

MANJESH MATHEW

Assistant Professor



Research & PG Dept. of Chemistry

[DST FIST Sponsored Department]

St. Thomas College, Palai

CERTIFICATE

This is to certify that the project report entitled **“GREEN SYNTHESIS OF COPPER NANOPARTICLES USING OCIMUM SANCTUM LEAF EXTRACT”** is an authentic and credible work carried out by **Mr. ABHISHEK P J** (Reg. No. 150021085304) under my supervision and guidance during the period 2015-18 in partial fulfilment of the degree of **Bachelor of Science in Chemistry** under the **Faculty of Science, Mahatma Gandhi University, Kottayam.**

Palai

30/03/2018

MANJESH MATHEW

(Supervising Teacher)

Countersigned by,

Dr. SUNNY KURIAKOSE

Head of Department of Chemistry

Valued by:

Date:

Dr. SUNNY KURIAKOSE

Associate Professor & Head



Research & PG Dept. of Chemistry

[DST FIST Sponsored Department]

St. Thomas College, Palai

CERTIFICATE

This is to certify that the project report entitled “**GREEN ALTERNATIVES OF ORGANIC SYNTHESIS: NITRATION OF SALICILIC ACID AND BROMINATION OF ACETANILIDE**” is an authentic and credible work carried out by **Mr. AJITH ASHOKAN** (Reg. No. 150021085317) under my supervision and guidance during the period 2015-18 in partial fulfilment of the award of the degree of **Bachelor of Science in Chemistry** under the **Faculty of Science, Mahatma Gandhi University, Kottayam.**

Palai

28/03/2018

Dr. SUNNY KURIAKOSE

(Supervising Teacher)

Countersigned by,

Dr. SUNNY KURIAKOSE

Head of Department of Chemistry

Valued by:

1.

2.

Dr. SAJEEV MARTIN GEORGE

Assistant Professor



Research & PG Dept. of Chemistry

[DST FIST Sponsored Department]

St. Thomas College, Palai

CERTIFICATE

This is to certify that the project report entitled **“DETERMINATION OF LYCOPENE CONTENT IN VARIOUS FRUITS”** is an authentic and credible work carried out by **Mr. AKHIL MATHEW** (Reg. No. 150021085305) under my supervision and guidance during the period 2015-18 in partial fulfilment of the degree of **Bachelor of Science in Chemistry** under the **Faculty of Science, Mahatma Gandhi University, Kottayam.**

Palai

28/03/2018

Dr. SAJEEV MARTIN GEORGE

(Supervising Teacher)

Countersigned by,

Dr. SUNNY KURIAKOSE

Head of Department of Chemistry

Valued by:

Date:

AMAL JOSE BABY

Assistant Professor



Research & PG Dept. of Chemistry

[DST FIST Sponsored Department]

St. Thomas College, Palai

CERTIFICATE

This is to certify that the project report entitled **“SYNTHESIS AND CHARACTERIZATION OF CdS NANOPARTICLES”** is an authentic and credible work carried out by **Mr. AMAL SASI (Reg. No. 150021085306)** under my supervision and guidance during the period 2015-18 in partial fulfilment of the degree of **Bachelor of Science in Chemistry** under the **Faculty of Science, Mahatma Gandhi University, Kottayam.**

Palai

28/03/2018

AMAL JOSE BABY

(Supervising Teacher)

Countersigned by,

Dr. SUNNY KURIAKOSE

Head of Department of Chemistry

Valued by:

Date:

AMAL JOSE BABY

Assistant Professor



Research & PG Dept. of Chemistry

[DST FIST Sponsored Department]

St. Thomas College, Palai

CERTIFICATE

This is to certify that the project report entitled **“SYNTHESIS AND CHARACTERIZATION OF CdS NANOPARTICLES USING METHANOL AS STABILIZING AGENT”** is an authentic and credible work carried out by **Mr. ANANDU JAYAN (Reg. No. 150021085318)** under my supervision and guidance during the period 2015-18 in partial fulfilment of the degree of **Bachelor of Science in Chemistry** under the **Faculty of Science, Mahatma Gandhi University, Kottayam.**

Palai

28/03/2018

AMAL JOSE BABY

(Supervising Teacher)

Countersigned by,

Dr. SUNNY KURIAKOSE

Head of Department of Chemistry

Valued by:

Date:

Dr. SUNNY KURIAKOSE

Associate Professor & Head



Research & PG Dept. of Chemistry

[DST FIST Sponsored Department]

St. Thomas College, Palai

CERTIFICATE

This is to certify that the project report entitled **“GREEN ALTERNATIVES OF ORGANIC SYNTHESIS: NITRATION OF SALICILIC ACID AND BROMINATION OF ACETANILIDE”** is an authentic and credible work carried out by **Mr. ANANDU M** (Reg. No. 150021085319) under my supervision and guidance during the period 2015-18 in partial fulfilment of the award of the degree of **Bachelor of Science in Chemistry** under the **Faculty of Science, Mahatma Gandhi University, Kottayam.**

Palai

28/03/2018

Dr. SUNNY KURIAKOSE

(Supervising Teacher)

Countersigned by,

Dr. SUNNY KURIAKOSE

Head of Department of Chemistry

Valued by:

1.

2.

JOGY ALEX

Associate Professor



Research & PG Dept. of Chemistry
[DST FIST Sponsored Department]
St. Thomas College, Palai

CERTIFICATE

This is to certify that the project report entitled “**MICROWAVE ASSISTED ORGANIC SYNTHESIS**” is an authentic and credible work carried out by **Mr. ANANTHAKRISHN. S** (Reg. No. 150021085321) under my supervision and guidance during the period 2015-18 in partial fulfilment of the degree of **Bachelor of Science in Chemistry** under the **Faculty of Science, Mahatma Gandhi University, Kottayam.**

Palai

28/03/2018

JOGY ALEX

(Supervising Teacher)

Countersigned by,

Dr. SUNNY KURIAKOSE

Head of Department of Chemistry

Valued by:

Date:

JOGY ALEX

Associate Professor



Research & PG Dept. of Chemistry
[DST FIST Sponsored Department]
St. Thomas College, Palai

CERTIFICATE

This is to certify that the project report entitled “**MICROWAVE ASSISTED ORGANIC SYNTHESIS**” is an authentic and credible work carried out by **Mr. ANOOP GOPAKUMAR** (Reg. No. 150021085322) under my supervision and guidance during the period 2015-18 in partial fulfilment of the degree of **Bachelor of Science in Chemistry** under the **Faculty of Science, Mahatma Gandhi University, Kottayam.**

Palai

28/03/2018

JOGY ALEX

(Supervising Teacher)

Countersigned by,

Dr. SUNNY KURIAKOSE

Head of Department of Chemistry

Valued by:

Date:

JITHIN PRAKASH P. A.

Assistant Professor



Research & PG Dept. of Chemistry

[DST FIST Sponsored Department]

St. Thomas College, Palai

CERTIFICATE

This is to certify that the project report entitled “**SYNTHESIS AND CHARACTERIZATION OF MAGNESIUM ALUMINIUM LAYERED DOUBLE OXIDE**” is an authentic and credible work carried out by **Mr. ASHIL AUGUSTIN** (Reg. No. 150021085307) under my supervision and guidance during the period 2015-18 in partial fulfilment of the degree of **Bachelor of Science in Chemistry** under the **Faculty of Science, Mahatma Gandhi University, Kottayam.**

Palai

28/03/2018

JITHIN PRAKASH P. A.

(Supervising Teacher)

Countersigned by,

Dr. SUNNY KURIAKOSE

Head of Department of Chemistry

Valued by:

Date:

Dr. G. D. GEM MATHEW

Associate Professor



Research & PG Dept. of Chemistry

[DST FIST Sponsored Department]

St. Thomas College, Palai

CERTIFICATE

This is to certify that the project report entitled “**SOME EXPERIMENTS IN GREEN CHEMISTRY**” is an authentic and credible work carried out by **Mr. AUGUSTINE JAISON** (Reg. No. 150021085308) under my supervision and guidance during the period 2015-18 in partial fulfilment of the degree of **Bachelor of Science in Chemistry** under the **Faculty of Science, Mahatma Gandhi University, Kottayam.**

Palai

31/03/2018

Dr. G. D. GEM MATHEW

(Supervising Teacher)

Countersigned by,

Dr. SUNNY KURIAKOSE

Head of Department of Chemistry

Valued by:

Date:

Dr. JOSE K. XAVIER

Associate Professor



Research & PG Dept. of Chemistry

[DST FIST Sponsored Department]

St. Thomas College, Palai

CERTIFICATE

This is to certify that the project report entitled “**A STUDY ON CAROTENOIDS OF VARIOUS VEGETABLES**” is an authentic and credible work carried out by **Mr. BIBIN ANTONY** (Reg. No. 150021085323) under my supervision and guidance during the period 2015-18 in partial fulfilment of the degree of **Bachelor of Science in Chemistry** under the **Faculty of Science, Mahatma Gandhi University, Kottayam.**

Palai

30/03/2018

Dr. JOSE K. XAVIER

(Supervising Teacher)

Countersigned by,

Dr. SUNNY KURIAKOSE

Head of Department of Chemistry

Valued by:

Date:

AMAL JOSE BABY

Assistant Professor



Research & PG Dept. of Chemistry

[DST FIST Sponsored Department]

St. Thomas College, Palai

CERTIFICATE

This is to certify that the project report entitled **“SYNTHESIS AND CHARACTERIZATION OF CdS NANOPARTICLES USING METHANOL AS STABILIZING AGENT”** is an authentic and credible work carried out by **Mr. BINTO BILSON (Reg. No. 150021085336)** under my supervision and guidance during the period 2015-18 in partial fulfilment of the degree of **Bachelor of Science in Chemistry** under the **Faculty of Science, Mahatma Gandhi University, Kottayam.**

Palai

28/03/2018

AMAL JOSE BABY

(Supervising Teacher)

Countersigned by,

Dr. SUNNY KURIAKOSE

Head of Department of Chemistry

Valued by:

Date:

MANJESH MATHEW

Assistant Professor



Research & PG Dept. of Chemistry

[DST FIST Sponsored Department]

St. Thomas College, Palai

CERTIFICATE

This is to certify that the project report entitled **“GREEN SYNTHESIS OF COPPER NANOPARTICLES USING OCIMUM SANCTUM LEAF EXTRACT”** is an authentic and credible work carried out by **Mr. CIBIN CYRIAC** (Reg. No. 150021085324) under my supervision and guidance during the period 2015-18 in partial fulfilment of the degree of **Bachelor of Science in Chemistry** under the **Faculty of Science, Mahatma Gandhi University, Kottayam.**

Palai

30/03/2018

MANJESH MATHEW

(Supervising Teacher)

Countersigned by,

Dr. SUNNY KURIAKOSE

Head of Department of Chemistry

Valued by:

Date:

Dr. THOMAS V. MATHEW

Assistant Professor



Research & PG Dept. of Chemistry

[DST FIST Sponsored Department]

St. Thomas College, Palai

CERTIFICATE

This is to certify that the project report entitled **“SYNTHESIS AND CHARACTERIZATION OF COPPER NANOPARTICLES”** is an authentic and credible work carried out by **Mr. DOMIN MATHEW** (Reg. No. 150021085301) under my supervision and guidance during the period 2015-18 in partial fulfilment of the degree of **Bachelor of Science in Chemistry** under the **Faculty of Science, Mahatma Gandhi University, Kottayam.**

Palai

28/03/2018

Dr. THOMAS V. MATHEW

(Supervising Teacher)

Countersigned by,

Dr. SUNNY KURIAKOSE

Head of Department of Chemistry

Valued by:

Date:

Dr. G. D. GEM MATHEW

Associate Professor



Research & PG Dept. of Chemistry

[DST FIST Sponsored Department]

St. Thomas College, Palai

CERTIFICATE

This is to certify that the project report entitled “**SOME EXPERIMENTS IN GREEN CHEMISTRY**” is an authentic and credible work carried out by **Mr. EDWIN JOSE A C** (Reg. No. 150021085309) under my supervision and guidance during the period 2015-18 in partial fulfilment of the degree of **Bachelor of Science in Chemistry** under the **Faculty of Science, Mahatma Gandhi University, Kottayam.**

Palai

28/03/2018

Dr. G. D. GEM MATHEW

(Supervising Teacher)

Countersigned by,

Dr. SUNNY KURIAKOSE

Head of Department of Chemistry

Valued by:

Date:

Dr. THOMAS V. MATHEW

Assistant Professor



Research & PG Dept. of Chemistry

[DST FIST Sponsored Department]

St. Thomas College, Palai

CERTIFICATE

This is to certify that the project report entitled **“SYNTHESIS AND CHARACTERIZATION OF COPPER NANOPARTICLES”** is an authentic and credible work carried out by **Mr. FRANKLIN.A.MADUKKAKUZHY** (Reg. No. 150021085301) under my supervision and guidance during the period 2015-18 in partial fulfilment of the degree of **Bachelor of Science in Chemistry** under the **Faculty of Science, Mahatma Gandhi University, Kottayam.**

Palai

28/03/2018

Dr. THOMAS V. MATHEW

(Supervising Teacher)

Countersigned by,

Dr. SUNNY KURIAKOSE

Head of Department of Chemistry

Valued by:

Date:

AMAL JOSE BABY

Assistant Professor



Research & PG Dept. of Chemistry

[DST FIST Sponsored Department]

St. Thomas College, Palai

CERTIFICATE

This is to certify that the project report entitled **“SYNTHESIS AND CHARACTERIZATION OF CdS NANOPARTICLES”** is an authentic and credible work carried out by **Mr. HARSHAD HAMEED (Reg. No. 150021085326)** under my supervision and guidance during the period 2015-18 in partial fulfilment of the degree of **Bachelor of Science in Chemistry** under the **Faculty of Science, Mahatma Gandhi University, Kottayam.**

Palai

28/03/2018

AMAL JOSE BABY

(Supervising Teacher)

Countersigned by,

Dr. SUNNY KURIAKOSE

Head of Department of Chemistry

Valued by:

Date:

JITHIN PRAKASH P. A.

Assistant Professor



Research & PG Dept. of Chemistry

[DST FIST Sponsored Department]

St. Thomas College, Palai

CERTIFICATE

This is to certify that the project report entitled **“SYNTHESIS AND CHARACTERIZATION OF MAGNESIUM ALUMINIUM LAYERED DOUBLE OXIDE”** is an authentic and credible work carried out by **Mr. JINSE SUNNY** (Reg. No. 150021085327) under my supervision and guidance during the period 2015-18 in partial fulfilment of the degree of **Bachelor of Science in Chemistry** under the **Faculty of Science, Mahatma Gandhi University, Kottayam.**

Palai

28/03/2018

JITHIN PRAKASH P. A.

(Supervising Teacher)

Countersigned by,

Dr. SUNNY KURIAKOSE

Head of Department of Chemistry

Valued by:

Date:

MANJESH MATHEW

Assistant Professor



Research & PG Dept. of Chemistry

[DST FIST Sponsored Department]

St. Thomas College, Palai

CERTIFICATE

This is to certify that the project report entitled **“GREEN SYNTHESIS OF COPPER NANOPARTICLES USING OCIMUM SANCTUM LEAF EXTRACT”** is an authentic and credible work carried out by **Mr. JINU RAJAN** (Reg. No. 150021085328) under my supervision and guidance during the period 2015-18 in partial fulfilment of the degree of **Bachelor of Science in Chemistry** under the **Faculty of Science, Mahatma Gandhi University, Kottayam.**

Palai

30/03/2018

MANJESH MATHEW

(Supervising Teacher)

Countersigned by,

Dr. SUNNY KURIAKOSE

Head of Department of Chemistry

Valued by:

Date:

JITHIN PRAKASH P. A.

Assistant Professor



Research & PG Dept. of Chemistry

[DST FIST Sponsored Department]

St. Thomas College, Palai

CERTIFICATE

This is to certify that the project report entitled “**SYNTHESIS AND CHARACTERIZATION OF MAGNESIUM ALUMINIUM LAYERED DOUBLE OXIDE**” is an authentic and credible work carried out by **Mr. JITHIN. K. V** (Reg. No. 150021085329) under my supervision and guidance during the period 2015-18 in partial fulfilment of the degree of **Bachelor of Science in Chemistry** under the **Faculty of Science, Mahatma Gandhi University, Kottayam.**

Palai

28/03/2018

JITHIN PRAKASH P. A.

(Supervising Teacher)

Countersigned by,

Dr. SUNNY KURIAKOSE

Head of Department of Chemistry

Valued by:

Date:

Dr. G. D. GEM MATHEW

Associate Professor



Research & PG Dept. of Chemistry

[DST FIST Sponsored Department]

St. Thomas College, Palai

CERTIFICATE

This is to certify that the project report entitled “**SOME EXPERIMENTS IN GREEN CHEMISTRY**” is an authentic and credible work carried out by **Mr. JOBINS M JOY** (Reg. No. 150021085330) under my supervision and guidance during the period 2015-18 in partial fulfilment of the degree of **Bachelor of Science in Chemistry** under the **Faculty of Science, Mahatma Gandhi University, Kottayam.**

Palai

28/03/2018

Dr. G. D. GEM MATHEW

(Supervising Teacher)

Countersigned by,

Dr. SUNNY KURIAKOSE

Head of Department of Chemistry

Valued by:

Date:

JITHIN PRAKASH P. A.

Assistant Professor



Research & PG Dept. of Chemistry

[DST FIST Sponsored Department]

St. Thomas College, Palai

CERTIFICATE

This is to certify that the project report entitled “**A COMPARITIVE STUDY OF THE REMOVAL OF METHYL ORANGE USING Mg-AI LDH & CALCIUM PHOSPHATE NANOPARTICLES FROM AQUEOUS SOLUTIONS**” is an authentic work carried out by **Mr. JOYAL JOY** (Reg. No. 150021085310) under my supervision and guidance during the period 2015-18 in partial fulfilment of the degree of **Bachelor of Science in Chemistry** under the **Faculty of Science, Mahatma Gandhi University, Kottayam.**

Palai

28/03/2018

JITHIN PRAKASH P. A.

(Supervising Teacher)

Countersigned by,

Dr. SUNNY KURIAKOSE

Head of Department of Chemistry

Valued by:

Date:

Dr. SUNNY KURIAKOSE

Associate Professor & Head



Research & PG Dept. of Chemistry

[DST FIST Sponsored Department]

St. Thomas College, Palai

CERTIFICATE

This is to certify that the project report entitled **“GREEN ALTERNATIVES OF ORGANIC SYNTHESIS: NITRATION OF SALICILIC ACID AND BROMINATION OF ACETANILIDE”** is an authentic and credible work carried out by **Mr. LIBIN SIBY** (Reg. No. 150021085311) under my supervision and guidance during the period 2015-18 in partial fulfilment of the award of the degree of **Bachelor of Science in Chemistry** under the **Faculty of Science, Mahatma Gandhi University, Kottayam.**

Palai

28/03/2018

Dr. SUNNY KURIAKOSE

(Supervising Teacher)

Countersigned by,

Dr. SUNNY KURIAKOSE

Head of Department of Chemistry

Valued by:

1.

2.

TOJO JOSEPH
Assistant Professor



Research & PG Dept. of Chemistry
[DST FIST Sponsored Department]
St. Thomas College, Palai

CERTIFICATE

This is to certify that the project report entitled “**A STUDY ON CASEIN AND LACTOSE CONTENT IN DIFFERENT MILK SAMPLES**” is an authentic and credible work carried out by **Mr. MATHUKUTTY MATHEWS** (Reg. No. 150021085312) under my supervision and guidance during the period 2015-18 in partial fulfilment of the degree of **Bachelor of Science in Chemistry** under the **Faculty of Science, Mahatma Gandhi University, Kottayam.**

Palai
28/03/2018

TOJO JOSEPH
(Supervising Teacher)

Countersigned by,

Dr. SUNNY KURIAKOSE
Head of Department of Chemistry

Valued by:

Date:

JOGY ALEX

Associate Professor



Research & PG Dept. of Chemistry
[DST FIST Sponsored Department]
St. Thomas College, Palai

CERTIFICATE

This is to certify that the project report entitled “**MICROWAVE ASSISTED ORGANIC SYNTHESIS**” is an authentic and credible work carried out by **Mr. NITHIN AUGUSTINE** (Reg. No. 150021085337) under my supervision and guidance during the period 2015-18 in partial fulfilment of the degree of **Bachelor of Science in Chemistry** under the **Faculty of Science, Mahatma Gandhi University, Kottayam.**

Palai

28/03/2018

JOGY ALEX

(Supervising Teacher)

Countersigned by,

Dr. SUNNY KURIAKOSE

Head of Department of Chemistry

Valued by:

Date:

TOJO JOSEPH
Assistant Professor



Research & PG Dept. of Chemistry
[DST FIST Sponsored Department]
St. Thomas College, Palai

CERTIFICATE

This is to certify that the project report entitled “**A STUDY ON CASEIN AND LACTOSE CONTENT IN DIFFERENT MILK SAMPLES**” is an authentic and credible work carried out by **Mr. PHILIP JOSE** (Reg. No. 150021085331) under my supervision and guidance during the period 2015-18 in partial fulfilment of the degree of **Bachelor of Science in Chemistry** under the **Faculty of Science, Mahatma Gandhi University, Kottayam.**

Palai
28/03/2018

TOJO JOSEPH
(Supervising Teacher)

Countersigned by,

Dr. SUNNY KURIAKOSE
Head of Department of Chemistry

Valued by:

Date:

AMAL JOSE BABY

Assistant Professor



Research & PG Dept. of Chemistry

[DST FIST Sponsored Department]

St. Thomas College, Palai

CERTIFICATE

This is to certify that the project report entitled **“SYNTHESIS AND CHARACTERIZATION OF CdS NANOPARTICLES”** is an authentic and credible work carried out by **Mr. PRIJIL RAJU (Reg. No. 150021085332)** under my supervision and guidance during the period 2015-18 in partial fulfilment of the degree of **Bachelor of Science in Chemistry** under the **Faculty of Science, Mahatma Gandhi University, Kottayam.**

Palai

28/03/2018

AMAL JOSE BABY

(Supervising Teacher)

Countersigned by,

Dr. SUNNY KURIAKOSE

Head of Department of Chemistry

Valued by:

Date:

JITHIN PRAKASH P. A.

Assistant Professor



Research & PG Dept. of Chemistry

[DST FIST Sponsored Department]

St. Thomas College, Palai

CERTIFICATE

This is to certify that the project report entitled “**A COMPARITIVE STUDY OF THE REMOVAL OF METHYL ORANGE USING Mg-AI LDH & CALCIUM PHOSPHATE NANOPARTICLES FROM AQUEOUS SOLUTIONS**” is an authentic work carried out by **Mr. RIJO JOSEPH** (Reg. No. 150021085303) under my supervision and guidance during the period 2015-18 in partial fulfilment of the degree of **Bachelor of Science in Chemistry** under the **Faculty of Science, Mahatma Gandhi University, Kottayam.**

Palai

28/03/2018

JITHIN PRAKASH P. A.

(Supervising Teacher)

Countersigned by,

Dr. SUNNY KURIAKOSE

Head of Department of Chemistry

Valued by:

Date:

AMAL JOSE BABY

Assistant Professor



Research & PG Dept. of Chemistry

[DST FIST Sponsored Department]

St. Thomas College, Palai

CERTIFICATE

This is to certify that the project report entitled **“SYNTHESIS AND CHARACTERIZATION OF CdS NANOPARTICLES USING METHANOL AS STABILIZING AGENT”** is an authentic and credible work carried out by **Mr. S HARIKRISHNAN KARTHA (Reg. No. 150021085333)** under my supervision and guidance during the period 2015-18 in partial fulfilment of the degree of **Bachelor of Science in Chemistry** under the **Faculty of Science, Mahatma Gandhi University, Kottayam.**

Palai

28/03/2018

AMAL JOSE BABY

(Supervising Teacher)

Countersigned by,

Dr. SUNNY KURIAKOSE

Head of Department of Chemistry

Valued by:

Date:

Dr. SAJEEV MARTIN GEORGE

Assistant Professor



Research & PG Dept. of Chemistry

[DST FIST Sponsored Department]

St. Thomas College, Palai

CERTIFICATE

This is to certify that the project report entitled **“DETERMINATION OF LYCOPENE CONTENT IN VARIOUS FRUITS”** is an authentic and credible work carried out by **Mr. SAMSON SCARIA CHERIAN** (Reg. No. 150021085334) under my supervision and guidance during the period 2015-18 in partial fulfilment of the degree of **Bachelor of Science in Chemistry** under the **Faculty of Science, Mahatma Gandhi University, Kottayam.**

Palai

28/03/2018

Dr. SAJEEV MARTIN GEORGE

(Supervising Teacher)

Countersigned by,

Dr. SUNNY KURIAKOSE

Head of Department of Chemistry

Valued by:

Date:

Dr. JOSE K. XAVIER

Associate Professor



Research & PG Dept. of Chemistry

[DST FIST Sponsored Department]

St. Thomas College, Palai

CERTIFICATE

This is to certify that the project report entitled “**A STUDY ON CAROTENOIDS OF VARIOUS VEGETABLES**” is an authentic and credible work carried out by **Mr. SAVAD C N** (Reg. No. 150021085313) under my supervision and guidance during the period 2015-18 in partial fulfilment of the degree of **Bachelor of Science in Chemistry** under the **Faculty of Science, Mahatma Gandhi University, Kottayam.**

Palai

30/03/2018

Dr. JOSE K. XAVIER

(Supervising Teacher)

Countersigned by,

Dr. SUNNY KURIAKOSE

Head of Department of Chemistry

Valued by:

Date:

TOJO JOSEPH
Assistant Professor



Research & PG Dept. of Chemistry
[DST FIST Sponsored Department]
St. Thomas College, Palai

CERTIFICATE

This is to certify that the project report entitled **“A STUDY ON CASEIN AND LACTOSE CONTENT IN DIFFERENT MILK SAMPLES”** is an authentic and credible work carried out by **Mr. SHARON SHAJI** (Reg. No. 150021085314) under my supervision and guidance during the period 2015-18 in partial fulfilment of the degree of **Bachelor of Science in Chemistry** under the **Faculty of Science, Mahatma Gandhi University, Kottayam.**

Palai
28/03/2018

TOJO JOSEPH
(Supervising Teacher)

Countersigned by,

Dr. SUNNY KURIAKOSE
Head of Department of Chemistry

Valued by:

Date:

Dr. THOMAS V. MATHEW

Assistant Professor



Research & PG Dept. of Chemistry

[DST FIST Sponsored Department]

St. Thomas College, Palai

CERTIFICATE

This is to certify that the project report entitled “**SYNTHESIS AND CHARACTERIZATION OF COPPER NANOPARTICLES**” is an authentic and credible work carried out by **Mr. SUNIL M A** (Reg. No. 150021085315) under my supervision and guidance during the period 2015-18 in partial fulfilment of the degree of **Bachelor of Science in Chemistry** under the **Faculty of Science, Mahatma Gandhi University, Kottayam.**

Palai

28/03/2018

Dr. THOMAS V. MATHEW

(Supervising Teacher)

Countersigned by,

Dr. SUNNY KURIAKOSE

Head of Department of Chemistry

Valued by:

Date:

Dr. JOSE K. XAVIER

Associate Professor



Research & PG Dept. of Chemistry

[DST FIST Sponsored Department]

St. Thomas College, Palai

CERTIFICATE

This is to certify that the project report entitled “**A STUDY ON CAROTENOIDS OF VARIOUS VEGETABLES**” is an authentic and credible work carried out by **Mr. TOJO PAUL** (Reg. No. 150021085316) under my supervision and guidance during the period 2015-18 in partial fulfilment of the degree of **Bachelor of Science in Chemistry** under the **Faculty of Science, Mahatma Gandhi University, Kottayam.**

Palai

30/03/2018

Dr. JOSE K. XAVIER

(Supervising Teacher)

Countersigned by,

Dr. SUNNY KURIAKOSE

Head of Department of Chemistry

Valued by:

Date:

Dr. SAJEEV MARTIN GEORGE

Assistant Professor



Research & PG Dept. of Chemistry

[DST FIST Sponsored Department]

St. Thomas College, Palai

CERTIFICATE

This is to certify that the project report entitled **“DETERMINATION OF LYCOPENE CONTENT IN VARIOUS FRUITS”** is an authentic and credible work carried out by **Mr. VAISAKH B** (Reg. No. 150021085335) under my supervision and guidance during the period 2015-18 in partial fulfilment of the degree of **Bachelor of Science in Chemistry** under the **Faculty of Science, Mahatma Gandhi University, Kottayam.**

Palai

31/03/2018

Dr. SAJEEV MARTIN GEORGE

(Supervising Teacher)

Countersigned by,

Dr. SUNNY KURIAKOSE

Head of Department of Chemistry

Valued by:

Date: