

# JAMAL MOHAMED COLLEGE (Autonomous) (Affiliated to Bharathidasan University) Tiruchirappalli- 620 020

### **Problem-Solving Methodologies**

Problem Solving is a form of complex learning process which enable the students to apply their knowledge in challenging situations. The college gives ample opportunities for the students to hone their skills in problem solving techniques through various projects offered in each department.

- ➤ Brain storming sessions are conducted to generate new ideas. Mind-mapping, Data mining and Logic approximation methods are also adopted by Mathamatics, Management Studies, Physics and Computer Science departments to inculcate the problem-solving skills.
- ➤ Case study programmes are being practised such as Air pollution, Water Pollution in specific areas of our district which help the students to bring meaningful results. The society concerning problems are taken up through group projects by Chemistry students of the college.
- ➤ Fish culture project is promoted by Zoology Department to assess the environmental issues which affect fish rearing and solving the same.
- ➤ Live Projects and other software are developed by students of computer science.
- ➤ Telescope making training is offered by our students of Physics for school children to facilitate them in star-gazing.
- > Student belonging to the departments of Commerce, Management Studies, Economics and Social Work studies take up projects in studying the performance of employees and their issues in different companies.
- ➤ Soft skills incorporated in the curriculum develop students' confidence and help them in facing challenges and take right decisions in problem-solving.

Mentoring helps students pick up skills to critically analyse reallife situations and come up with solutions.

#### **Department of Physics**



Mr. G. Aazhimukilan, Trichy
Astro Club, Tiruchirappalli
delivering a special lecture on The
Great Conjunction of Jupiter and
Saturn through Google Meet
platform on 19-12-2020

Mr. V. Rajasekar, Scientist, ISRO, Trivandrum delivering a special lecture on The Great Conjunction of Jupiter and Saturn through Google Meet platform on 20-12-2020.





Students viewing "The great Conjunction of Jupiter and Saturn- An event after 397 years" through the telescope on 21-12-2020.

# A section of students during Sky Watch Programme on 09-03-2020



A section of Students viewing the Wellington and Comet during
Sky-Watch Programme on 17-12-2021



# An Events has been conducted in the topic of "Manam Kondu Manam Mudippom" on 22/12/17.



# Various Problem - Solving Events conducted by Department of Management Studies



# Telecomunication Project by Department of Physics



# **BHARAT SANCHAR NIGAM LIMITED**

(A GOVERNMENT OF INDIA ENTERPRISE)
TRICHY TELECOM DISTRICT



# CERTIFICATE

This is to certify that Shri/kum	M.ABDUL REHAMAAN
a student of JAMAL MOHAM	MED COLLEGE (Autonomous)
B.Sc / PH	HYSICS - II Year
has undergone Vocational Train	ning on Telecom Technologies in o
organization for 5 days from08-	3-11-2021 to 12-11-2021 ar
completed the training successfully	0
Place: Trichy	Assistant General Manager
Date: 12-11-2021	(Administration) Office of PGM, BSNL, Trichy.

### **Projects**

# Software Development Project by Department of Computer Applications

# JAMAL MOHAMED COLLEGE (AUTONOMOUS)

Accredited (3rd Cycle) with 'A' Grade by NAAC (Affiliated to Bharathidasan University)
TIRUCHIRAPPALLI – 620 020

DEPARTMENT OF COMPUTER APPLICATIONS

BACHELOR OF COMPUTER APPLICATIONS

SEMESTER - VI

SOFTWARE DEVELOPLMENT LAB [20UCA6CC16P]

CERTIFICATE

Name

MOHAMED USATTH 3.A.

Register Number

: MUCA OII

This is to certify that this is a bonafide record of practical work done in the Computer Centre of Jamal Mohamed College, Tiruchirappalli - 20 during the Year 2022 - 2023.

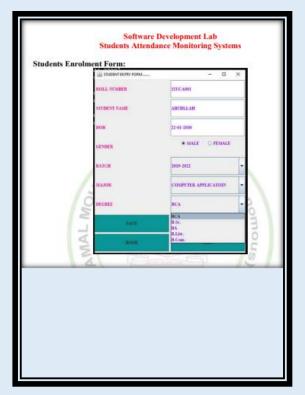
Variation ...

Submitted for the B.C.A Practical Examination held at Jamal Mohamed College, Tiruchirappalli - 20, on 28 - 63 - 2622

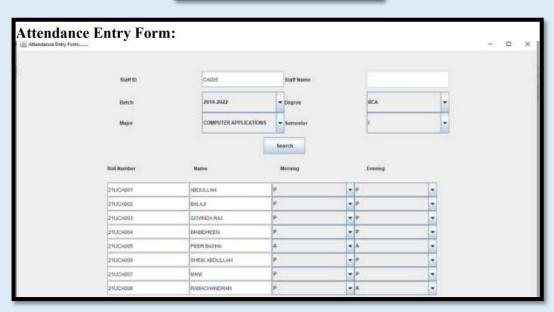
Tiruchirappalli - 20

Date : 28 - 03 - 2022

External Examiner







### Department of Chemistry

### SOURCE APPORTIONMENT AND SEASONAL VARIATION OF PARTICULATE MATTER (PM2,5) IN A TROPICAL CITY, TIRUCHIRAPPALLI

A dissertation Submitted to JAMAL MOHAMED COLLEGE (Autonomous)

Affiliated to the
BHARATHIDASAN UNIVERSITY, TIRUCHIRAPPALLI-620 020

In partial fulfilment of the requirements for the award of the Degree of

MASTER OF SCIENCE IN CHEMISTRY

N. Mohamed Asik Reg No: 20PCH015

Under the guidance of
Dr. M. MOHAMED SIHABUDEEN



Since 1951

#### PG & RESEARCH DEPARTMENT OF CHEMISTRY JAMAL MOHAMED COLLEGE (Autonomous)

College with Potential for Excellence
Accredited (3<sup>rd</sup> Cycle) with 'A' Grade by NAAC
DBT Star College Scheme & DST-FIST Funded
(Affiliated to Bharathidasan University)
Tiruchirappalli- 620 020

May - 2022

# ASSESSMENT OF SOURCE APPORTIONMENT FINE PARTICULATE MATTER (PM2.5) OBSERVATIONS AT URBAN TIRUCHIRAPPALLI DISTRICT

A dissertation Submitted to
JAMAL MOHAMED COLLEGE (Autonomous)

Affiliated to the
BHARATHIDASAN UNIVERSITY, TIRUCHIRAPPALLI-620 020

In partial fulfilment of the requirements for the award of the Degree of

MASTER OF SCIENCE IN CHEMISTRY

Submitted by Stephen Baskar S Reg No: 20PCH057

Under the guidance of Dr. A. Asrar Ahamed



Since 1951

#### PG & RESEARCH DEPARTMENT OF CHEMISTRY JAMAL MOHAMED COLLEGE (Autonomous)

College with Potential for Excellence Accredited (3<sup>rd</sup> Cycle) with 'A' Grade by NAAC DBT Star College Scheme & DST-FIST Punded (Affiliated to Bharathidasan University) Tiruchirappalli- 620 020

May - 2022

# INVESTIGATION OF FOAMING CAPACITIES OF DIFFERENT SOAP

DBT Star College Scheme Under Graduate Group Project

#### Submitted by

Name	Register Number
ABDUL BASITH	18UCH001
M. ABUBAKAR SIDDIQ	18UCH002
AHAMED HUSSEIN V.O.G.	18UCH003
AHAMED UAZ	18UCH004
M. AHAMED SHERIFF	18UCH005

Under the support and guidance of

#### Dr. M. Mohamed Sihabudeen

Associate Professor & Head Department of Chemistry

Interdepartmental Project

Submitted to



Since 195

#### JAMAL MOHAMED COLLEGE (AUTONOMOUS)

College with potential for Excellence Accredited (3rd Cycle) with 'A' Grade by NAAC DBT Star College Scheme & DST-FIST Funded (Affiliated to Bharathidasan University)

TIRUCHIRAPPALLI - 620 020

March - 2021

# ESTIMATION OF ESSENTIAL OIL CONTENT IN CITRUS PEEL DBT Star College Scheme Under Graduate Group Project

#### Submitted by

Name	Register Number
L. IBRAHIM MARAKAYAR	18UCH022
M. ISMAIL ANAS	18UCH023
T. JAWAKAR SRINATH	18UCH024
R. KANNAN	18UCH025
K. KEERTHIVASAN	18UCH026
S. KISHORE	18UCH027

#### Under the support and guidance of

Dr. J. SIRAJUDEEN, M.Sc, M.Phil, B.Ed
Assistant Professor
PG and Research Department of Chemistry
Submitted to



Since 1951

#### JAMAL MOHAMED COLLEGE (AUTONOMOUS)

College with potential for Excellence Accredited (3<sup>rd</sup> Cycle) with 'A' Grade by NAAC DBT Star College Scheme & DST-FIST Funded (Affiliated to Bharathidasan University) TIRUCHIRAPPALLI – 620 020

March - 2021

### Department of Microbiology

1.

#### National Repository for Microalgae and Cyanobacteria – Freshwater (Sponsored by DBT, Govt. of India)

#### Department of Microbiology Bharathidasan University, Tiruchirappalli - 620024 Tamil Nadu, India

#### Certificate



This is to certify that Ms.A.Almas Banu, II-M.Sc Microbiology, Department of Microbiology, Jamal Mohamed College (Autonomous). Tiruchirappalli - 620020, has underwent a training on morphological identification, isolation and culturing techniques of Microalgae and Cyanobacteria. She also got trained in Microscope Handling, DNA isolation, Agarose Gel Electrophoresis and instrumentation techniques (PCR, FT-IR GC, AAS, Ultrasonicator & Lyophilizer) during October 2021 to December 2021 as Internship Trainee at National Repository for Microalgae and Cyanobacteria-Freshwater (Sponsored by DBT, Govt. of India). Department of Microbiology, Bharathidasan, University, Tiruchirappalli-620024, Tamil Nadu, India.

Dr. N. THAUDDIN

Professor, Department of Microbiology
Chair, School of Life Sciences
Principal Investigator
National Repository for Microalgae and Cyanobacteria – Freshwater
(Spensored by DBT, Govt. of India)
Bharathidasan University, Tiruchirappalli- 620924, Tamil Nadu, India

Date: 03rd January 2022

2.

# National Repository for Microalgae and Cyanobacteria – Freshwater (Sponsored by DBT, Govt. of India)



Department of Microbiology Bharathidasan University, Tiruchirappalli - 620024 Tamil Nadu, India

#### **Certificate**



This is to certify that Ms.K.Annalakshmi, II-M.Sc Microbiology, Department of Microbiology, Jamal Mohamed College (Autonomous), Tiruchirappalli – 620020, has underwent a training on morphological identification, isolation and culturing techniques of Microalgae and Cyanobacteria. She also got trained in Microscope Handling, DNA isolation, Agarose Gel Electrophoresis and instrumentation techniques (PCR, FT-IR GC, AAS, Ultrasonicator & Lyophilizer) during October 2021 to December 2021 as Internship Trainee at National Repository for Microalgae and Cyanobacteria-Freshwater (Sponsored by DBT, Govt. of India), Department of Microbiology, Bharathidasan University, Tiruchirappalli-620024, Tamil Nadu, India.

Dr. N. THAJUDDIN

Professor, Department of Microbiology
Chair, School of Life Sciences
Principal Investigator
National Repository for Microalgae and Cyanobacteria – Freshwater
(Sponsored by DBT, Govt of India)
Bharathidasan University, Tiruchirappalli- 620024, Tamii Nadu, India

Date: 03rd January 2022

.

## Department of Botany

### Dr.S.R.Sivakumar, M.Sc., M.Phil., Ph.D.,

Assistant Professor, Department of Botany Bharathidasan University, Trichy-24, Tamilnadu. India



# BONAFIDE CERTIFICATE

This is to certify that the dissertation entitled "Isolation and Characterization of Bacteria from Holdfast of Sargassum wight! Greville" submitted to the Bharathidasan University, is a record of original research work done by Mr. S. Nazeer Ahamed (Roll No: 19PS19701), M.Sc Microbiology (II Year), Jamal Mohamed College (Autonomous), Triuchirappalli-620 020, during January 2021 to March 2021 of him study in the Department of Botany under my supervision and guidance in partial fulfillment of the requirements for the award of the degree of Master of Science in Microbiology. The research work presented in this dissertation has not formed the basis for the award of any degree/Fellowship to any candidate.

Dr.S.R. SIVAKUMAR

(Research Supervisor)

🖣 78680 88513 & 93452 69943 🌑 drsrsivakumar@gmail.com | sivakumar.sr@bdu.ac.in

### BHARATHIDASAN UNIVERSITY



Department of Animal Science School of Life Sciences Palkalaiperur, Tiruchirappalli - 620024 Tamilnadu, India.

Dr. R. THIRUMURUGAN Professor

24.02.2021

#### CERTIFICATE OF INTERNSHIP

This is to certify that Mr. Arjunraj. A, III year, B.Sc., Zoology\_student from Jamal Mohammed College, Tiruchirappalli – 620020 has successfully completed three days internship under DBT-STAR College Scheme from 22.02.2021 to 24.02.2021 in the Department of Animal Science, Bharathidasan University, Tiruchirappalli – 620 024. During this period he learned the basic Techniques of Animal Cell Culture, Animal Handling, Assessment of Estrous Cyclicity and Fish feed preparation, Antimicrobial peptides from fish skin mucus and Nanoparticle toxicity in fish.

(R. THIRUMURUGAN)

PROFESSOR AND HEAD DEPT. OF ANIMAL SCIENCE BHARATHIDASAN UNIVERSITY TIRUCHIRAPPALLI - 920 024

#### Soft Skill

#### JAMAL MOHAMED COLLEGE

#### SOFT SKILLS DEVELOPMENT STUDENT'S WORKBOOK

#### Declaration

I T RAJENTHIRA PRASATH B.SC. C. HEMT STRY R. with register number ... 81VCH.0H.H.

declare that the contents of the work submitted for the external assessment of Soft skills development course are my original work

J. R. Dilosta 2
Signature of the student with date

I \_PY \_ZAHIR HUSSAIN the faculty of soft skills development, ensure that the work submitted by the student is only meant for his/her personal development. No part of this work is revealed without the consent of the student and all confidentiality is maintained

Aslience Signature of the Staff Incharge

#### **UNIT-1 COMMUNICATION SKILLS**

Exercise-1 Which place do you like the most and why? (2.5 marks)

- →School
- →Home
- →Any other place

Home Reason(s): \* A Home is place that gives comfort to overyone. It is because a home is filled With Love and life . Much Like every Lucky passon, Talso have a home and a loving family . Through My Home essay, I will take you through what my home is sike and how much it means to me. \* My home is situated in the city. The Es not too big nor small just the perfect SPZE. My family IPves in the home It comprises of my father, mother, speter

and grand parente. We five in our ancestral home so my home is viringe.

#### UNIT-2 EMOTIONAL SKILLS

Exercise-5 Read the following situations and Write about your feelings at that moment. (3 Marks)

- a) Imagine that you are in a canteen. Your class teacher comes to the canteen to have a cup of tea with his colleague. You greet your teacher with a smile and say "Good morning sir/madam." Your class teacher does not look at you or respond to your greeting.
- \*. I feel Sad because why shouldn't he response to me did I do any woost thing or didn't he know me that I am is his student or the didn't noticed me.
  - b) Imagine that you are working part-time at a Restaurant as a Server. When you approach a table or two in your restaurant, you notice one of the customers ordering very quickly often looks at his watch and seem to be hurried.
- \*. I consider that person who much hurry and I take his order fastly

# UNIT-3 FUNCTIONAL SKILLS

Exercise 9: Imagine a situation where you are going to college by vehicle. Suddenly, middle of nowhere your vehicle tire was punctured; you do have tools for repairing it. Write down the steps to repair the puncture with a real-time photograph. (2.5 marks)

Forst I consider the traveller and shift them into other vehicle than I enquire punchture Repair Shop. I take the treangle that to indicate person at work. I take the fools and put the hydralic jock on pole of the punctured, tyre side. Then I unscrew the type and save the type to the puncture Report Shop. After Repairing the type replace it and screw it or I use the Step tyre and ofter Ct I go to the purcture Shop.



