

CERTIFICATE

This is to certify that the project report entitled "**A study on Differential calculus**" is a bonafide work carried out by **Sourav Krishna S2224111**, **Anjana Jayaraman 2221102**, **Shaima Mariam 2221054**, **Deekshan D souza 2224102** and **Shrijith Rao 2221115** under the guidance of Ms Tinu from the department of Mathematics, St Aloysius college (Autonomous), Mangaluru.

The same is being submitted to the UG department of Mathematics, St Aloysius College (Autonomous) in **partial fulfilments of the requirements for the continuous internal assessment of 1 semester Bachelor of Science**. No part of this project has been the award of any other degree.

Signature of guide.
Ms Tinu John.

Signature of HOD

Ms. Priya Monteiro

Head of the Dept. of
Mathematics
St. Aloysius College (Autonomous)
Mangalore-575003

CERTIFICATE

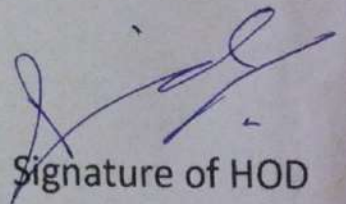
This is to certify that the project report entitled "**A brief study of inverse using Cayley Hamilton Theory and elementary operation**" is bonified work carried by Dona Sebastian-2221105, Ponnamma K.R-(2221111), Sumangala R.N-(2221056), Ashwin Lobo-(2221051) under the guidance of Mrs Tinu John from the department of mathematics, St Aloysius college (Autonomous), Mangaluru.

The same is being submitted to the UG department of Mathematics, St Aloysius college (Autonomous) in partial fulfilment of the requirement for the **Continuous Internal Assessment of 1 semester Bachelor of science**. No part of this project has been presented for the award of any other degree.



Signature of guide

Ms. Tinu John



Signature of HOD

Ms. Priya Monteiro

Head of the Dept. of
Mathematics
St. Aloysius College (Autonomous)
Mangalore-575003

CERTIFICATE

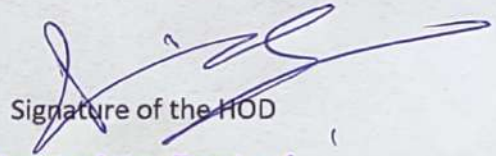
This is to certify that the project report entitled "**LMVT and Maclaurin series**" is a bonafied work carried out by **Sinchana Nayak (2221055) Muhammad Ismail Sinan (2221108) Nazareth Rishika Sharon Olwin (2224105) Dakshina V K (2221103) Zainab Zafar (2224112)** under the guidance of **Ms Tinu John** from the Department of Mathematics, St Aloysius College (Autonomous), Mangaluru.

The same is being submitted to the UG Department of Mathematics, St Aloysius College(Autonomous) in partial fulfilment of the requirements for the **Continuous Internal Assessment of I Semester Bachelor of Science**. No part of this thesis has been presented for the award of any other degree.



Signature of Guide

Ms Tinu John



Head of the Dept. of
Mathematics
St. Aloysius College (Autonomous)
Mangalore-575003

CERTIFICATE

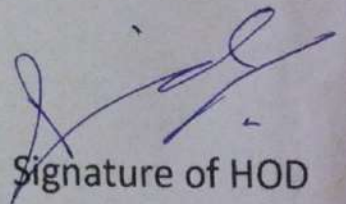
This is to certify that the project report entitled "**A brief study of inverse using Cayley Hamilton Theory and elementary operation**" is bonified work carried by Dona Sebastian-2221105, Ponnamma K.R-(2221111), Sumangala R.N-(2221056), Ashwin Lobo-(2221051) under the guidance of Mrs Tinu John from the department of mathematics, St Aloysius college (Autonomous), Mangaluru.

The same is being submitted to the UG department of Mathematics, St Aloysius college (Autonomous) in partial fulfilment of the requirement for the **Continuous Internal Assessment of 1 semester Bachelor of science**. No part of this project has been presented for the award of any other degree.



Signature of guide

Ms. Tinu John



Signature of HOD


Ms. Priya Monteiro

Head of the Dept. of
Mathematics
St. Aloysius College (Autonomous)
Mangalore-575003

CERTIFICATE

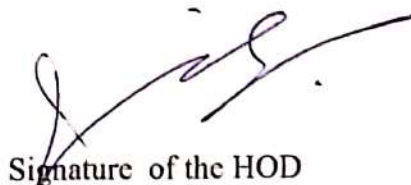
This is to certify that the project report entitled "**Diophantine equations and linear congruences**" is a bonafied work carried out by **Ms Aradhana Bekal 2224113, Ms Neha Rodrigues 2224107, Ms Fathimathul Saniya Siraj N 2224104, Mr Vishith Prem Vas 2221117 and Ms Oorvi G 2221110** under the guidance of **Ms Priya Monteiro** from the Department of Mathematics, St Aloysius College (Autonomous), Mangaluru.

The same is being submitted to the UG Department of Mathematics, St Aloysius College(Autonomous) in partial fulfilment of the requirements for the **Continuous Internal Assessment of I Semester Bachelor of Science**. No part of this thesis has been presented for the award of any other degree.



Signature of Guide

Ms Priya Monteiro



Signature of the HOD

Ms Priya Monteiro
**Head of the Dept. of
Mathematics
St. Aloysius College (Autonomous)
Mangalore-575003**

CERTIFICATE

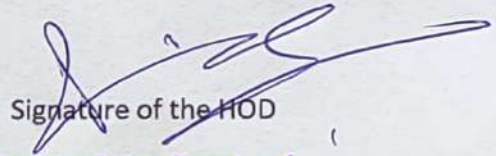
This is to certify that the project report entitled "**LMVT and Maclaurin series**" is a bonafied work carried out by **Sinchana Nayak (2221055) Muhammad Ismail Sinan (2221108) Nazareth Rishika Sharon Olwin (2224105) Dakshina V K (2221103) Zainab Zafar (2224112)** under the guidance of **Ms Tinu John** from the Department of Mathematics, St Aloysius College (Autonomous), Mangaluru.

The same is being submitted to the UG Department of Mathematics, St Aloysius College(Autonomous) in partial fulfilment of the requirements for the **Continuous Internal Assessment of I Semester Bachelor of Science**. No part of this thesis has been presented for the award of any other degree.



Signature of Guide

Ms Tinu John



Head of the Dept. of
Mathematics
St. Aloysius College (Autonomous)
Mangalore-575003

CERTIFICATE

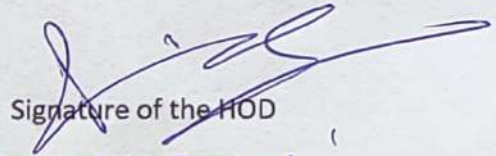
This is to certify that the project report entitled "**LMVT and Maclaurin series**" is a bonafied work carried out by **Sinchana Nayak (2221055) Muhammad Ismail Sinan (2221108) Nazareth Rishika Sharon Olwin (2224105) Dakshina V K (2221103) Zainab Zafar (2224112)** under the guidance of **Ms Tinu John** from the Department of Mathematics, St Aloysius College (Autonomous), Mangaluru.

The same is being submitted to the UG Department of Mathematics, St Aloysius College(Autonomous) in partial fulfilment of the requirements for the **Continuous Internal Assessment of I Semester Bachelor of Science**. No part of this thesis has been presented for the award of any other degree.



Signature of Guide

Ms Tinu John




Head of the Dept. of
Mathematics
St. Aloysius College (Autonomous)
Mangalore-575003

CERTIFICATE

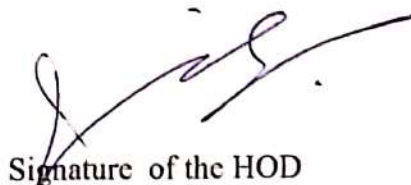
This is to certify that the project report entitled "**Diophantine equations and linear congruences**" is a bonafied work carried out by **Ms Aradhana Bekal 2224113, Ms Neha Rodrigues 2224107, Ms Fathimathul Saniya Siraj N 2224104, Mr Vishith Prem Vas 2221117 and Ms Oorvi G 2221110** under the guidance of **Ms Priya Monteiro** from the Department of Mathematics, St Aloysius College (Autonomous), Mangaluru.

The same is being submitted to the UG Department of Mathematics, St Aloysius College(Autonomous) in partial fulfilment of the requirements for the **Continuous Internal Assessment of I Semester Bachelor of Science**. No part of this thesis has been presented for the award of any other degree.



Signature of Guide

Ms Priya Monteiro




Signature of the HOD

Ms Priya Monteiro
**Head of the Dept. of
Mathematics
St. Aloysius College (Autonomous)
Mangalore-575003**

CERTIFICATE

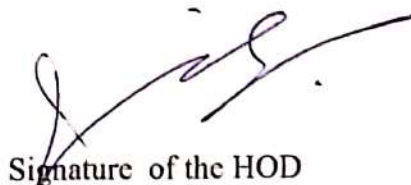
This is to certify that the project report entitled "**Diophantine equations and linear congruences**" is a bonafied work carried out by **Ms Aradhana Bekal 2224113, Ms Neha Rodrigues 2224107, Ms Fathimathul Saniya Siraj N 2224104, Mr Vishith Prem Vas 2221117 and Ms Oorvi G 2221110** under the guidance of **Ms Priya Monteiro** from the Department of Mathematics, St Aloysius College (Autonomous), Mangaluru.

The same is being submitted to the UG Department of Mathematics, St Aloysius College(Autonomous) in partial fulfilment of the requirements for the **Continuous Internal Assessment of I Semester Bachelor of Science**. No part of this thesis has been presented for the award of any other degree.



Signature of Guide

Ms Priya Monteiro



Signature of the HOD

Ms Priya Monteiro

**Head of the Dept. of
Mathematics
St. Aloysius College (Autonomous)
Mangalore-575003**

CERTIFICATE

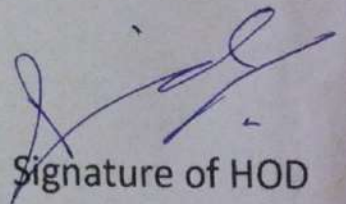
This is to certify that the project report entitled "**A brief study of inverse using Cayley Hamilton Theory and elementary operation**" is bonified work carried by Dona Sebastian-2221105, Ponnamma K.R-(2221111), Sumangala R.N-(2221056), Ashwin Lobo-(2221051) under the guidance of Mrs Tinu John from the department of mathematics, St Aloysius college (Autonomous), Mangaluru.

The same is being submitted to the UG department of Mathematics, St Aloysius college (Autonomous) in partial fulfilment of the requirement for the **Continuous Internal Assessment of 1 semester Bachelor of science**. No part of this project has been presented for the award of any other degree.



Signature of guide

Ms. Tinu John



Signature of HOD

Ms. Priya Monteiro

Head of the Dept. of
Mathematics
St. Aloysius College (Autonomous)
Mangalore-575003

CERTIFICATE

This is to certify that the project report entitled "**A study on Differential calculus**" is a bonafide work carried out by **Sourav Krishna S2224111**, **Anjana Jayaraman 2221102**, **Shaima Mariam 2221054**, **Deekshan D souza 2224102** and **Shrijith Rao 2221115** under the guidance of Ms Tinu from the department of Mathematics, St Aloysius college (Autonomous), Mangaluru.

The same is being submitted to the UG department of Mathematics, St Aloysius College (Autonomous) in **partial fulfilments of the requirements for the continuous internal assessment of 1 semester Bachelor of Science**. No part of this project has been the award of any other degree.

Signature of guide.
Ms Tinu John.

Signature of HOD
Ms. Priya Monteiro
Head of the Dept. of
Mathematics
St. Aloysius College (Autonomous)
Mangalore-575003

CERTIFICATE

This is to certify that the project report entitled "**A study on Differential calculus**" is a bonafide work carried out by **Sourav Krishna S2224111**, **Anjana Jayaraman 2221102**, **Shaima Mariam 2221054**, **Deekshan D souza 2224102** and **Shrijith Rao 2221115** under the guidance of Ms Tinu from the department of Mathematics, St Aloysius college (Autonomous), Mangaluru.

The same is being submitted to the UG department of Mathematics, St Aloysius College (Autonomous) in **partial fulfilments of the requirements for the continuous internal assessment of 1 semester Bachelor of Science**. No part of this project has been the award of any other degree.

Signature of guide.
Ms Tinu John.

Signature of HOD

Ms. Priya Monteiro

Head of the Dept. of
Mathematics
St. Aloysius College (Autonomous)
Mangalore-575003

CERTIFICATE

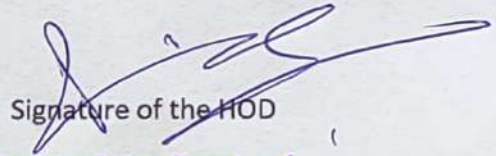
This is to certify that the project report entitled "**LMVT and Maclaurin series**" is a bonafied work carried out by **Sinchana Nayak (2221055) Muhammad Ismail Sinan (2221108) Nazareth Rishika Sharon Olwin (2224105) Dakshina V K (2221103) Zainab Zafar (2224112)** under the guidance of **Ms Tinu John** from the Department of Mathematics, St Aloysius College (Autonomous), Mangaluru.

The same is being submitted to the UG Department of Mathematics, St Aloysius College(Autonomous) in partial fulfilment of the requirements for the **Continuous Internal Assessment of I Semester Bachelor of Science**. No part of this thesis has been presented for the award of any other degree.



Signature of Guide

Ms Tinu John



Head of the Dept. of
Mathematics
St. Aloysius College (Autonomous)
Mangalore-575003

CERTIFICATE

This is to certify that the project report entitled "**A study on Differential calculus**" is a bonafide work carried out by **Sourav Krishna S2224111**, **Anjana Jayaraman 2221102**, **Shaima Mariam 2221054**, **Deekshan D souza 2224102** and **Shrijith Rao 2221115** under the guidance of Ms Tinu from the department of Mathematics, St Aloysius college (Autonomous), Mangaluru.

The same is being submitted to the UG department of Mathematics, St Aloysius College (Autonomous) in **partial fulfilments of the requirements for the continuous internal assessment of 1 semester Bachelor of Science**. No part of this project has been the award of any other degree.

Signature of guide.
Ms Tinu John.

Signature of HOD
Ms. Priya Monteiro
Head of the Dept. of
Mathematics
St. Aloysius College (Autonomous)
Mangalore-575003

CERTIFICATE

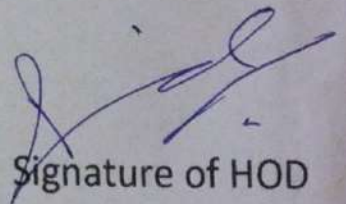
This is to certify that the project report entitled "**A brief study of inverse using Cayley Hamilton Theory and elementary operation**" is bonified work carried by Dona Sebastian-2221105, Ponnamma K.R-(2221111), Sumangala R.N-(2221056), Ashwin Lobo-(2221051) under the guidance of Mrs Tinu John from the department of mathematics, St Aloysius college (Autonomous), Mangaluru.

The same is being submitted to the UG department of Mathematics, St Aloysius college (Autonomous) in partial fulfilment of the requirement for the **Continuous Internal Assessment of 1 semester Bachelor of science**. No part of this project has been presented for the award of any other degree.



Signature of guide

Ms. Tinu John



Signature of HOD


Ms. Priya Monteiro

Head of the Dept. of
Mathematics
St. Aloysius College (Autonomous)
Mangalore-575003

CERTIFICATE

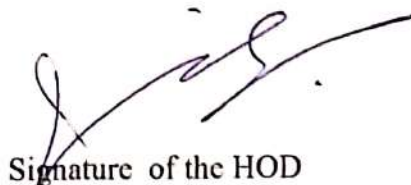
This is to certify that the project report entitled "**Diophantine equations and linear congruences**" is a bonafied work carried out by **Ms Aradhana Bekal 2224113, Ms Neha Rodrigues 2224107, Ms Fathimathul Saniya Siraj N 2224104, Mr Vishith Prem Vas 2221117 and Ms Oorvi G 2221110** under the guidance of **Ms Priya Monteiro** from the Department of Mathematics, St Aloysius College (Autonomous), Mangaluru.

The same is being submitted to the UG Department of Mathematics, St Aloysius College(Autonomous) in partial fulfilment of the requirements for the **Continuous Internal Assessment of I Semester Bachelor of Science**. No part of this thesis has been presented for the award of any other degree.



Signature of Guide

Ms Priya Monteiro



Signature of the HOD

Ms Priya Monteiro
**Head of the Dept. of
Mathematics
St. Aloysius College (Autonomous)
Mangalore-575003**

CERTIFICATE

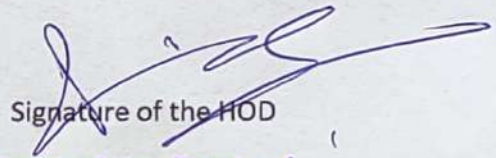
This is to certify that the project report entitled "**LMVT and Maclaurin series**" is a bonafied work carried out by **Sinchana Nayak (2221055) Muhammad Ismail Sinan (2221108) Nazareth Rishika Sharon Olwin (2224105) Dakshina V K (2221103) Zainab Zafar (2224112)** under the guidance of **Ms Tinu John** from the Department of Mathematics, St Aloysius College (Autonomous), Mangaluru.

The same is being submitted to the UG Department of Mathematics, St Aloysius College(Autonomous) in partial fulfilment of the requirements for the **Continuous Internal Assessment of I Semester Bachelor of Science**. No part of this thesis has been presented for the award of any other degree.



Signature of Guide

Ms Tinu John



Head of the Dept. of
Mathematics
St. Aloysius College (Autonomous)
Mangalore-575003