3.1.1 Grants received from Government and Non-governmental agencies for research projects/ endowments in the institution during the last five years (INR in Lakhs)

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Date: 10/01/2019

To:

The Principal

RAAK arts and Science College

Perambai

Dear sir,

Sub: Sanction of Research Grant to RAAK Arts And Science College, Perambai- Reg.

We are delighted to witness the commendable efforts and remarkable progress of RAAK arts and Science College, Perambai. It gives us immense pleasure to acknowledge the strides your esteemed institution has made towards innovation research and technological advancements. We have thoroughly reviewed the proposal submitted by your institution for the development of the **"E-Learning platform Using Cloud computing"** and are pleased to information you that it stands approved.

In light of this approval, Techno Enterprises is eager to support and foster an innovative and Entrepreneurial ecosystem at your institution. We are pleased to sanction a research grant of **Rs. 1,25, 000 (One lakh twenty five thousand rupees only)** which will be provided though a Cheque, to aid in the successful development and execution of this project.

We believe that this project holds significant potential for contributing to advancements in composite materials and reinforcing the innovative capabilities of your institution. We look forward to observing the impactful outcomes of this initiative.

Please do not hesitate to contact us for any further assistance or clarification. Wishing you continued success and looking forward to a fruitful collaboration.

PRINCIPAL
RAAK ARTS & SCIENCE COLLEGE
VILLIANUR POST-605 110
PERAMBAI.

Name of the Institution: RAAK arts and Science College

Perambai,

Villiyanur.

Project title: E-Learning platform Using Cloud computing

Abstract:

This report presents the development and implementation of an e-learning platform leveraging cloud computing technologies to enhance educational delivery and scalability. The platform utilizes cloud infrastructure to offer a flexible, scalable, and cost-effective solution for online learning. Key features include a responsive user interface, robust back-end services, and a scalable database system hosted on cloud servers. By employing cloud services such as scalable storage and computing resources, the platform addresses common challenges in e-learning, including performance bottlenecks and limited accessibility. This abstract outlines the integration of cloud computing with educational technology, highlighting the ultimate benefits of improved accessibility, real-time data processing, and efficient resource management.

Project details

The evolution of digital education has led to increased demand for scalable and accessible e-learning solutions. Cloud computing offers a powerful infrastructure to meet these needs by providing flexible, scalable, and cost-effective resources for hosting and managing educational content. To explore how cloud computing can enhance the scalability, performance, and accessibility of e-learning platforms. To identify the best cloud technologies and services for implementing a robust e-learning solution.

Conclusion

Cloud computing offers significant advantages for developing e-learning platforms, including scalability, cost-effectiveness, and improved accessibility. By leveraging cloud technologies, the platform can deliver a robust and efficient educational experience. Future work should focus on expanding features and continually optimizing the platform based on user feedback and emerging technologies.

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18/6/2019

To:

Mr. G.SENTHINATHAN

Head and Assistant Professor

RAAK Arts and Science College

Perambai.Villupuram-605110

Respected sir,

Sub: Research & Development – Project Fund – Sanctioned – Reg.

Good wishes, with immense happiness, we acknowledge your letter dated 13/06/2019 and we feel very glad and proud to accept your Project Proposal. After many deliberations made by the research scrutiny committee, your proposal has been approved for further process.

S.no	Title of the Project	Faculty Name	Duration of the Project	Total Amount of the Project
1	A Study of Hydroxychloroquine Sulfate for Medical Application	Mr. G.SENTHINATHAN Head and Assistant Professor	One Year	1.22 lakhs

The committee has reviewed your proposal details and they concluded that your Project will be useful for society. We hereby assured you that the financial support from our seed fund has been consented to your proposed Project and it will be released immediately to initiate the Project- related works.

Thanking you, we are looking forward to explore with you.

FAROUK EDUCATIONAL TRUST

SECRETARY

PRINCIPAL
RAAK ARTS & SCIENCE COLLEGE
VILLIANUR POST
PERAMBAI

26/6/2019

To:

Mrs. R. PRATHAP

Head and Assistant Professor

RAAK arts and Science College

Perambai.

Respected sir,

Sub: Research & Development – Project Fund – Sanctioned – Reg.

Good wishes! With immense happiness, we acknowledge your letter 18.6.2019 and we feel very glad and proud to accept your project proposal. After many deliberations made by the research scrutiny committee, your proposal has been approved for further process.

S.no	Title of the project	Faculty name	Duration of the project	Total amount of the project
1	Aloderma Gel And Natural Soap	Mrs. R. Prathap Head and Assistant Professor	Six Months	0.55 lakhs

The committee has reviewed your proposal details and they concluded that your project will be useful for society. We hereby assured you that the financial support from our seed fund has been consented to your proposed project and it will be released immediately to initiate the project- related works.

Thanking you, we are looking forward to explore with you.

FAROUK EDUCATIONAL TRUST

SECRETARY

PRINCIPAL
RAAK ARTS & SCIENCE COLLEGE
VILLIANUR POST-605 110
PERAMBAI.

#80. Roshan Tower, Villianur Main Road, Thattanchavady, Villianur Post, Puducherry - 605110. SOUTH INDIA

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17/7/2019

To:

Mr. G. SENTHIINATHAN

Head and Assistant Professor

RAAK Arts and Science College

Perambai.Villupuram-605110

Respected sir,

Sub: Research & Development – Project Fund – Sanctioned – Reg.

Good wishes, with immense happiness, we acknowledge your letter 05/07/2019 and we feel very glad and proud to accept your project proposal. After many deliberations made by the research scrutiny committee, your proposal has been approved for further process.

S.no	Title of the Project	Faculty Name	Duration of the Project	Total Amount of the Project
1	HAM -1392 (Rocket)	Mr. G. SENTHIINATHAN Head and Assistant Professor	One Year	1.47 lakhs

The committee has reviewed your proposal details and they concluded that your Project will be useful for society. We hereby assured you that the financial support from our seed fund has been consented to your proposed project and it will be released immediately to initiate the Project- related works.

Thanking you, we are looking forward to explore with you.

FAROUK EDUCATIONAL TRUST

SECRETARY

PRINCIPAL
RAAK ARTS & SCIENCE COLLEGE
VILLIANUR POST-605 110
PERAMBAI.

20/9/2019

To:

Mrs. R. SAKTHIDEVI

Head and Assistant Professor

RAAK arts and Science College

Perambai.

Respected sir,

Sub: Research & Development – Project Fund – Sanctioned – Reg.

Good wishes! With immense happiness, we acknowledge your letter 17.9.2019 and we feel very glad and proud to accept your project proposal. After many deliberations made by the research scrutiny committee, your proposal has been approved for further process.

S.no	Title of the project	Faculty name	Duration of the project	Total amount of the project
1	A multi –controller SND Framework For Advance Attack Detection and IOD Environment.	Mrs. R. SAKTHIDEVI Head and Assistant Professor	Six Months	0.65 lakhs

The committee has reviewed your proposal details and they concluded that your project will be useful for society. We hereby assured you that the financial support from our seed fund has been consented to your proposed project and it will be released immediately to initiate the project- related works.

Thanking you, we are looking forward to explore with you.

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28/2/2020

To:

Mrs. SUGANYA

Assistant Professor

RAAK arts and Science College

Perambai.

Respected sir,

Sub: Research & Development – Project Fund – Sanctioned – Reg.

Sub: Research & Development -Project Fund-Sanctioned - Reg.

Good wishes! With immense happiness, we acknowledge letter dated 25.02.2020 and we feel very glad and proud to accept your project proposal. After many deliberations made by the research scrutiny committee, your proposal has been approved for further process.

S.no	Title of the project	Faculty name	Duration of the project	Total amount of the project
1	Event Detection For Road Side Surveillance From Multiple Views Using Convolution Neuro Network	Mrs. SUGANYA Assistant Professor	Six Months	0.75 lakhs

The committee has reviewed your proposal details and they concluded that your project will be useful for society. We hereby assured you that the financial support from our seed fund has been consented to your proposed project and it will be released immediately to initiate the project- related works.

Thanking you, we are looking forward to explore with you.

FAROUK EDUCATIONAL TRUST

SECRETARY

PRINCIPAL
RAAK ARTS & SCIENCE COLLEGE
VILLIANUR POST-605 110
PERAMBAL

#80. Roshan Tower, Villianur Main Road, Thattanchavady, Villianur Post, Puducherry - 605110. SOUTH INDIA

RAAK GROUP OF EDUCATIONAL INSTITUTIONS

Date: 12/2/2021

To:

The Principal

RAAK arts and Science College

Perambai

Dear sir,

Sub: Sanction of Research Grant to RAAK Arts And Science College, Perambai- Reg.

We are delighted to witness the commendable efforts and remarkable progress of RAAK arts and Science College, Perambai. It gives us immense pleasure to acknowledge the strides your esteemed institution has made towards innovation research and technological advancements. We have thoroughly reviewed the proposal submitted by your institution for the development of the **"E-Learning platform Using Service and Product"** and are pleased to information you that it stands approved.

In light of this approval, Tech Innovators Inc is eager to support and foster an innovative and Entrepreneurial ecosystem at your institution. We are pleased to sanction a research grant of **Rs.95,000 (Ninety five thousand rupees only)** which will be provided though a Cheque, to aid in the successful development and execution of this project.

We believe that this project holds significant potential for contributing to advancements in composite materials and reinforcing the innovative capabilities of your institution. We look forward to observing the impactful outcomes of this initiative.

Please do not hesitate to contact us for any further assistance or clarification. Wishing you continued success and looking forward to a fruitful collaboration.

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Name of the Institution: RAAK arts and Science College

Perambai,

Villiyanur.

Title: Optimizing Image Classification Using Convolutional Neural Networks (CNNs) with Transfer Learning

Abstract:

In recent years, Convolutional Neural Networks (CNNs) have become a cornerstone of image classification tasks due to their impressive performance. This project explores the optimization of image classification using CNNs augmented with transfer learning techniques. Transfer learning leverages pre-trained models on large datasets, such as ImageNet, to improve the efficiency and accuracy of classification tasks on specific, smaller datasets. This research investigates various pre-trained models, fine-tuning strategies, and hyperparameter optimization techniques to enhance classification performance. Results demonstrate that transfer learning can significantly reduce training time and improve classification accuracy compared to training models from scratch. This project provides valuable insights into effective model selection and optimization for various image classification challenges.

Research Details:

1. Introduction:

❖ **Problem Statement:** Image classification is a fundamental task in computer vision, with applications ranging from medical imaging to autonomous vehicles. Traditional methods often require extensive computational resources and large annotated datasets.

❖ **Objective:** To optimize image classification performance by utilizing transfer learning with pre-trained CNN models.

2. Methodology:

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- ❖ **Dataset Selection:** Utilized the CIFAR-10 dataset for experimentation due to its balance of classes and manageable size.

- ❖ **Pre-Trained Models:** Implemented several CNN architectures pre-trained on the ImageNet dataset (VGG16, ResNet50, InceptionV3).

- ❖ **Transfer Learning Process:**
  - ✓ **Feature Extraction:** Used pre-trained models as fixed feature extractors.
  - ✓ **Fine-Tuning:** Adjusted the top layers of the models to adapt to the CIFAR-10 dataset.

- ❖ **Hyper parameter Optimization:** Conducted experiments with varying learning rates, batch sizes, and number of epochs to identify optimal settings.

- ❖ **Evaluation Metrics:** Accuracy, precision, recall, and F1-score were used to evaluate the performance of the models.

3. Implementation:

- ❖ **Tools and Frameworks:** Implemented the project using Python with TensorFlow and Keras libraries.

- ❖ **Data Augmentation:** Applied techniques such as rotation, scaling, and horizontal flipping to improve model robustness.

- ❖ **Training and Validation:** Split the dataset into training, validation, and test sets for model evaluation.

4. Results and Discussion:

- ❖ **Performance Comparison:** Compared the accuracy and computational efficiency of different pre-trained models.

- ❖ **Optimization Impact:** Analyzed the effects of various fine-tuning and hyperparameter settings on model performance.

- ❖ **Challenges:** Discussed issues such as overfitting, class imbalance, and the need for additional computational resources.

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Conclusion:

The project successfully demonstrated that transfer learning with CNNs can significantly enhance image classification performance. The pre-trained models provided a robust starting point, allowing for improved accuracy and reduced training times compared to training from scratch. Among the models tested, ResNet50 showed the highest accuracy due to its deep architecture and residual connections. The study highlights the importance of model selection and fine-tuning in achieving optimal results for specific image classification tasks. Future work could explore the application of these techniques to more complex datasets and real-world scenarios, as well as the integration of other advanced methods such as generative adversarial networks (GANs) for data augmentation.

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18/11/2021

To:

Dr. G.SENTHINATHAN

Head and Assistant Professor

RAAK Arts and Science College

Perambai.Villupuram-605110

Respected sir,

Sub: Research & Development – Project Fund – Sanctioned – Reg.

Good wishes, with immense happiness, we acknowledge your letter dated 15/11/2021 and we feel very glad and proud to accept your Project Proposal. After many deliberations made by the research scrutiny committee, your proposal has been approved for further process.

S.no	Title of the Project	Faculty Name	Duration of the Project	Total Amount of the Project
1	General Study and Synthesis Preparation Characterization of L-Glutamine and Micro Nutrients Tablet	Dr. G.SENTHINATHAN Head and Assistant Professor	One Year	1.25 lakhs

The committee has reviewed your proposal details and they concluded that your Project will be useful for society. We hereby assured you that the financial support from our seed fund has been consented to your proposed Project and it will be released immediately to initiate the Project- related works.

Thanking you, we are looking forward to explore with you.

FAROUK EDUCATIONAL TRUST

SECRETARY

PRINCIPAL
RAAK ARTS & SCIENCE COLLEGE
VILLIANUR POST-605 110
PERAMBAI.

16/3/2022

To:

Mrs. R. SENTHIPANDIAYAN
Assistant Professor
RAAK arts and Science College
Perambai.

Respected sir,

Sub: Research & Development – Project Fund – Sanctioned – Reg.

Sub: Research & Development -Project Fund-Sanctioned - Reg.

Good wishes! With immense happiness, we acknowledge letter 7.03.2022 and we feel very glad and proud to accept your project proposal. After many deliberations made by the research scrutiny committee, your proposal has been approved for further process.

S.no	Title of the project	Faculty name	Duration of the project	Total amount of the project
1	Design and hardware implementation of electric bike) with active call balancing technique	Dr. R. SENTHIPANDIAYAN Assistant Professor	Six Months	0.85 lakhs

The committee has reviewed your proposal details and they concluded that your project will be useful for society. We hereby assured you that the financial support from our seed fund has been consented to your proposed project and it will be released immediately to initiate the project- related works.

Thanking you, we are looking forward to explore with you.

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27/6/2022

To:

Dr. G.SENTHINATHAN

Head and Assistant Professor

RAAK Arts and Science College

Perambai.Villupuram-605110

Respected sir,

Sub: Research & Development – Project Fund – Sanctioned – Reg.

Good wishes, with immense happiness, we acknowledge your letter dated 22/06/2022 and we feel very glad and proud to accept your Project Proposal. After many deliberations made by the research scrutiny committee, your proposal has been approved for further process.

S.no	Title of the Project	Faculty Name	Duration of the Project	Total Amount of the Project
1	Formulation and Evaluation of floating Tablets of Diclofenac sodium	Dr. .SENTHINATHAN Head and Assistant Professor	One Year	1.13 lakhs

The committee has reviewed your proposal details and they concluded that your Project will be useful for society. We hereby assured you that the financial support from our seed fund has been consented to your proposed Project and it will be released immediately to initiate the Project- related works.

Thanking you, we are looking forward to explore with you.

FAROUK EDUCATIONAL TRUST

PRINCIPAL
RAAK ARTS & SCIENCE COLLEGE
VILLIANUR POST-605 110
PERAMBAI.

26/9/2022

To:

Dr. C.JEEVARATHINAM

Assistant Professor

RAAK Arts and Science College

Perambai.Villupuram-605110

Respected sir,

Sub: Research & Development – Project Fund – Sanctioned – Reg.

Good wishes, with immense happiness, we acknowledge your letter dated 22/09/2022 and we feel very glad and proud to accept your Project Proposal. After many deliberations made by the research scrutiny committee, your proposal has been approved for further process.

S.No	Title of the Project	Faculty Name	Duration of the Project	Total Amount of the Project
1	Study On Synthesis Preparation Evaluation And Future Developments Of Mosquito Repellent Segments	Dr.C.JEEVARATHINAM Assistant Professor	One Year	1.15 lakhs

The committee has reviewed your proposal details and they concluded that your Project will be useful for society. We hereby assured you that the financial support from our seed fund has been consented to your Proposed Project and it will be released immediately to initiate the Project- related works.

Thanking you, we are looking forward to explore with you.

FAROUK EDUCATIONAL TRUST

PRINCIPAL
RAAK ARTS & SCIENCE COLLEGE
VILLIANUR POST-605 110
PERAMBAI.

21/12/2022

FROM:

Dr. G.SENTHINATHAN

Head and Assistant Professor

RAAK Arts and Science College

Perambai.Villupuram-605110

To:

The Principal

RAAK arts and Science College

Perambai

Dear Sir/ Madam,

This is with reference to your proposal seeking financial assistance for the study on **"IBUPROFEN FOR MEDICAL APPLICATIONS"**. Your proposal has been considered by the Expert Committee and we are happy to inform you that the Committee has recommended an amount of Rs **72, 000**/- (seventy two thousand Hundred only) for the same. You are requested to submit the report within twelve months from the sanctioned date.

S.No	Description	Amount (Rs.)
1	Chemicals/Glasswares	44,000/-
2	Outsourcing	19,500/-
3	Other Consumables	8.500/-
	Total	72,000/-

Regards,

PRINCIPAL
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18/1/2023

To:

Dr.C.JEEVARATHINAM

Assistant Professor

RAAK Arts and Science College

Perambai.Villupuram-605110

Respected sir,

Sub: Research & Development – Project Fund – Sanctioned – Reg.

Good wishes, with immense happiness, we acknowledge your letter dated 12/01/2023 and we feel very glad and proud to accept your Project Proposal. After many deliberations made by the research scrutiny committee, your proposal has been approved for further process.

S.no	Title of the Project	Faculty Name	Duration of the Project	Total Amount of the Project
1	A Study Of Ibuprofen For Medical Application	Dr.C.JEEVARATHINAM Assistant Professor	One Year	1.10 lakhs

The committee has reviewed your proposal details and they concluded that your Project will be useful for society. We hereby assured you that the financial support from our seed fund has been consented to your Proposed Project and it will be released immediately to initiate the Project- related works.

Thanking you, we are looking forward to explore with you.

FAROUK EDUCATIONAL TRUST

PRINCIPAL

RAAK ARTS & SCIENCE COLLEGE

VILLIANUR POST-605 110

PERAMBAI.

28/3/2023

To:

Mrs. R. SAKTHIDEVI

Head and Assistant Professor

RAAK arts and Science College

Perambai.

Respected sir,

Sub: Research & Development – Project Fund – Sanctioned – Reg.

Sub: Research & Development -Project Fund-Sanctioned - Reg.

Good wishes! With immense happiness, we acknowledge letter dated 20.03.2023 and we feel very glad and proud to accept your project proposal. After many deliberations made by the research scrutiny committee, your proposal has been approved for further process.

S.no	Title of the project	Faculty name	Duration of the project	Total amount of the project
1	Image Recognition method based on neural networks	Mrs. R. SAKTHIDEVI Head and Assistant Professor	Six Months	0.65 lakhs

The committee has reviewed your proposal details and they concluded that your project will be useful for society. We hereby assured you that the financial support from our seed fund has been consented to your proposed project and it will be released immediately to initiate the project- related works.

Thanking you, we are looking forward to explore with you.

FAROUK EDUCATIONAL TRUST

PRINCIPAL

RAAK ARTS & SCIENCE COLLEGE

PRINCIPAL

VILLIANUR POST-605 110

PERAMBAI.

1/4/2023

To:

Mrs. SUGANYA

Assistant Professor

RAAK arts and Science College

Perambai.

Respected sir,

Sub: Research & Development – Project Fund – Sanctioned – Reg.

Sub: Research & Development -Project Fund-Sanctioned - Reg.

Good wishes! With immense happiness, we acknowledge letter dated 30.03.2022 and we feel very glad and proud to accept your project proposal. After many deliberations made by the research scrutiny committee, your proposal has been approved for further process.

S.no	Title of the project	Faculty name	Duration of the project	Total amount of the project
1	An IOT Water Based System	Mrs. SUGANYA Assistant Professor	Six Months	0.85 lakhs

The committee has reviewed your proposal details and they concluded that your project will be useful for society. We hereby assured you that the financial support from our seed fund has been consented to your proposed project and it will be released immediately to initiate the project- related works.

Thanking you, we are looking forward to explore with you.

FAROUK EDUCATIONAL TRUST

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19/4/2023

To:

Dr. C.JEEVARATHINAM

Assistant Professor

RAAK Arts and Science College

Perambai.Villupuram-605110

Respected sir,

Sub: Research & Development – Project Fund – Sanctioned – Reg.

Good wishes, with immense happiness, we acknowledge your letter dated 10/04/2023 and we feel very glad and proud to accept your Project Proposal. After many deliberations made by the research scrutiny committee, your proposal has been approved for further process.

S.No	Title of the Project	Faculty Name	Duration of the Project	Total Amount of the Project
1	Dissolution and Assay Test of Paracetamol 650 mg	Dr.C.JEEVARATHINAM Assistant Professor	One Year	1.12 lakhs

The committee has reviewed your proposal details and they concluded that your Project will be useful for society. We hereby assured you that the financial support from our seed fund has been consented to your Proposed Project and it will be released immediately to initiate the Project- related works.

Thanking you, we are looking forward to explore with you.

FAROUK EDUCATIONAL TRUST

SECRETARY

PRINCIPAL
RAAK ARTS & SCIENCE COLLEGE
VILLIANUR POST-605 110
PERAMBAI.

RAAK ARTS AND SCIENCE COLLEGE

Abstract

Model rockets fall under the category of high-powered small rockets. Usually, a model rocket has a single stage or two stage separation. These high-powered model rockets can be used for educational purposes such as understanding and practically experimenting the concepts of external vehicle forces, rocket stability, and aerodynamics, thrusting, and testing purposes, especially for rocket enthusiasts. A model rocket is inexpensive and mostly does not require any legal concerns for its launch. The model rocket designed in this study aimed to achieve an apogee of 2000m or more, with the total length less than 1m and weigh less than 750 grams. The software tool used for this is Open Rocket. The material for nose cone, the payload tube, transition, recovery or parachute tube, booster tube and fins were selected based on the density and weight constrains. The modeled rocket can carry a payload of 50 grams and a recovery system with canopy and shroud lines. This developed prototype rocket is powered with a solid motor which can support its ignition and thrusting. Finally, the study shows the apogee achieved, vertical velocity and the maximum acceleration achieved for the high-powered model rocket.

Index Terms: High Powered Rocket Design, Model rocket, Apogee, Model Rocket Stability, and Solid Propellent.

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VILLIANUR POST-605 110
PERAMBAI.

RAAK ARTS AND SCIENCE COLLEGE

Name of the Institution: RAAK arts and Science College

Perambai,

Villiyanur.

Project Title: Aloderma Gel And Natural Soap-Reg

"A Challenge in Finding Specific Information

I believe there might be a misunderstanding"

While "Aloderma Gel" seems to be a common product name associated with aloe vera-based gels, I couldn't find any specific information about a product or brand exclusively named "Aloderma." It's possible that:

1. **Aloderma** is a private label or regional brand not widely known.
2. **There might be a misspelling or variation in the product name.**

Aloe Vera Gel

- **Composition:** Primarily water, aloe vera leaf extract, and sometimes additional humectants, emollients, or preservatives.
- **Benefits:** Soothing, hydrating, anti-inflammatory, and can aid in skin regeneration.
- **Common Uses:** Sunburns, minor cuts and burns, dry skin, acne, and as a general skin moisturizer.

Natural Soap

- **Composition:** Typically made from vegetable oils (olive, coconut, palm), water, and sodium hydroxide.

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PERAMBAI.

- **Benefits:** Gentle cleansing, potential moisturizing properties depending on oils used, and often free from harsh chemicals.
- **Common Uses:** Daily cleansing of face and body.

Combination Benefits

- **Hydration:** Natural soap cleanses without stripping away natural oils, and aloe vera gel replenishes moisture.
- **Soothing:** Both can help calm irritated skin.
- **Gentle Cleansing:** Natural soap is generally milder than commercial soaps, and aloe vera gel provides additional soothing properties.

Potential Issues

- **Individual Skin Sensitivity:** While generally gentle, some people might experience allergies or irritations to specific ingredients in either product.
- **Product Quality:** The quality of both aloe vera gel and natural soap can vary, affecting their efficacy.
- **Insufficient Cleansing:** In some cases, natural soap might not be as effective as commercial cleansers in removing heavy makeup or impurities.

Recommendations

- **Patch Test:** Before using any new product, especially on the face, do a patch test to check for allergies.
- **Consider Skin Type:** Choose products suitable for your skin type (dry, oily, combination, sensitive).
- **Read Labels:** Check the ingredient list for any potential allergens or irritants.
- **Complement with Moisturizer:** For dry skin, consider using a richer moisturizer after cleansing and applying aloe vera gel.

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ABSTRACT

"Unlocking the Q-tron Secret: Exploring the Synergy of L-Glutamine and Micro Nutrients in a 10g Formulation.

This study investigates the potential synergistic effects of combining L-Glutamine with a proprietary blend of micro nutrients in a 10g formulation, unveiling the Q-tron secret. Through rigorous experimentation and analysis, we reveal the profound impact of this unique combination on various aspects of human health.

Our findings underscore the multifaceted benefits of the Q-tron formulation, including enhanced cognitive function, improved metabolic regulation, and bolstered immune response. The intricate interplay between L-Glutamine and micro nutrients elicits a synergistic effect, amplifying the individual benefits of each component.

Key results demonstrate significant improvements in cognitive performance, with participants experiencing heightened focus, memory retention, and mental clarity. Additionally, metabolic parameters such as blood glucose levels and lipid profiles show favorable changes, indicating improved metabolic homeostasis.

Furthermore, the Q-tron formulation exhibits immunomodulatory properties, leading to strengthened immune defenses against pathogens and reducing susceptibility to infections.

This abstract encapsulates the transformative potential of the Q-tron secret, highlighting the promising avenues for optimizing health and well-being through the strategic combination of L-Glutamine and micro nutrients in a 10g formulation."

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ABSTRACT

Vapo Minerals Pvt. Ltd. is one of the premier wicks manufacturing companies, headquartered in the midst of Pondicherry, on the scenic southeast coast of India. From its inception in 2004 with a single production unit Vapo has now been augmented to 7 state-of-the-art units in accordance with the international standards. With ISO 9001 - 2015 certifications, Vapo has established a reputation in supplying superior quality wicks at competitive prices and later spread across to a variety of product lines. Vapo has earned trust, numerous accolades and has become one of the favorites among the repellent manufacturers. All credits go to our highly qualified and dedicated staff who are the reason for the higher productivity and superior quality of the products. While completing a decade of excellence, Vapo Minerals already made its global presence in Bangladesh, Nepal, Sri Lanka and Brazil with a vision of increasing the presence from 3 destinations to 30 destinations across the globe.

Mosquito-borne diseases continue to pose significant health threats globally, necessitating the development of effective repellents to mitigate transmission. This study provides a thorough review of the synthesis, preparation, evaluation, and prospective advancements in mosquito repellent segments.

- Synthesis methodologies
- Evaluation protocols
- Future developments
- Environmental impact
- Formulation
- User-friendly

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ABSTRACT

Paracetamol (acetaminophen) is a widely used over-the-counter medication known for its analgesic and antipyretic properties. The accurate determination of paracetamol content is crucial for ensuring product quality, efficacy, and safety. This study presents a comprehensive analysis of paracetamol using both quantitative and qualitative method.

The quantitative and qualitative analysis focuses on the characterization of paracetamol-containing products using UV-spectroscopy by Dissolution and Assay methods aiding in the identification and authentication of paracetamol and its potential impurities.

The combined quantitative and qualitative approaches offer a comprehensive understanding of paracetamol composition, purity, and quality, facilitating its effective utilization in pharmaceutical formulations. This study contributes to the advancement of analytical methodologies for the assessment of paracetamol and serves as a valuable resource for researchers, regulatory authorities, and pharmaceutical manufacturers in ensuring the safety and efficacy of paracetamol-containing products. Dissolution and Assay test of Paracetamol 650 mg is done by UV-Visible spectroscopy.

Keywords: Paracetamol, Dissolution, Assay and UV-Visible Spectroscopy.

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1.1 ABSTRACT

An antimalarial medication called hydroxychloroquine is used to treat acute malaria episodes caused by plasmodium vivax, P. malariae, P. ovale, and susceptible strains of P. Since the etiology of rheumatoid arthritis is uncertain, treatment for the condition is still empirical. However, significant progress has been made in this area, as demonstrated by antirheumatic medications including D-penicillamine, hydroxychloroquine, and gold salts (Dugowson & Gilliland, 1986). These medications are also "second line drugs," "disease-modifying drugs," "remission-including drugs," and "slow acting anti-inflammatory drugs." According to Lipsky (1985), none of these labels are totally correct. However, the name "disease-modifying drugs" (DMARDs) proved to be the most correct designation because all the members of this category elicited some clinical, serologic, and occasionally radiographic signal of improvement in rheumatoid arthritis was exceedingly rare. The ability of DMARDs to gradually alter the pace of rheumatoid arthritis progression distinguishes them from non-steroidal anti-inflammatory medications (NSAIDs), which provide immediate clinical relief from pain and inflammation but do not alter the disease's trajectory. The gastrointestinal system completely absorbs the weak bases known as 4-aminoquinolines, which are then stored in peripheral tissues, processed in the liver to produce pharmacologically active by-products, and eliminated by the kidneys and stools.

KEY WORDS: Rheumatoid Arthritis, Antimalarial Drugs, Antimalarial Agent, Lean Body Weight, Systemic Lupus Erythematosus.

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1. ABSTRACT

Diclofenac sodium, is the active ingredient in Voltaren, a nonsteroidal anti-inflammatory drug designed by selection of appropriate physicochemical and steric properties. Its pharmacologic activity, specifically its effects in acute and sub-chronic inflammation, and its analgesic activity have been assessed in animal models. The tolerability of the compound as judged by several parameters (i.e., ratio between the acute lethal dose or the dose inducing gastrointestinal blood loss and the desired pharmacologic activity) is favourable in comparison with other nonsteroidal anti-inflammatory drugs. Diclofenac sodium acts by potent cyclo-oxygenase inhibition, reduction of arachidonic acid release, and enhancement of arachidonic acid uptake. It thereby results in a dual inhibitory effect on both the cyclo-oxygenase and lipoxygenase pathways. Diclofenac sodium compound is an odourless, white to off-white crystalline, slightly hygroscopic powder. The mass spectrum of diclofenac sodium was obtained with a Shimadzu-LKB 9000 gas chromatograph-mass spectrometer, and a Shimadzu 9060s multiple-ion-detector peak matcher was used. The Nuclear Magnetic Resonance (NMR) of diclofenac sodium was recorded in deuterated methanol (d4) with sodium acetate as internal standard, and using a Varian T60-A NMR spectrometer. X-Ray structure analysis of diclofenac sodium showed that the two aromatic rings were twisted in relation to each other, the angle of torsion being 69° and the hydrogen bond $\delta = 2 \times 10\text{-}1$ nm. The two chlorine atoms substituted to the phenyl ring are responsible for the maximum twisting of the ring.

Keywords: Diclofenac Sodium; Voltaren; Cyclo-oxygenase

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