X-RAY DIFFRACTION STUDIES OF DIMETHYLAMINE P-NITROFHENOL CRYSTALS

A PROJECT REPORT

Submitted by

ABINA SHALINI.S

(Reg.No: 20213092521201)

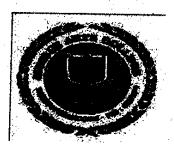
in partial fulfillment for the award of the degree

of

MASTER OF SCIENCE

IN

PHYSICS



MUSLIM ARTS COLLEGE

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(APRIL - 2023)

Certified that this project titled "X-RAY DIFFRACTION STUDIES OF DIMETHYLAMINE P-NITROPHENOL CRYSTALS" is the bonafide work of ABINA SHALINI.S (Reg.No:20213092521201) who carried out the work under my supervision. Certified further that to the best of my knowledge the work reported herein does not form part of any other project on the basis of which a degree or award was conferred on an earlier occasion on this or any other candidate.

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THERMAL AND MECHANICAL PROPERTIES OF DIMETHYLAMINE P-NITROPHENOL SINGLE CRYSTALS

A PROJECT REPORT

Submitted by

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Certified that this project titled "THERMAL AND MECHANICAL PROPERTIES OF DIMETHYLAMINE P-NITROPHENOL CRYSTALS" is the bonafide work of ABISHA.J.M (Reg.No:20213092521202) who carried out the work under my supervision. Certified further that to the best of my knowledge the work reported herein does not form part of any other project on the basis of which a degree or award was conferred on an earlier occasion on this or any other candidate.

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VIBRATIONAL ANALYSIS AND GROWTH OF DIMETHYLAMINE P-NITROPHENOL CRYSTALS

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Certified that this project titled "VIBRATIONAL ANALYSIS AND GROWTH OF DIMETHYLAMINE P-NITROPHENOL CRYSTALS" is the bonafide work of ABISHA.T.S (Reg.No:20213092521203) who carried out the work under my supervision. Certified further that to the best of my knowledge the work reported herein does not form part of any other project on the basis of which a degree or award was conferred on an earlier occasion on this or any other candidate.

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XRD PATTERN OF UREA P-NITROPHENOL SINGLE CRYSTALS

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FT-IR & FT-RAMAN SPECTRAL STUDIES OF UREA P-NITROPHENOL SINGLE CRYSTALS

A PROJECT REPORT

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THERMAL AND MECHANICAL PROPERTES OF UREA P-NITROPHENOL SINGLE CRYSTALS

A PROJECT REPORT

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Certified that this project titled "THERMAL AND MECHANICAL PROPERTIES OF UREA PARA-NITROPHENOL SINGLE CRYSTALS" is the bonafide work of ANJUSHA.M (Reg.No:20213092521206) who carried out the work under my supervision. Certified further that to the best of my knowledge the work reported herein does not form part of any other project on the basis of which a degree or award was conferred on an earlier occasion on this or any other candidate.

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PERIODIC VARIATIONS OF SOLAR FLARES DURING SOLAR CYCLE 23 AND 24

A PROJECT REPORT

Submitted by

R.BEAUTLIN

In partial fulfilment for the award of the degree of

IN
PHYSICS



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APRIL 2023

Certified that this thesis titled "PERIODIC VARIATIONS OF SOLAR FLARES DURING SOLAR CYCLE 23 AND 24" is the bonafide work BEAUTLIN.R(Reg. No: 20213092521207) who carried out the work under my supervision. Certified further that to the best of my knowledge the work reported herein does not form part of any other thesis or dissertation on the basis of which a degree or award was conferred on an earlier occasion on this or any other candidate.



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ofs

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VARIATION OF SOLAR WIND PARAMETERS OBSERVED BY STEREO SPACECRAFT

A PROJECT REPORT

Submitted by

BENCY C B

In partial fulfillment for the award of the degree

of

MASTER OF SCIENCE

IN

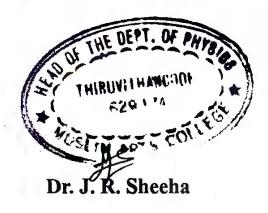
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Certified that the project titled "VARIATION OF SOLAR WIND PARAMETERS OBSERVED BY STEREO SPACECRAFT" is the bonafide work of BENCY C B (Reg. No: 20213092521208) who carried out the work under my supervision. Certified further that to the best of my knowledge the work reported here in does not form part of any other project on the basis of which a degree or award was conferred on an earlier occasion on this or any other candidate.



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FILAMENTS AND CORONAL MASS EJECTION DURING 2006-2020

A PROJECT REPORT

Submitted by

L. BENIFA

In partial fulfilment for the award of the degree

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APRIL 2023

Certified that this thesis titled "FILAMENTS AND CORONAL MASS EJECTIONS DURING 2006-2020" is the bonafide work BENIFA. L (Reg. No: 20213092521209) who carried out the work under my supervision. Certified further that to the best of my knowledge the work reported herein does not form part of any other thesis or dissertation on the basis of which a degree or award was conferred on an earlier occasion on this or any other candidate.



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Dr. G. Edwin Sheela Principal

GEOMAGNETIC STORMS DURING SOLAR CYCLE 23 AND 24

A PROJECT REPORT

Submitted by

J. DONNA

In partial fulfilment for the award of the degree of

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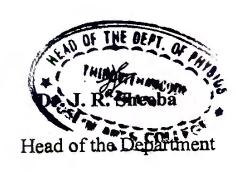
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STATISTICAL ANALYSIS OF SEP, CME AND SOLAR FLARE

A PROJECT REPORT

Submitted by

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Dr. G. Edwin Sheela
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GROWTH AND VIBRATIONAL ANALYSIS OF 2,4-DICHLOROBENZALDEHYDE SINGLE CRYSTAL

A PROJECT REPORT

Submitted by

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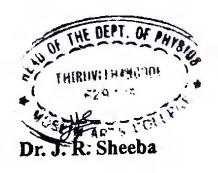
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1. Internal Examiner.

a. Extenser Examiner

CRYSTAL GROWTH, THERMAL ANALYSIS AND DENSITY MEASUREMENT OF 2,4-DICHLOROBENZALDEHYDE SINGLE CRYSTAL

A PROJECT REPORT

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JESHLIN SHINY. J. M

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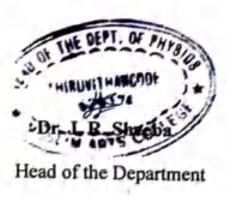
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Dr. R.P. JEBIN wous size, so Assistant Professor Department of Physics & Research C Muslim Arts College Thinwithancode 629 174 Dr. R. P. Jebin

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1. Internal Examiner.

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GROWTH AND OPTICAL ANALYSIS OF 2,4-DICHLOROBENZALDEHYDE SINGLE CRYSTAL

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PRIYA-J (Reg.No: 20213092521214) who carried out the work under my supervision. Certified
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CRYSTAL GROWTH, MICROHARDNESS AND THERMAL DIFFUSIVITY OF 2,4-DICHLOROBENZALDEHYDE SINGLE CRYSTAL

A PROJECT REPORT

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LEKSHMI K G

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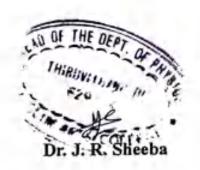
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CRYSTAL GROWTH AND X-RAY DIFFRACTION STUDIES OF 2,4 - DICHLOROBENZALDEHYDE SINGLE CRYSTAL

A PROJECT REPORT

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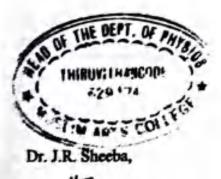
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SUPERVISOR,

STRUCTURAL OPTICAL, MECHANICAL AND THERMAL STUDIES OF NONLINEAR OPTICAL CRYSTAL 4-METHYLPYRIDINIUM 4-NITROBENZOATE

PROJECT REPORT

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N.RAMYA

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Dr. J.R. sheeba,

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Dr.D.Shalini,

Head of the department,

Supervisor,

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GROWTH, STRUCTURAL, OPTICAL, THERMAL AND LASER DAMAGE THRESHOLD STUDIES OF AN ORGANIC MATERIAL 4-METHYLPYRIDINIUMPICRATE

PROJECT REPORT

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R.RENYA

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Dr.D.Shalini,

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Supervisor.

2

GROWTH AND STRUCTURAL CHARACTERIZATION OF ORGANIC NONLINEAR OPTICAL CRYSTAL 4- METHYLPYRIDINIUM 4- NITROBENZOATE

PROJECT REPORT

Submitted by

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CHARACTERIZATION OF ORGANIC NONLINEAR OPTICAL
CRYSTAL 4-METHYLPYRIDINIUM 4-NITROBENZOATE" Bonafide
work of SRUTHI.S.V (Reg:20213092521219) who carried out the
work under my supervision. Certified further that to the best of my
knowledge the work reported here in does not form part of any other
project on the basis of which a degree or award was conferred on an
earlier occasion on this or any other candidate.

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Dr.J.R. Sheeba,

Head of the Department.

SIGNATURE Dr.D.Shalini, Supervisor.

et s

GROWTH AND STRUCTURAL CHARACTERIZATION OF ORGANIC NONLINEAR OPTICAL CRYSTAL CALCIUM 5-SULFOSALICYLATE

PROJECT REPORT

Submitted by

A.STERLIN JENI

In partial fulfillment for the award of the degree of

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CHARACTERIZATION OF ORGANIC NONLINEAR OPTICAL CRYSTAL CALCIUM 5-SULFOSALICYLATE" Bonafide work of A.STERLIN JENI (Reg:20213092521220) who carried out the work under my supervision. Certified further that to the best of my knowledge the work reported here in does not form part of any other project on the basis of which a degree or award was conferred on an earlier occasion on this or any other candidate.



Dr.J.R. Sheeba,

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Dr.D.Shalini,

Supervisor.

GROWTH AND STRUCTURAL CHARACTERIZATION OF ORGANIC NONLINEAR OPTICAL CRYSTAL 4-METHYLPYRIDINIUM 5-SULFOSALICYLATE

PROJECT REPORT

Submitted by

SULAIHA SHAHINA. S

In partial fulfillment for the award of the degree of

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(APRIL – 2023)

CHARACTERIZATION OF ORGANIC NONLINEAR OPTICAL CRYSTAL

4-METHYLPYRIDINIUM 5-SULFOSALICYLATE" Bonafide work of SULAIHA

SHAHINA. S (Reg:20213092521221) who carried out the work under my supervision.

Certified further that to the best of my knowledge the work reported here in does not form part of any other project on the basis of which a degree or award was conferred on an earlier occasion on this or any other candidate.



Dr.J.R.Sheeba,

Head of the Department.

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Dr.D.Shalini,

Supervisor.

15

2

GROWTH AND VIBRATIONAL SPECTRAL ANALYSIS OF N-BENZYL-3-NITROANILINE CRYSTAL

A PROJECT REPORT

Submitted by

SUSMITHA. S

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(APRIL-2023)

Certified that the project titled "Growth and Vibrational Spectral Analysis of N-Benzyl-3-Nitroaniline Crystal" is the bonafide work of SUSMITHA. S (Reg No: 20213092521223) who carried out the work under my supervision. Certified further that to the best of my knowledge the work reported herein does not form part of any other project on the basis of which a degree or award was conferred on an earlier occasion onthis or any other candidate.



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Dr. J.R. Sheeba

Dr.V.K. Suma,

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STRUCTURAL DETERMINATION AND NLO PROPERTY ANALYSIS OF N-BENZYL 3-NITRO ANILINE

A PROJECT REPORT

Submitted by

VAISHNAVI A

(Reg.No:20213092521224)

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NLO property analysis of N benzyl 3-nitro aniline" is the bonafide work of VAISHNAVI.A (Reg: 20213092521224) who carried out the work under my supervision. Certified further that to the best of my knowledge the work reported herein does not form part of any other project on the basis of which a degree or award was conferred on an earlier occasion on this or any other candidate.

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PG and Research Centre of Physics
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SIGNATURE

Dr.V.K. Suma

Head of the Department

SUPERVISOR

8/5

MOLECULAR STRUCTURE AND NLO ACTIVITY STUDY OF DL- CYSTEINIUM SEMIOXALATE USING DFT METHOD A PROJECT REPORT

Submitted by VINISHA.K.K.

(20213092521225)

in partial fulfillment for the award of the degree of

MASTER OF SCIENCE

IN PHYSICS



MUSLIM ARTS COLLEGE
THIRUVITHANCODE-629 174
MANONMANIAM SUNDARANAR UNIVERSITY
TIRUNELVELI-627 012
(APRIL-2023)

Certified that the project titled "MOLECULAR STRUCTURE AND NLO ACTIVITY STUDY OF DL- CYSTEINIUM SEMIOXALATE USING DFT METHOD" is the bonafide work of VINISHA.K.K. (Reg: 20213092521225) who carried out the work under my supervision. Certified further that to the best of my knowledge the work reported herein does not form part of any other project on the basis of which a degree or award was conferred on an earlier occasion on this or any other candidate.



SIGNATURE

Dr. J.R. Sheeba

Dr.V.K. Suma

Head of the Department

SUPERVISOR

GROWTH AND VIBRATIONAL ANALYSIS OF 4- METHYLPYRIDINIUM PICRATE

A PROJECT REPORT Submitted by VINITHA.V

in partial fulfillment for the award of the degree of

MASTER OF SCIENCE

IN PHYSICS



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(APRIL-2023)

Certified that the project titled "Growth and Vihrational Analysis of 4-MethylPyridinium Picrate" is the bonafide work of VINITHA.V (Reg: 20213092521226) who carried out the work under my supervision. Certified further that to the best of my knowledge the work reported herein does not form part of any other project on the basis of which a degree or award was conferred on an earlier occasion on this or any other candidate.



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Dr. J.R. Sheeba

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DENSITY FUNCTIONAL THEORY AND NLO ACTIVITY STUDY ON 4-METHYLPYRIDINIUM PICRATE

A PROJECT REPORT
Submitted by

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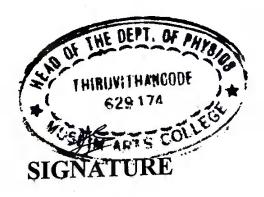
MASTER OF SCIENCE

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MUSLIM ARTS COLLEGE
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and NLO Activity study on 4-Methylpyridininm Picrate" is the bonafide work of VINSHA W M (Reg No.: 20213092521227) who carried out the work under my supervision. Certified further that to the best of my knowledge the work reported here in does not form part of any other projecton the basis of which a degree or award was conferred on an earlier occasion on this or any other candidate.



19. 100 2 OH 2028 SIGNATURE

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EQUATORIAL GEOPHYSICAL RESEARCH LABORATORY

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APRIL-2023

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| Abinesh Sree . V of class I M.S.c. physics | |
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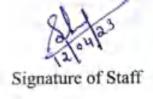


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| Reg | No | ವಿರಾ | 1230.9 | 1.25.21 | 203 | | .,,,, | during | the | academic |
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EQUATORIAL GEOPHYSICAL RESEARCH LABORATORY (EGRL)

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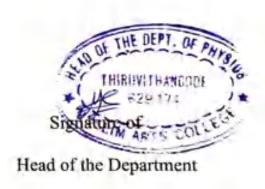
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| Reg N | io20. | 2230 | 9.2 | 5.21 | <i>\$</i> 0.7 | | during | the the | academic |
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PG AND RESEARCH DEPARTMENT OF PHYSICS MUSLIM ARTS COLLEGE, THIRUVITHANCODE APRIL - 2023

| | Ashika M | of clas | ss I M.Sc | Physics | | |
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| Re | eg No. 202230925. | 21208di | | ear of 20 | THIRD HENDERDY | 18 |
| Si | gnature of Staff | Thiruvithand K.K. Dist 62 | 9 174 00 0 | | Head of the | |
| St | abmitted for the vi | va-voice Examinat | tion held on A | 08-05-202 | . <u></u> | |
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EQUATORIAL GEOPHYSICAL RESEARCH LABORATORY

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Signature of MARTHURITAIN Head of the Department

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EQUATORIAL GEOPHYSICAL RESEARCH LABORATORY [EGRL]

FIELD WORK REPORT Submitted By

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Bonisha.B. of class T.M.Sc. physics. Reg. No.

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Date :....

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EQUATORIAL GEOPHYSICAL RESEARCH LABAROTRY (EGRL)

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MUSLIM ARTS COLLEGE, THIRUVITHANCODE

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EQUATORIAL GEOPHYSICAL RESEARCH LABAROTRY (EGRL)

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| MERCILIN K | 20223092521216 | | | | |
| MINISHA M | 20223092521217 | | | | |

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S. Dinesh of class I. M.Sc. Physics

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DEPARTMENT OF PG & RESEARCH CENTRE MUSLIM ARTS COLLEGE THIRUVITHANCODE APRIL 2023

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A Judith Abinaya of class J. MSc. Physics.

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|-----------|--------|------|------|----------|--------|--------|--------|------|---------|
| KM | lexcil | in | | of | class | IM | Sc. T | hys | ìcs |
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Head of the Department

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| Certified | that | this | is a | bonafied | report | of the | work | done by | |
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| N | 1:Min | isha | | of | class | 7.M | :Sc. | Physics | |
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Head of the Department

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RISHVALIN SONA.S 20223092521221

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 NITHISHA.R.V
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Head of the Department COLL

Submitted for the viva-voice Examination held on .. 08 -. 05 -- 2023...

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S RISHVALIN SONA 20223092521221

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NAME 20223092521221 RISHVALIN SONA.S 20223092521218 NEHISHA.S

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5. Rishvalin... Sana...... of class ... I.M. Sc. Physics

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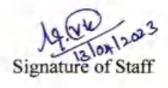
VIBISHA E

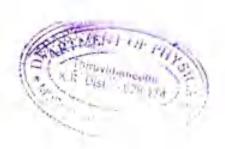
20223092521224

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| Certified | that | this | is a | bonafied | report | of the | work | done |
|-----------|---------|--------|--------|-------------|--------|--------|-------|----------|
| byM. | Sreej | a | ****** | . of class | I. | .m.S | Ph | gsias |
| Reg. No | | 20.22. | 309. å | 25.2.1.2.2. | 3 | during | g the | academic |
| Year 2022 | - 2023. | | | | | | | |







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|-----------|---------|--------|-----|-----|----------|--------|--------|------|----------|
| byE | libish | a | | | of class | .I1 | M.S.cP | hys | ich |
| Reg. No | .20c | 1.2.30 | .92 | 5.2 | 4 | | during | the | academic |
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Signature of Staff



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