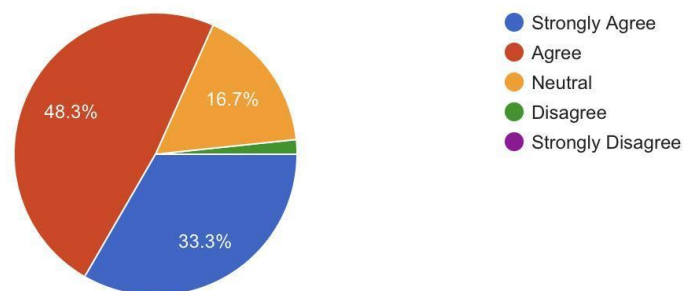
60 responses



You have learned to Understand the calculus of vector functions and its use to develop the basic principles of planetary motion.



60 responses



**Observations:** From the given responses, it is observed that around 83.3 % of students strongly agreed or agreed that they have learned first and second derivative tests for relative extrema and were able apply the knowledge in problems in business, economics and life sciences, 95 % are able to sketch curves in a plane using its mathematical properties in the different coordinate systems of reference, 88.3% are able to compute area of surfaces of revolution and the volume of solids by integrating over cross-sectional areas and 81.6% are able to understand the calculus of vector functions and its use to develop the basic principles of planetary motion.

It is also observed that students had an interest in the paper as 88.3% of students had more than 67% of attendance.

**Action Taken:**

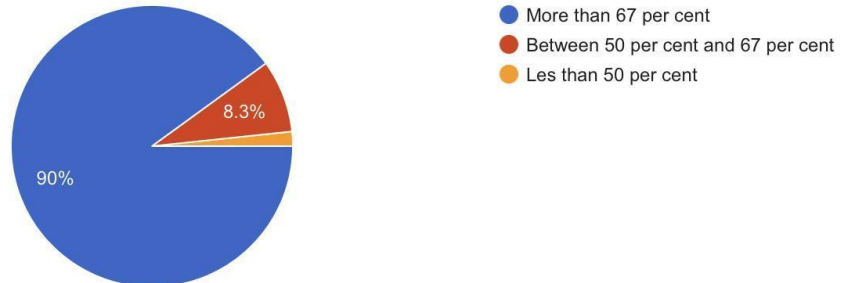
For the moderate responses, topics will be discussed more with the students in tutorials. For the weak students, special classes will be held to discuss important questions with them. Measures will be taken to make the subject more engaging and appealing to the students in order to ensure higher attendance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



Percentage of classes attended

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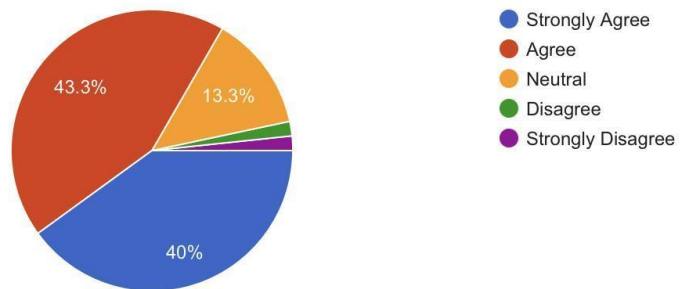
60 responses



You have learned to Employ De Moivre's theorem in a number of applications to solve numerical problems.

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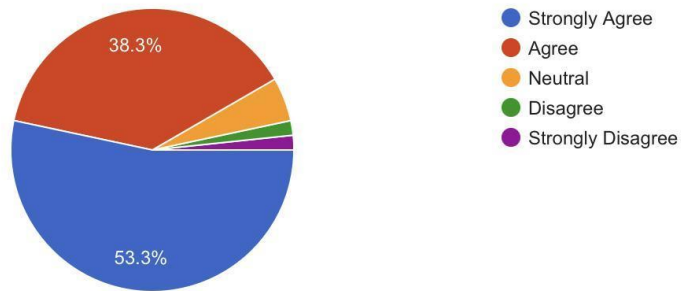
60 responses



You have learned about equivalent classes and cardinality of a set.

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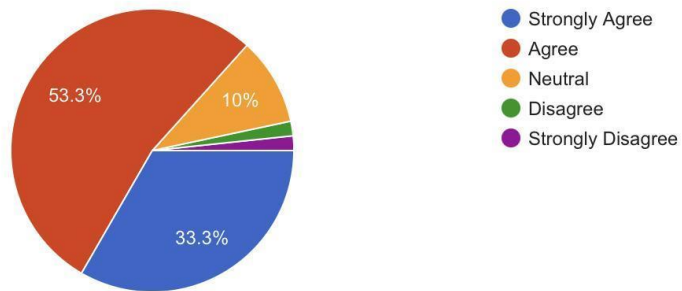
60 responses



You understood the Use modular arithmetic and basic properties of congruences.

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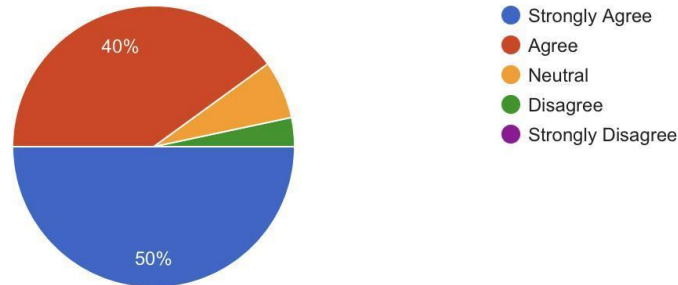
60 responses



You have learned to Recognize consistent and inconsistent systems of linear equations by the row echelon form of the augmented matrix.

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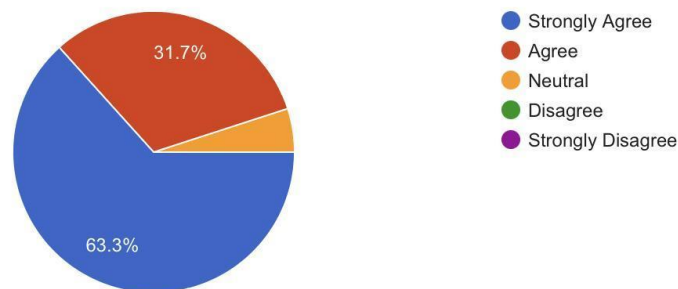
60 responses



You have learned to Find eigenvalues and corresponding eigenvectors for a square matrix.

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60 responses



**Observations:** From the given responses, it is observed that around 83.3-95% of students strongly agreed or agreed that they have learned the basics of algebra and have learned to Employ De Moivre's theorem in a number of applications to solve numerical problems, equivalent classes and cardinality of a set, Use modular arithmetic and basic properties of congruences, learned to Recognize consistent and inconsistent systems of linear equations by the row echelon form of the augmented matrix, to find eigenvalues and corresponding eigenvectors for a square matrix. It is also observed that students had an interest in the paper as 90 % 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 like quiz, presentations would also be done at regular intervals.

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**Academic Session: 2019-20**

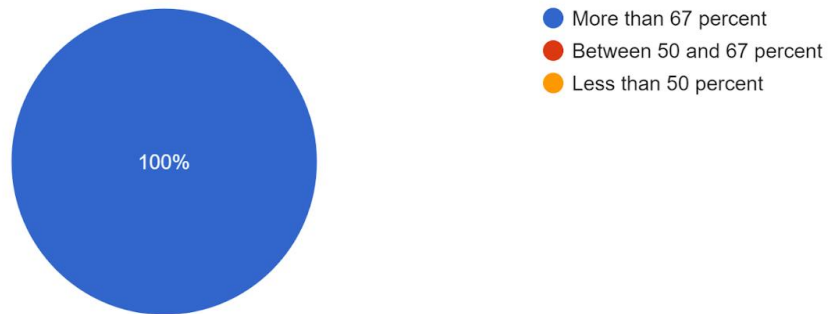
**Department: Mathematics**

**Program: B.A. Prog**

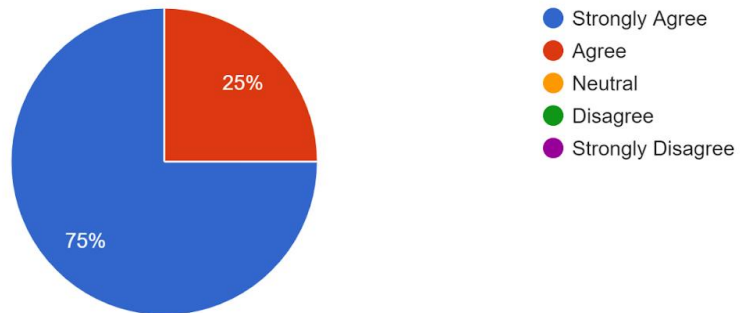
**Semester: 1**

**Paper Name: Calculus**

Percentage of classes attended in this course  
4 responses

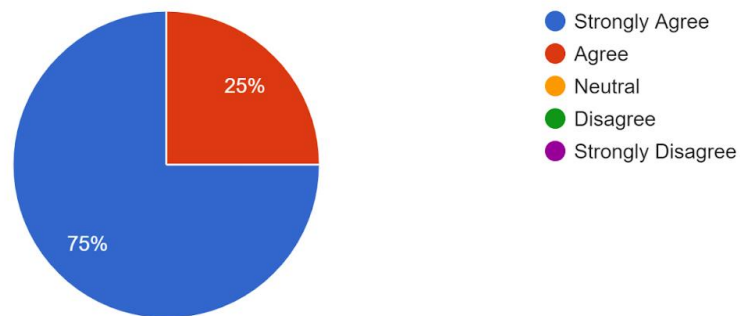


You understood the concept of continuity and differentiability of functions  
4 responses



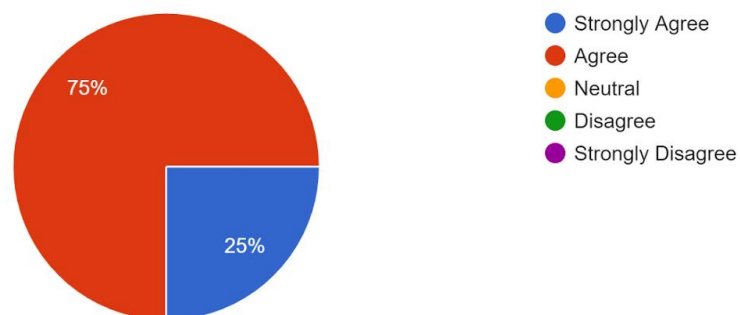
You have learned about tracing of curves

4 responses



You were able to understand an overview of Mean Value Theorems and its applications

4 responses



**Observations:** From the given responses, it is observed that around 100 % of students strongly agreed or agreed that they were able to learn the concept of continuity and differentiability of functions, tracing of curves, Mean Value Theorems and its applications.

It is also observed that students need to be motivated to attend the course as 100% students had more than 67% of attendance.

**Action Taken:** Measures will be taken to make the subject more interesting 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: 2019-20**

**Department: Mathematics**

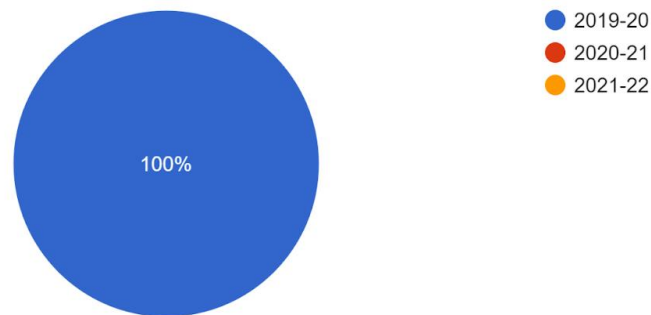
**Program: B.A.(H) & B.Com**

**Semester: 1**

**1. Paper Name: Calculus (UPC: 32355101)**

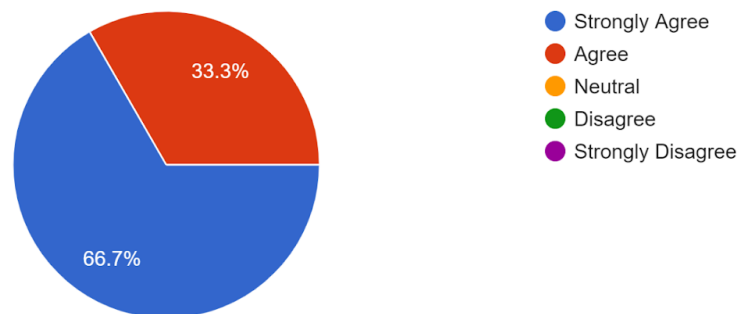
Year of Study

3 responses



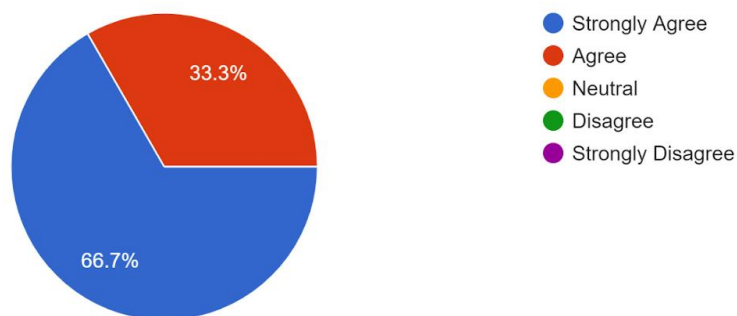
You are able to Sketch the curves in Cartesian and polar coordinates as well as learn techniques of sketching the conics.

3 responses



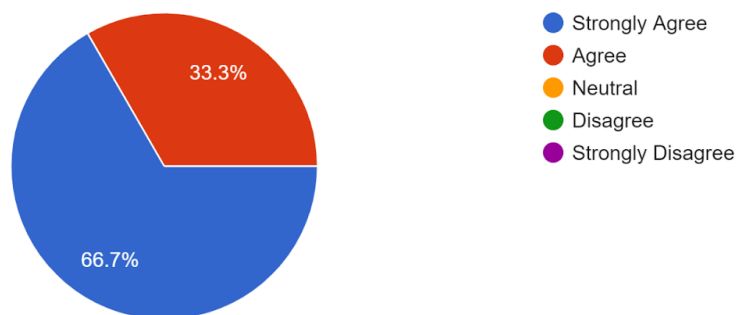
You are able to visualize three dimensional figures and calculate their volumes and surface areas.

3 responses



You have understood concept of limits, continuity and derivatives of functions of several variable and vector-valued functions.

3 responses



### Observations:

From the given responses, it is observed that around 100 % of students strongly agreed and agreed that they are able to Sketch the curves in Cartesian and polar coordinates as well as learn techniques of sketching the conics. They are able to visualize three dimensional figures and calculate their volumes and surface areas. They have understood the concept of limits, continuity and derivatives of functions of several variable and vector-valued functions.

### 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 like quiz, presentations would also be done at regular intervals.