



P.K.M. COLLEGE OF EDUCATION

MADAMPAM, KAITHAPRAM PO, KANNUR-670631, Website-www.pkmcollege.org Govt. Aided Teacher Education Institution affiliated to Kannur University Recognized by NCTE and included under UGC 2(f) & 12B category Accredited by NAAC with 'A' Grade, RUSA 2.0 beneficiary

PROGRAMME PORTFOLIO

DEPARTMENT OF NATURAL SCIENCE
2022-2023



DEPARTMENT OF NATURAL SCIENCE

ACTIVITY REPORT 2022-2023

Objectives

- To acquaint with the theoretical back ground in teaching learning process.
- Develop skills in teaching like skill of introducing a lesson, skill of explanation, illustrating with examples, class management, skill of questioning, skill of board writing, skill of using learning aids, teaching methods, class management, organizing different school activities etc.
- Develop research skills and research culture among the student teachers by preparing and publishing field manuals, books, booklets etc.
- Develop competent natural science teachers with subject competency, organization skills, communication skills, ICT Skills, leadership quality, laboratory skills, skills in organizing different curricular and co-curricular activities etc.
- Develop socially committed Natural science teachers with scientific sensitivity, attitude interest and creativity in all works and activities.
- Student teachers get critical thinking, analytical skill, creativity skills, organization skills, leadership quality etc. through different co-curricular activities such as role play, projects, seminars etc.
- The student teacher develops presentation skills and communication skills through different presentations and seminars.
- By doing outdoor activities like project, surveys helps the learner to get opportunity to spend with nature and gain naturalistic intelligence.
- By organizing different webinars and programmes the students develop different skills organizing and executing different activities and programmes.

Strategic plan

- By different sessions the student teachers will get critical thinking, analysis, creativity skills, organizing skills , develops ways of expression, communication skills etc.
- Through the different projects the student teachers get opportunity to develop research skills, leadership skill, co-operation, organization skill, interpersonal skill, collection of data, analysis, interpretation, report writing etc.
- By preparing science related albums the student teachers will get skills in collecting data, analyzing, organizing, presenting and reporting etc.
- Surveys, field trips project works etc. were also helps the student teachers to acquire different skills.
- Seminars and presentations will improve the presentation skills and confidence among the student teachers.
- Both theoretical and practical curricular and co-curricular activities definitely develop different skills and this makes efficient natural science teachers with ethics and positive attitude.

Course learning outcomes

- By theoretical activities, discussions, demonstrations, panel discussions, online teaching etc. student teachers get a sound knowledge on the theoretical back ground of the teaching learning processes, become subject competent.
- By the practical sessions such as microteaching discussion, demonstration and criticism lessons the student teachers develop different skills in teaching learning process, student management , class management, organizing different programmes, science clubs, exhibitions, games, conducting projects, role plays debates and several curricular and co-curricular activities.

- By preparing science related albums the student teachers develop skills in collecting data, writing skills, skills in analysis, organizing skills, editing skills etc.
- By doing action research and preparing articles and presenting papers the student teachers develop research skills.
- By conducting survey, field trips, projects the student teachers get deeper knowledge in different methods and acquire different skills such as leadership skills, interpersonal skills, data analysis, interpretation etc.
- By doing environment related activities the student teachers develop naturalistic consciousness.

Activities planned

- Magazine
- Biological album
- Publications
- Project
- Seminar
- Paper presentations
- Assignments
- Webinar
- Day observance
- Ecofriendly activities
- Content analysis
- Practical records

- Discussion, demonstration and criticism. Sessions.
- Teaching aids preparation
- Action research
- Resource unit
- School internship.

Many curricular and co-curricular activities were done by the Natural Science department.
The details were given below

WORLD ENVIRONMENT DAY

World Environment day was celebrated on 6th June 2022. Different programmes and competitions such as planting tree saplings, leaf identification competition, seed identification competition etc. were conducted.

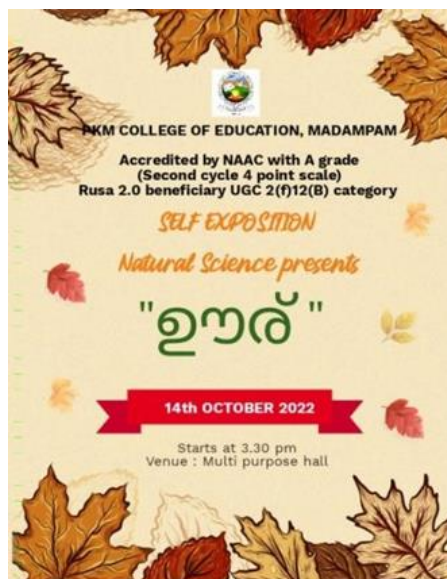




Tree saplings were planted in the campus. All students and faculties were participated in the same. After that different competitions were conducted like leaf identification and seed identification. 20 leaves of different plants were placed and conducted leaf identification competition. After this 19 seeds were placed for identification. Students were participated enthusiastically. After the competition student co-ordinators explained the different types of plants and seeds and methods used for their identification.



SELF EXPOSITION

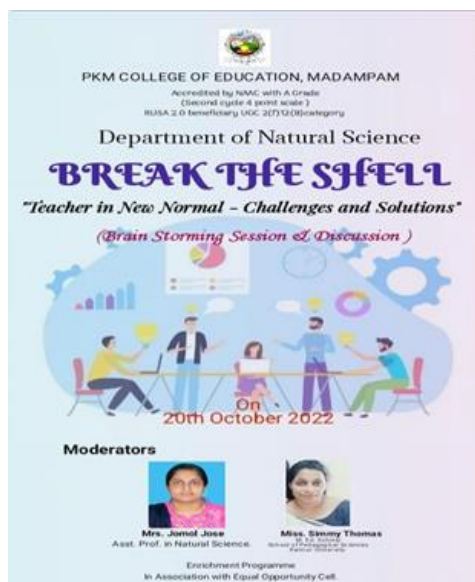


The Self Exposition Program named “Ooru” by the 1st year B.Ed. Natural Science students was held on 14th October 2022 at 03.30 pm in the multipurpose hall of P. K. M. College of Education, Madampam. The aim of the program was to introduce students’ abilities and promote their unity in classrooms. The program started with the entry of Mr. Hariprasad N. as a YouTube blogger into a forest and the students introduced themselves. Then the team performed a folksong followed by kadhaprasangam of Ms. Anju M J and mappilapattu of Ms. Sahala Yasmin K. Individual songs were also sang in between by Ms. Sreelakshmi V P, Ms. Linet Treesa Mathew and Ms. Aiswarya P.V. Topics related to the subject were added in between the act by Ms. Sheethal C. and Ms. Blessy Joy. The program ended with a group dance and at last a message was also given about the need for conservation of nature. The session was concluded at 4.15 pm by Sr. Caroline, Asst. Prof. in Malayalam who gave the feedback about the whole programme.





BRAINSTORMING SESSION



SESSION 1

A brainstorming session named "Break the shell" was conducted by the Department of Natural Science on 20th October, 11:00 a.m. at the Natural Science classroom cum methodology lab. The objectives of the program were to find solutions for stage fear, lack of confidence, and lack of communication. The session was moderated by Mrs. Jomol Jose, Assistant professor in natural science, and Miss Simmi Thomas, M.Ed. scholar at the School of Pedagogical Sciences at Kannur University. The student teachers of natural science were actively participated in the session.

The solutions put forward by the participants in the case of stage fear include utilizing opportunities, planning, and preparation, getting familiarized with the environment, Realize your strength and weakness, visualizing success, self-motivation, practice, don't stick onto the mistakes. For lack of confidence, the solutions suggested were preparation and planning, optimism, self-motivation, communication skills, find a resource person. Saying what you know, keeping a rapport with the audience, and improving other languages, were the solutions proposed for improving communication proficiency. The moderators concluded and suggested additional solutions for each problem. The first session came to an end at 12:30 p.m.

SESSION 2

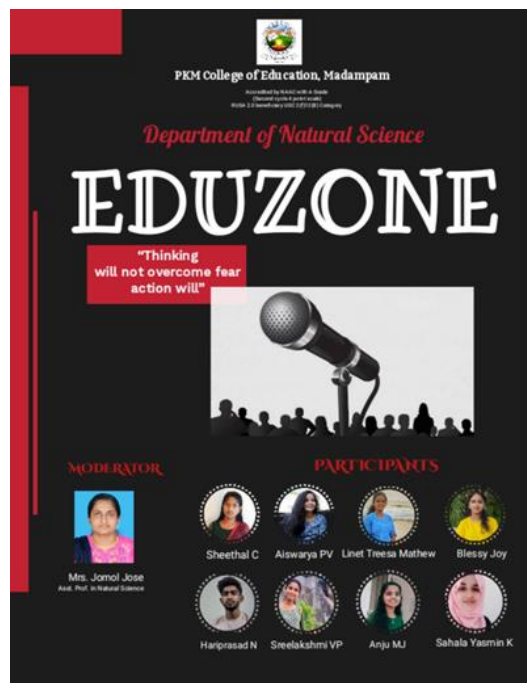
The brainstorming session 2 was conducted on 21 October 2022, 1 30 PM. The session was moderated by Mrs. Jomol Jose, Assistant professor in Natural science. The main objectives of session 2 were lack of subject knowledge and Technical skills proficiency.

The solutions put forward by the participants in the case of lack of subject knowledge were prepare content in-depth, study at the application level, update knowledge, share knowledge with others, use other media, test ourselves, attend seminars, and other classes, and refer to many textbooks and foreign authors. For lack of technical skills proficiency, the solutions suggested were tutorial videos, self-learning, attending courses, continuous use and update, and computer classes. The mediator concluded and suggested additional solutions for each problem. Session 2 came to an end at 2.30 PM.

The sessions were very helpful for student teachers to overcome their stage fear and to gain self-confidence. It also made us realize the importance of efficiency in languages and communication skills. The session also helped us to understand how to work on subject knowledge improvement and technical skills proficiency.



EDUZONE -SPEECH



In order to improve the speaking abilities of students in a stage, department of Natural science introduced a program called ‘Eduzone’. As part of the program, each of the student teachers is provided with the opportunity to speak on particular topic. The program was inaugurated on 10/10/22 Monday with the speech by Ms. Sheethal C on the topic “Role of Education in Gender Equality”. In her speech she talked about what is gender equality, where the world stands today in terms of it, what are the inequalities still present in the society and how far we came from the gender inequalities that were present in past times. She emphasized on the importance of education in bringing out gender equality as education is the only way to change the mind-set of people and the entire society. By saying this she concluded her speech. After the speech there was a discussion session, moderated by Mrs. Jomol Jose, Asst. Prof. in Natural Science. Student teachers of natural science were involved in the discussion and they shared their views on the various aspects of the topic. The session ended with the final conclusion by Mrs.Jomol Jose.

On 11th October 2022, Student teacher Aiswarya P V discussed on the topic “ROLE OF EDUCATION IN SOCIAL CHANGE” In her speech she talked about the role of education in social change. The changes all over the years are found to be the result of improvement in the educational field. She emphasized on the importance of education in bringing out changes in our

daily life situations, as it is the key to change the mind-set of people of entire society. After the speech there was a discussion session, moderated by Mrs. Jomol Jose. Student teachers of natural science were involved in the discussion and they shared their views on the various aspects of the topic. The session ended with the final conclusion by Mrs. Jomol Jose.

Ms. Linet Treesa Mathew gave a speech on 12/10/2022 about the topic 'Leadership in students'. The talk was about the reasons for the decline of leadership quality in children as they get old and their lack of interest in taking even small responsibilities. The solutions for this were discussed and ways to improve leadership quality were pointed out. After the speech there was a discussion session, moderated by Mrs Jomol Jose. All the student teachers of the class shared their views and solutions of the same and were very well involved in the discussion. The session ended with the final conclusion by Mrs. Jomol Jose by emphasizing the importance of a teacher in bringing up the qualities and solving the problems of a student to a greater extend.

On 14/10/2022 Friday Ms. Blessy Joy delivered the speech on the topic 'Sex Education'. In her talk, she emphasized on what is sex education, its needs and relevance. Sex education teaches the child not only the basics of puberty, body changes and development but also gives a comprehending understanding of their bodies and how to say no to unwanted sexual activities. Sex education should be compulsory in every school. It doesn't promote to have sex, which should be realised by the parents, teachers and the society. Knowing about your sexuality gives altogether a better and productive mind-set and relationships. By saying this she concluded her speech. After the speech there was a discussion session, moderated by Mrs. Jomol Jose. Student teachers of Natural Science were actively participating in the discussion and each of them shared their views and experience. The session ended with the final conclusion by Mrs. Jomol Jose.

On 8-11-2022 Ms Sahala Yasmin K delivered the speech on the topic "The importance of connection". In her speech, she talked about the importance and benefits of having a good relationship with others. She emphasized on the emotional and social connections of humans and its importance and health benefits. Social connections provide good mental health and lower the rate of anxiety and depression and actually improve our immune system. Connections help us to regulate our emotions. By neglecting our needs to connect, we put our health at risk. By saying it

she concluded her speech. After the speech there was a discussion session. Student teachers of natural science actively involved in the discussion and shared their views and experiences.



Sreelakshmi V P student teacher of Natural Science presented her talk on topic “LEARN, UNLEARN, RELEARN” on 14th November 2022 at the Natural Science classroom. She stressed the significance of unlearning in the current situation in her address. Unlearning is the process of letting go of old beliefs, assumptions, and habits that no longer serve us, and relearn them with new, more useful ones. She concluded her speech with Unlearning is becoming increasingly important in present education as world is facing rapid changes in technology, the workplace, and societal norms. In order to adapt to these changes and succeed in the modern world, it is essential that students and educators are able to unlearn old beliefs and practices that are no longer relevant or effective, and embrace new ideas and ways of thinking. After the speech there was a discussion session, moderated by Mrs. Jomol Jose. Student teachers of natural science were involved in the discussion and they shared their views on the various aspects of the topic. The session ended with the final conclusion by Mrs. Jomol Jose.

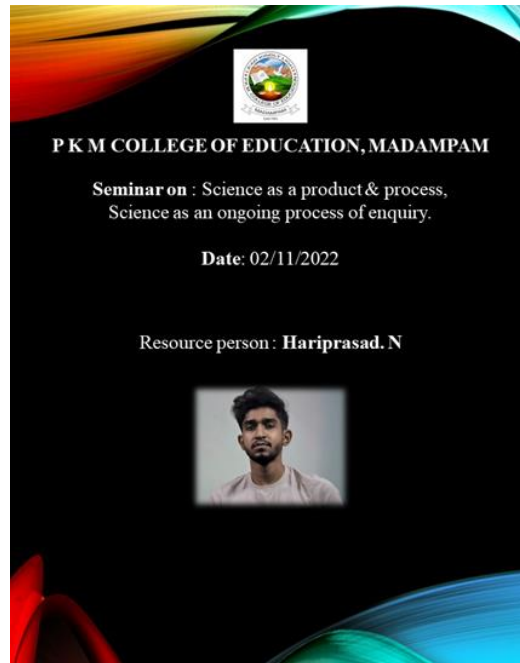


On 18/11/2022 Friday Anju M J delivered a speech on the topic “Influence of teacher on student’s life”. In her speech she talked about how teachers influenced her. A good teacher helps to become a good human being in the society and good citizen of the country. Students not only learn the academic lesson from a teacher, rather they learn a lot of things. They always encourage students to follow good habits. Whenever we say we are highly educated it is not only the subject knowledge. It includes everything our behaviour, confidence, respect etc. Saying this she concluded her speech. After the speech there was a discussion session. Student teachers of natural science were involved in the discussion and they shared their views on the various aspects of the topic.

On 20th December, Mr. Hariprasad. N discussed the topic 'Education and Superstition'. Further the topic left for discussion. The discussion mainly emphasised on false beliefs in society and pointed out some contemporary issues regarding superstition. At some point, it was evident through discussion that there is no relation between education & superstition. Because considering current scenarios, even highly educated class also bounded by superstition. Hence the discussion came to an end with stating that there has to be logical

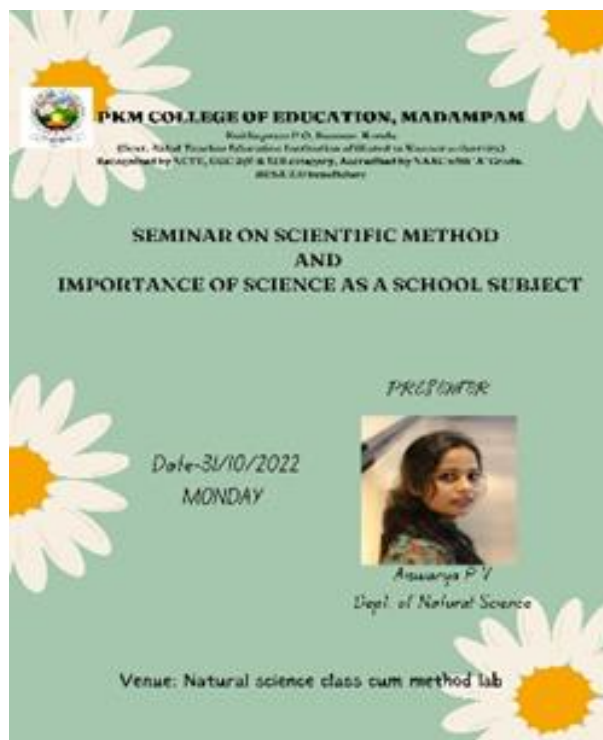
reasoning among people for differentiating what is belief and what is superstition. The session came to an end after 1 hour.

SEMINAR PAPER PRESENTATION



A seminar was conducted on the topic ‘Science as a product & process, Science as an on-going process of enquiry’ on 2nd November 2022 at the Department of Natural Science of P K M college of Education, Madampam. The topic was discussed by Hariprasad.N (1st year B.Ed. student) and soon after that, discussion and evaluation were done. The session started on 1.30 PM afternoon and ended within one hour. 1st year B.Ed. Natural science students were the participants.





Department of Natural Science, PKM College of Education, Madampam conducted a seminar on “Scientific method and Importance of Science as a school subject” for first year Natural Science student teachers on 31st October 2022 at 11.45 am in Natural Science class cum method lab. Ms. Aiswarya P V presented on the topic “Scientific method and Importance of Science as a school subject”. The programme came to an end by 12.30 am.





Natural Science department of PKM College of Education, Madampam conducted a seminar on 'Historical background of Science education' and content organization for first year Natural Science student teachers on 7th November 2023 at 11.30am in Natural Science class cum method lab. Ms. Anju M J presented on the topic Historical background of Science education. The programme came to an end by 12.30 pm.





Department of Natural Science, PKM College of Education, Madampam conducted a seminar on “Values of Teaching Science, Scientific attitude, scientific sensitivity and Scientific Creativity” for first year Natural Science student teachers on 3rd November 2022 at 11:30 am in Natural Science class cum method lab. Ms. Blessy Joy presented on the topic “Values of Teaching Science, Scientific Attitude, Scientific Sensitivity and Scientific Creativity”. The programme came to an end by 12:30 am.





A seminar was conducted on the topic “Maxims of teaching, Inductive, Deductive, Discovery approaches of teaching” on 8-11-2022 at the department of natural science of P.K.M College of education, madampam. The seminar was engaged by Sahala Yasmin K, 1st year student teacher of natural science department. The presentation includes the various maxims of teaching, and different approaches of teaching. The advantage and disadvantages of each approach is also discussed. The programme came to an end by 2:30 pm





The seminar on the topic " Techniques and Strategies for Teaching: Debate, Role-play, Seminar and Discussion" was conducted on 10th November 2022 at 11.30 am in the Natural Science classroom. The seminar was engaged by Linet Treesa Mathew, 1st year student teacher of Natural Science optional. An introduction about various strategies for teaching was given followed by details emphasizing four strategies namely, debate, seminar, role-play and discussion method. Advantages and disadvantages of each were also discussed in the class. After the session clarification of doubts was done.





Department of Natural Science, PKM College of Education, Madampam conducted a seminar on “Lecture method, Lecture cum demonstration method and Project method ” for first year Natural Science student teachers on 11th November 2022 at 10.40 am in Natural Science class cum method lab. Ms. Sheethal C. presented on the topic “Lecture method, Lecture cum demonstration method and Project method”. The programme came to an end by 11.30 am.

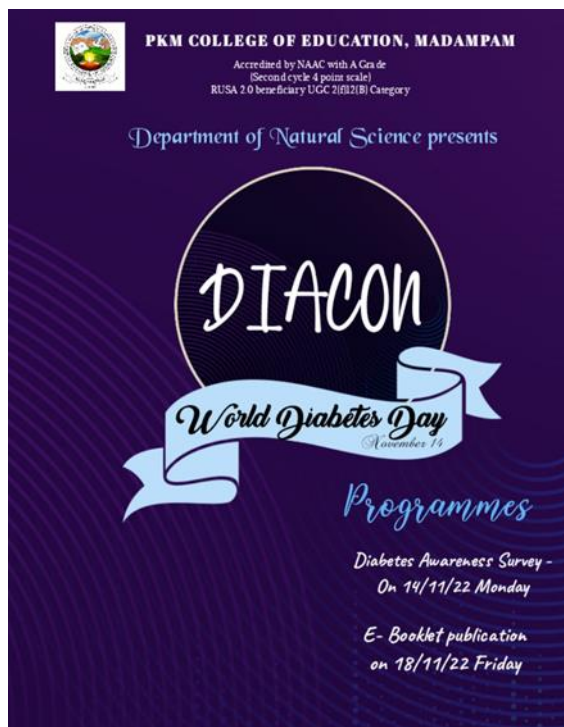




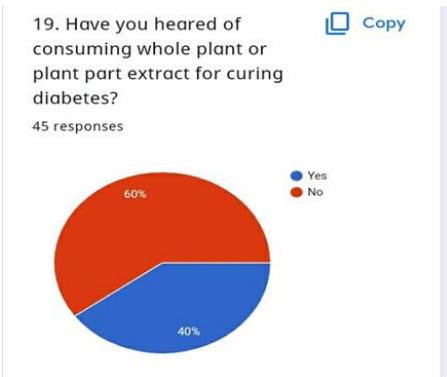
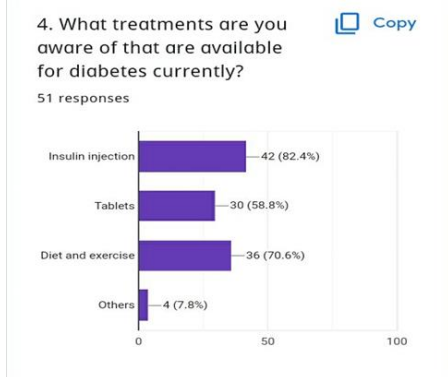
Department of Natural Science, P.K.M. College of Education, Madampam conducted a seminar on topic “Problem solving method, Questioning techniques, Brain storming” for first year student teachers of Natural Science on 15th November 2022 at 10:40 am in the Natural Science class cum method lab. Ms. Sreelakshmi V.P. presented on the topic Problem solving method, Questioning techniques, Brain storming. The programme came to an end by 11:30 am.



DIACON – DIABETES AWARENESS PROGRAMME & E-BOOKLET PUBLICATION



As a part of World Diabetes Day, the department of Natural Science and Bhoomithrasena Club were conducted a Diabetes survey among student–teachers and teachers of PKM College of education, Madampam. The survey was conducted on 14th November 2022 via google forms. The main objective of the survey was to understand the level of knowledge about diabetes and its control. The questions like the causes and symptoms of diabetes, available methods of testing diabetes, and also the available treatments for diabetes were included in the Google form. It also included the problems faced by the diabetic patients, the foods which increase the blood glucose level and its preventive measures. From the result of the survey, we can see that most of them don't aware of the different causes of diabetes and also they don't have much idea about all the available treatments for diabetes. Only very few of them were aware of all the methods of testing diabetes and the majority of them know about the food that diabetic patients can eat. From that, we realized the need for an awareness program and we have decided to prepare an e-booklet.



22. What is your opinion about eating as much as sugar and sweets when young and healthy?

45 responses

We should follow a balanced diet despite of the age we are in

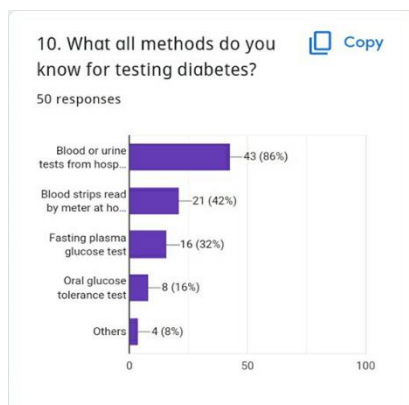
Partialy It is Good. Sugar is Converting into carbohydrates. Having too much sugar in the blood for long periods of time can cause serious health problems if it's not treated.

If you are health conscious control your food habits and if you want to enjoy the moment eat anything you want.

11. List out some foods that could increase blood glucose levels in patients

51 responses

- Food containing carbohydrates,sugar,red meat
- Rice, sweets, ice cream
- Rice, bread, fruits, vegetables
- Rice, tapioca, sugary foods
- Glucose, fruits
- Fruits
- Chocolate
- Rice
- Sugar
- Potatoes,...



12. List out some foods which a diabetes patient can eat

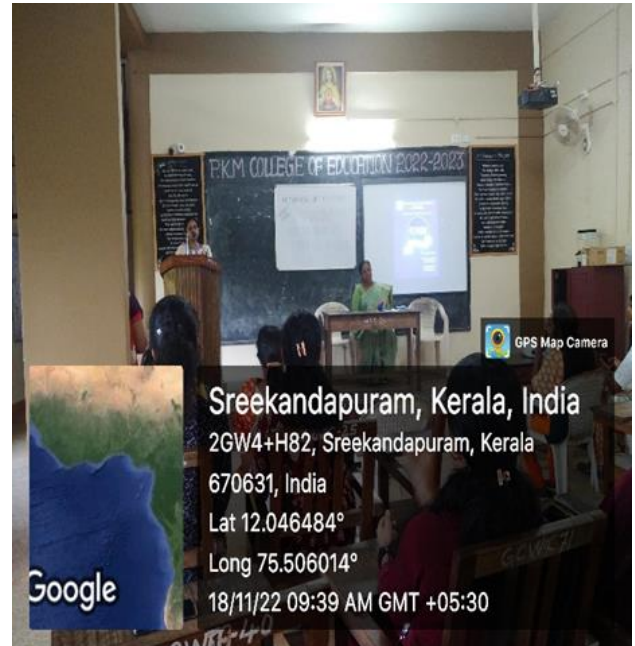
51 responses

- Chapati
- Orange, Oats
- Steamed Foods, vegetables
- Citrus fruits, beans, nuts
- Wheat, vegetables, fruits, nuts
- Vegetables, dairy,grains
- Broccoli
- Nuts
- Avocados
- Flax seed
- Oats

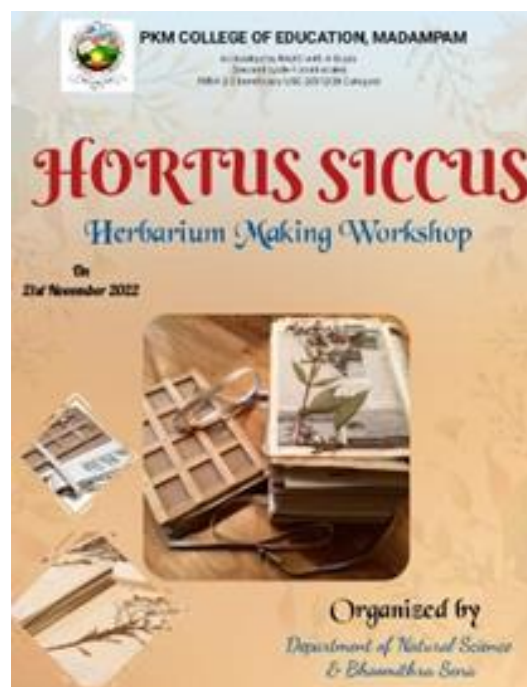
Based on the result of the diabetes awareness survey, natural science student teachers prepared an e-booklet. The e-booklet contains information about diabetes i.e its types, symptoms, prevention and control, and treatment. The preparation of an e-booklet was completed on 15th November 2022.

A program was conducted by the department of natural science for the release of an e-booklet on 18th November 2022 at 10 am. The student teacher Aiswarya P.V gave the welcome

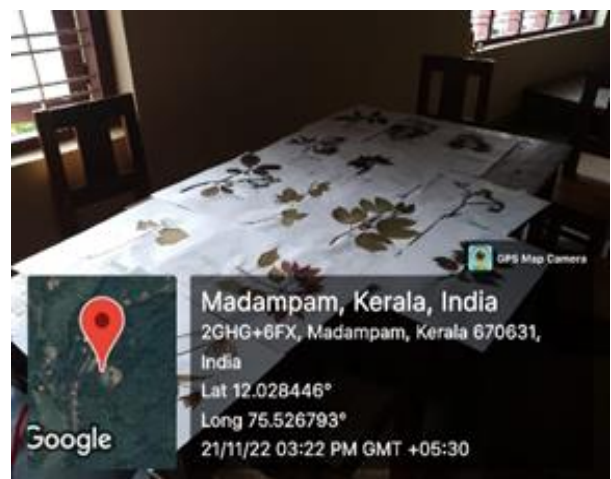
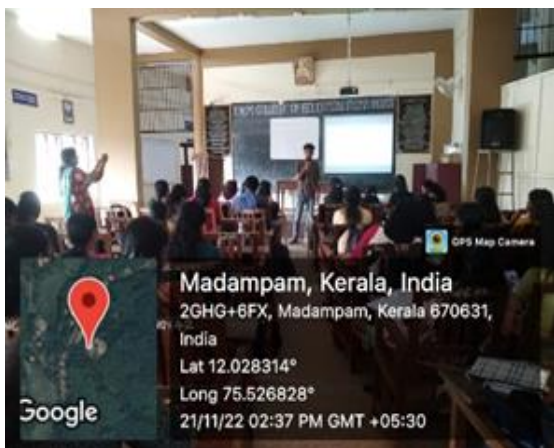
speech and the student teacher Linet Treesa Mathew gave an introductory speech about the e-booklet. After that Dr.Jessy NC , principal of PKM College of Education ,released the e-booklet and talked about the importance of a healthy lifestyle. Finally, the student teacher Sree Lakshmi V.P proposed the vote of thanks and the program came to an end at 11 am.



HERBARIUM MAKING WORKSHOP



The Natural science department and Bhoomithrasena club of P. K. M College conducted a Herbarium making workshop on November 21, 2022 at the General classroom of P. K. M College. It was done prior to the biodiversity survey of Bhoomithrasena club. The PowerPoint was presented by Mr. Hariprasad N and the demonstration of Herbarium making was done by Natural science students. At the end of the session, all students were grouped into four and all of them actively participated in the Herbarium workshop.



BIODIVERSITY AWARENESS & EXTENSION PROGRAMME

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KAITHAPRAM P O, KANNUR – 670631
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Recognized by NCTE and included under UGC 2(f) & 12B category
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KERALA STATE BIODIVERSITY BOARD
Sponsored
**BIODIVERSITY AWARENESS & EXTENSION
PROGRAMME**

**One Day Seminar
&
Biodiversity Awareness Survey**

**On
1st & 3rd
December 2022**

*Theme:
Building
a shared
future
for all life*

Resource Persons :

K. V. Govindan
Member,
District Planning Committee, Kannur

V.C. Balakrishnan
Environmentalist &
Former Secretary of SEEK

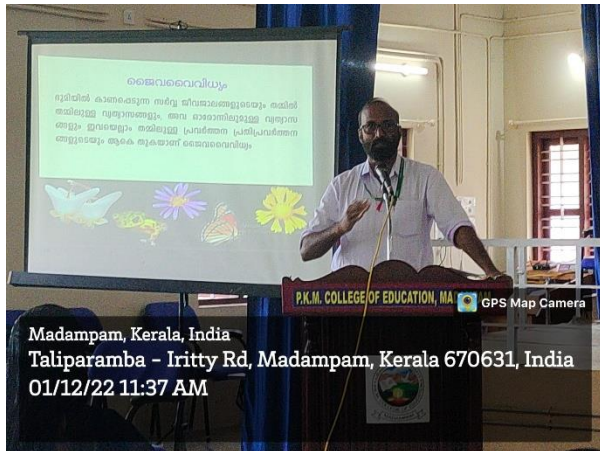
Organised by IQAC & Bhoomithrasena

On Thursday, December 1st 2022, Department of Natural Science in association with Bhoomithrasena club, P.K.M. College of Education Madampam conducted a one-day seminar under the sponsorship of the Kerala State Biodiversity Board. 'Building a Shared Future for All Time' served as the theme for the seminar. This is the first initiative in Kerala that the Kerala State Biodiversity Board has led and such a conference is desperately needed in this time where earth, plants, and animals are being destroyed. Ms. Sreethu, first-year student teacher begin the ceremony with a prayer song and was officiated by college vice-principal Dr. Prasanth Mathew. The welcome speech was delivered by Mrs. Jomol Jose, Asst. Pro. & co-ordinator of the seminar. K V Govindan, a member of the Kerala State Biodiversity Board inaugurated the function after

the inaugural speech. Aishwarya P V, co-ordinator of Bhoomithrasena club, gave a vote of gratitude at the conclusion of the meeting.



Around 11:30 a.m., the first technical session of the programme began. It was led by K V Govindan, a member of the Kerala State Biodiversity Board. The topic of the session was “Biodiversity and Life Security.” He delivered a session regarding the importance of biodiversity, need of conservation, threats in the present hour etc. The session was highly informative and interesting one for all student teachers. An interactive session was held after the talk of the resource person. Ms. Jobina Jose proposed the vote of thanks and the programme came to an end by 1 pm.



The second session started at 2:00 P M. V C Balakrishnan, a former secretary of SEEK organisation and environmental activist was the resource person. “Biodiversity Conservation at Local Level” was the topic. Ms. Linet Treesa Mathew, a student teacher of natural science department, introduced the resource person. Balakrishnan sir was given an elaborated description about the diversity available at local level and the need and significance of its conservation. The programme was followed by a very good interactive session. The programme ended at 4:00 p.m. with a vote of thanks by Mr. Akhil C K, a student teacher of Malayalam optional.



BIODIVERSITY AWARENESS SURVEY – MADAMPAM LOCALITY- 3-12-2022

Bhoomithrasena club and Natural Science department of P. K. M. College of Education, Madampam collectively conducted a Biodiversity survey on 3rd December 2022. Students of the college conducted the survey by grouping into three. All the groups were allotted to three different locations in Madampam. Each student was asked to collect at least 3 plants.

The first group of survey contained 9 student teachers of the college from different optional subjects. The field of survey was the P. K. M. College- Madampam road. Survey started at 9:45 am and every student was asked to collect at least three different plants. The group had a thorough observation of the area and collected about 30 plant materials including shrubs and herbs of different plant families. The collected materials were pressed on site and pictures



regarding the whole procedure were taken. The survey ended at 11.30 pm.

The second group of survey contained 9 student teachers of the college from different optional subjects. The field of survey was the P. K. M. College- Madampam road. Survey started at 9:45 different plant families. Further procedures were done after reaching college. The team reached college at 11.30 am .The group had a thorough observation of the area and collected



about 30 plant materials including shrubs and herbs of different plant families.

The third group contained 8 student teachers of the college which was headed by Hariprasad N and Aiswarya P V. The field of survey was Madampam – Amabatharu road. Survey started at 10.00 am and each of the students collected plants from the allotted area. The group moved along the road upto 2 km and collected almost 33 plants including Trees, shrubs and also herbs of different families. The collected plant specimens were pressed on the site itself



using newspaper. The team reached back college by 12.00 pm.

The pictures of plant collection were taken properly. Students tried to identify and study more about the plants using previous knowledge, technical help and also enquiring to expert teachers. The collected plants were kept in the classroom for further procedures. All the participants were enthusiastic during the whole survey which made the day both informative and memorable.

This programme was a new experience to all the student teachers and staff of P.K.M. College of Education, Madampam. Definitely the experiences and information received by the students teachers will really utilized in their future teaching profession for the welfare of our children and society. Later published the herbarium.

E- MAGAZINE RELEASING



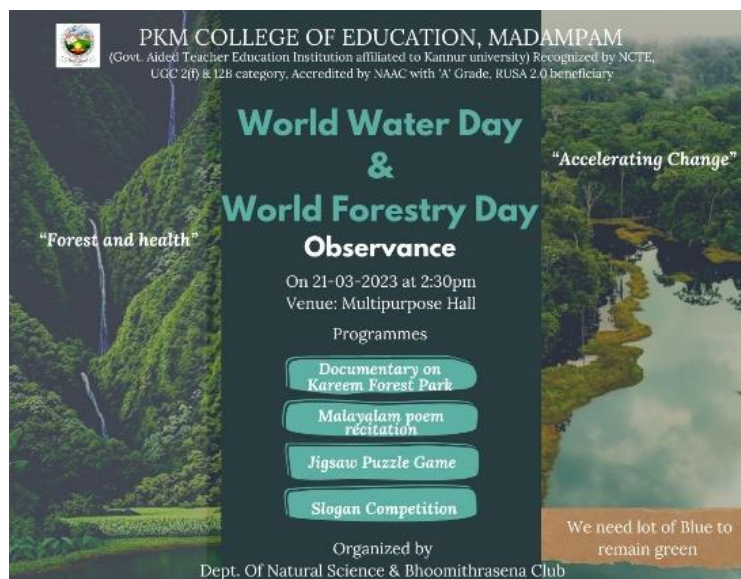
The e- magazine, 'Floraision' prepared by the student teachers of Natural Science optional of 2022-2024 batch was released on 13th January 2023 from the respective optional classroom. The magazine was a science magazine with all the contents related to Science subject. It included various contents like story, poem, interesting facts, drawings, articles etc., about science related topics. The chief editor of the e- magazine was Mrs. Jomol Jose and the student editor was Linet Treesa Mathew. A minimum of two contents prepared by all the 8 student teachers of the class was included.

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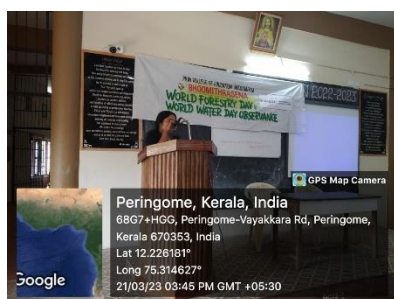
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	Mrs. Jomol K J
	Aiswarya P V
	Anju M J
	Blessy Joy
	Hariprasad N
	Linet Treesa Mathew
	Sahala Yasmin
	Sheethal C
	Sreelakshmi V P

WORLD WATER DAY & WORLD FORESTRY DAY OBSERVANCE

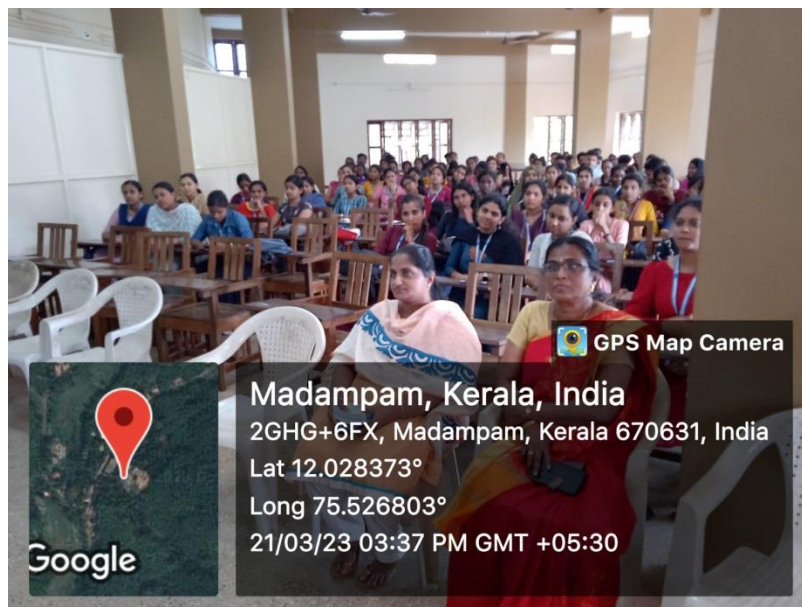


Dept. of Natural science and Bhoomithrasena club of PKM College of Education, Madampam jointly organised World water Day and World Forest Day observance on Tuesday, 21st March 2023. The programme began at 3.30 pm in the Multipurpose hall. Ms. Jobina Jose, student coordinator of Bhoomithrasena club welcomed the programme. Principal Dr. Jessy N C delivered the presidential address. Ms. Aiswarya P V, convenor of Bhoomithrasena club, has given the introductory talk on Documentary. The Documentary was on Kerala's largest man made forest, Kareem forest which is situated in Kasargod district. The documentary bears more relevance on the occasion of world forest day. Ms Athira T C of second year Natural science recited a poem on Nature written by her. Followed by this, a Jigsaw puzzle competition and a



Slogan writing competition(Theme-Water conservation) were held. Mr. Hariprasad N and Sreelakshmi V P of First year Natural science provided the instructions. In the puzzle

competition, Dept. of Mathematics won first prize, Malayalam department won second and Dept. of Social science won the third prize. Ms. Blessy Joy, student coordinator of Natural science department delivered the vote of thanks. The programme ended at 4.15 pm.



In slogan competition first prize was won by Aiswarya K. Malayalam, second prize was won by Amitha George, English & third prize was won by Jomol K.J., Malayalam. The prize were distributed on 23 rd March 2023.



In the academic year 2022 -2023 we had conducted different innovative and unique activities. We had conducted Environment day, World Diabetes Day, Diabetes Survey, Herbarium Workshop, Biodiversity Awareness & Extension Programme, Science Magazine, World Water Day & World Forestry Day, different competitions, video preparations and presentations, paper presentations etc. We submit this report for further verifications.

PROJECT

As part of the first semester of B.Ed. curriculum, Natural Science optional of P.K.M. College of Education conducted a project on Biodiversity survey on 3rd December 2022. Student teachers of Natural Science optional conducted the survey by grouping into 3. Three separate locations in Madampam were assigned to each group. At least 8-10 plants had to be collected by each pupil. The survey started at 9:45am.

Student teachers of Natural Science Blessy Joy, Anju M J and Linet Teresa Mathew make up the first group, they were allowed to collect plants from P.K.M. College of Education Madampam road. The group observed the allotted area and collected about 25 plants. From there itself the collected plant materials are pressed and pictures regarding the whole procedure were taken.

The second group members were Sahala Yasmin, Sheethal C and Sreelakshmi V P. They were permitted to collect plants from surroundings of P.K.M. College of Education. The collected materials includes herbs and shrubs of different families and they pressed the plant materials on site. More than 20 plants were collected by second team.

Aiswarya P V and Hariprasad N together constituted third group. The field of survey was Madampam -56 road. The group moved along the road up to 2 km and collected almost 20 plants from the allotted area.

The three groups reached the college by 12:00 pm with about 70 plants. Then started to identify the scientific name and families of the pressed plants. After the identification process, the plants were classified according to the Bentham and Hooker system of classification. The collected angiosperms (Flowering plants) were classified into 28 families and pteridophytes into 2 families. The collected plants were kept in the Natural Science classroom for further procedure. The 8 student teachers of Natural Science optional enthusiastically participated in the survey. The day made more informative.

- **PREPARED DISCUSSION LESSON PLANS**

To familiarize with lesson planning student teachers discussed the various instructional objectives and activities in groups and prepared five discussion lesson plans based on the topics in high school biology. Given an orientation to lesson plan writing, its objectives, steps involved, pattern, procedure, critical evaluation etc. Then one discussion lesson plan session was conducted for whole group. Directed, guided them in throughout the session. Then divided the students in to two groups and conducted two discussion lesson plan preparation session. Given corrections and after modifications the students were submitted five discussion lesson plans.

- **PREPARED DEMONSTRATION LESSON PLANS**

Conducted five demonstration lesson plan sessions. Given the links of class videos of Victers channel. Given directions to observe the classes and for preparing lesson plans on demonstration classes. After the five sessions the students were prepared five discussion lesson plans and submitted. The demonstration lessons helped to develop observation skills and learned the patterns and teaching skills used in the constructivist classrooms

- **CRITICISM CLASSES**

Criticism classes were conducted for eight students in natural science where prepared one criticism lesson plans and submitted. corrections and modifications were given. Then each one had taken a criticism class and recorded it. The recorded video of the classes where digitalized. Later conducted a criticism sessions for each student to critically evaluate the classes. Critically evaluated different teaching skills of each student and pointed out strength and weaknesses and given suggestions for improvement. The students made the initial attempt to execute the lesson plan. Most of the students were presented the class with confidence. They understood their strength and weaknesses. The teacher educator peer group had given the suggestion for improvement.

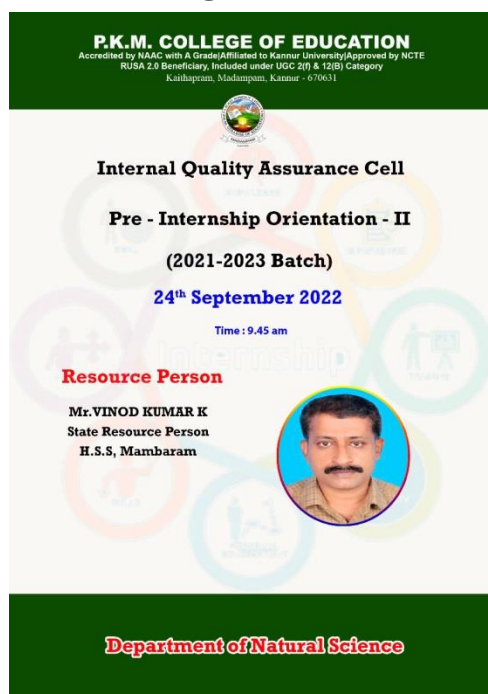
- **REMEDIAL CRITICISM SESSION**

Remedial criticism session was conducted after criticism classes. After the suggestions and corrections student teachers revealed a positive improvement in their teaching.

- **ACADEMIC COUNSELLING ON INTERNSHIP – INTERACTIVE SESSION**

Conducted an Interactive session on Internship on 23-09-2022. Discussed about Profession, Teaching profession, qualities and skills required for a teacher, professional quality, commitment, teaching behaviour, inter personal, intra personal skills required. Also discussed about the challenges in teaching and how to overcome it and how to adapt and how to become an efficient teacher with social commitment.

- **PRE-INTERNSHIP ORIENTATION**



A pre-internship orientation on recent trends in lesson plan preparation, teaching learning process and evaluation was organised by department of Natural science on 24th September 2022. The resource person was Mr. Vinod kumar K, State resource person HSS, Mambram. The

session was highly informative and eye-opening session. The student teachers got a new experience on real classroom teaching and the resource person was highly experienced and talented person.

- **PRACTICE TEACHING**

Done a 4 months school internship programme. Student teachers were participated in different school activities, summary preparations, home works corrections, test preparations etc. Directed them in all activities in school internship programme. They developed skills in teaching, organizing different activities, homework correction, test preparation etc. They were practiced to manage works in schools, interact with students, teachers etc.

BIOLOGISTS ALBUM

The biologist album is the collection of professionals who has specialized knowledge in the field of biology. This was an individual task. Everyone made each album with information and contributions of 10 famous biologists. This work helped them to attain more knowledge about famous biologists.

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DEPARTMENT OF NATURAL SCIENCE

2022-2023 ACADEMIC YEAR