

# Title of the Practice – Promoting Science Education

## Goal:

“Promoting Science Education” is a continuing project spearheaded by Department of Botany. The project has been recognized as one of the Best Practices of the college as part of the Strategic Development Plan of the College. Through this project students are motivated to take up Science education and select science as a choice for career. This is being achieved through series of Interactive lectures, hands-on practical training as well as motivational workshops. Students are made a part of the conferences/ seminars and symposia being organized by various science departments with external funding (DCE, UGC, KSCSTE etc.).

This is done with an aim to provide opportunity to them to understand the progress in the field of science and technology. Apart from this, the youngsters also get to converse and interact with the eminent scientists and academicians during such events. To boost up the scientific temper of the students the Science Departments motivates even the UG students to present papers and posters based on their project works during such seminars.

## The Context:

Under the Educational Innovation Scheme of the UGC, the Department of Botany in association with Shiksha Trust, Hyderabad and Inspire Learning Classrooms Pvt. Ltd., (Kerala), started this project as an extension activity venture to extend their services to the society to Promote Science Education among the School students of selected Govt. Schools in and around Kodungallur. The students of the department acted as ‘Student Tutors’ during these training program for school children which helped them to hone their skills in various science activities as well as boosted up their self-confidence and team spirit.

## The Practice:

This programme which was officially inaugurated on February 19, 2015 by the veteran educationalist and motivational speaker Dr. T P Sasikumar, the chairman of Shiksha Trust and Founder Director of Destination IAS. Later all the science departments joined together to take this forward as a Best Practice of the institution. As continuation of the programme, various programmes were organized by the Science departments during 2019-20.

- World Environmental Day (June 5) was celebrated on June 7<sup>th</sup> 2019, by department of Botany. A class on environmental education and conservation was delivered by Dr Nesy E. A., HoD of the department. Saplings of various economically useful trees were distributed among students and also made them aware to protect and grow the saplings for the coming generation.

- An inter-departmental quiz competition was organized by the Department of Botany on 27th September 2019 in connection with World Ozone day. The quiz was led by first year students of the department under the supervision of faculty of the Department.
- Department of Botany organized a workshop on pot terrarium making for first and second year students on October 11, 2019.
- Nature club in association with Department of Botany had conducted a nature food fest under the title “Naturae Foodie” on 23rd October 2019. The main aim of the food fest was to create awareness to students and teachers regarding the importance of naturally available food and also to make them aware about the harmful effects of junk foods. The fest also focused to promote eating of green salads as a measure to improve health.
- To create an understanding among students about the life cycle pattern of varied plants, to know how they are interacting each other and finally to develop a empathetic mind for caring the earth, Botany department in association with Nature Club conducted a miniature model exhibitions on pot terrariums and cactariums on 23rd October, 2019 along with Naturae Foodie.
- Department of Botany, KKTU Govt College conducted a two day National Seminar cum workshop under the topic Thallophyta: Diversity, Conservation and Natural Products on 12th and 13th of November 2019. The seminar was financially supported by Directorate of Collegiate Education, Govt of Kerala.
- A hands on training of various horticultural practices like budding, grafting and layering were demonstrated to students of various departments by the first year botany students on November 16, 2019.
- Botany department conducted a class on Organic farming for students on 16th December 2019. The class shed light on recent trends in agriculture, methods of organic farming, natural methods of pest avoidance, biofertilizers etc.
- Botany department and Nature club jointly conducted an Encounter with Campus Flora to familiarize the interested students about plants of the KKTU College Campus on 10th January 2020.
- As a part of wet land day on February 2, 2020, Botany department and Nature club conducted a field visit to nearby mangrove flora of Kombathukadavu near pullut. The students gathered awareness regarding the flora and fauna of this wetland and species richness in the selected area.
- Botany department in association with Nature conducted a class on “biodiversity loss after flood in Kerala” on 24th 2020. The class was led by Dr Amitha Bachan, Assistant Professor, Department of Botany, MES Asmabi College, Kodungallur. Around 40 students of various departments participated in the class
- Department of Applied physics and Department of Polymer Chemistry jointly organised a National seminar on “Nano and energy materials ( NAEM-2019 ) on 16/12/2019 and 18/12/2019. Many eminent personalities presented papers in the seminar.
- In order to improve the interface between Education and Industry, Polymer chemistry department collaborate with nearby Industrial organizations like

Vajra Polymers, Vellangallur. They sent a team of students to the above place for carrying out their UG project work.

- Department of Computer science organised a National seminar on National Seminar on Big Data and IOT
- Mathematics department organized a talk by Akhil Damodaran, Department of Mathematics, Vyasa N.S.S. College, Wadakkanchery on introduction to Functional Analysis on 19 June 2019.
- The Two day National Seminar on 'Topology and Its Applications' was organized by the Department of Mathematics on 18th and 19th of December 2019.
- The department of Zoology releases a bimonthly magazine 'Zoion' which includes articles written by students pertaining to various biological issues and topics and other activities organized by the Department.
- In order to inculcate the values of wetlands among the students of this college, Dept. of Zoology in cooperation with Bhoomithra Sena Club conducted an awareness programme. Dr. Jayachandran P. R. (Post Doctoral Fellow, Dept. of Marine Biology, Microbiology & Biochemistry, CUSAT) delivered the talk.
- In connection with the observation of the month of Anti-malaria, an awareness programme was conducted by the Dept. of Zoology and District Medical Office (Health), Thrissur for college students on 13.11.2019.
- International Seminar on topic "Reiterating Biodiversity" was organized by Dept of Zoology on 30th October 2019. It mainly emphasized on biodiversity conservation, documentation of biodiversity, less explored arenas of diversity and importance of diversity conservation.
- Students of final year degree course were encouraged to apply for the Scheme for Promoting Young Talents in Science (SPYTiS), supported by Kerala State Council for Science, Technology and Environment (KSCSTE).
- The college also ensures the active participation of students in various intercollegiate competitions such as quizzes etc.
- A class was conducted for students of Zoology department on topic "PreConception and Pre-Natal Diagnostic Techniques Act, 1994" on 18.12.2019.
- About 12 aquariums are maintained in the department of Zoology and students are given training on setting up an aquarium.
- Bright students are selected for Walk with scholar programme (WWS) and encouragement given to opt for higher studies. Coaching for academically weaker students under SSP and Remedial coaching schemes. All departments run WWS and SSP programmes

## Title of the Practice – Snehasparsham: the Touch of Love

### Goal:

The aim of this practice is to provide an interface between the campus and the society. It is mainly an outreach program to offer community level services by the campus. It makes it a mandate to put to use the facilities and expertise available with the institute to the best services of the community. This best practice is spearheaded by the National Service Scheme (NSS) in association with all the Departments of the college and various clubs like Nature club, Bhoomitra club and the students union.

### The Context:

Government institutions like our college should be of service to the public if the real purpose of the institution is to be served. Apart from the primary duty of imparting academic excellence to the students-the primary stakeholders- the institution should consider the other stakeholders majority of which comes under the general public in and around the college. Through providing services to the society, we would not only be doing an extension activity but also is realizing the Vision and Mission of the institute- Enlightenment of the society and empowerment for a worthy global citizenship. Community interactive activities will also help to inculcate in the young minds of the students a sense of social responsibility. These ventures will furthermore open up new gateways to overcome the social, economic, and educational backwardness of the region.

### The Practice:

Snehasparsham- includes many activities which are intended to be of benefit to the society, which gives life lessons to students to grow into responsible citizens who respects the rights of others, believes in gender equity, show environmental responsibility and overall empathy and reverence to fellow beings. Activities are designed to give special emphasis on women empowerment and self- employment. Gives thrust to getting to know our tradition and history. Regular campus cleaning, Reusing Plastic Waste, popularizing triple R (Reduce- Reuse-Recycle), greening of the campus, establishment of teaching herb garden, celebrating various days related to environment etc. are some of the best practices relating to this. Various activities under taken during the year towards this venture are briefed.

- Department of Zoology in association with NSS gave counselling to students with overweight and underweight on how to manage the conditions. Follow up is advised for them and the department facilitates free checking of BMI.
- In order to make the students aware of the importance of nutrition and the need for maintaining a healthy diet, an awareness class was conducted by the department of Zoology in association with NSS on 26th September 2019
- Faculty of various department cooperated in helping the flood-affected students. Besides the faculty members contributed personally to charity

activities like SOS - Delhi based Charity firm, helping to the adoption and educate abandoned children. Assistance was also given to some local charity funds when the concerned persons approached the department.

- Botany department in association with Nature club had conducted a sale of vegetable seedlings under the title “Green Sale”. The major purpose of the sale was to promote making of vegetable garden or kitchen garden in each and every houses of the students and teachers of KKTm Govt college and thereby develop sustainable agricultural practices among students and teachers as well as to improve their own health by eating pollution and pesticide free vegetables.
- As a part of waste redemption practices the Department of Botany conducted a class on pen stand making from waste paper on 16th December 2019 as part of botany association inauguration.
- Food package distribution is regularly done by the students union to the needy and poor, especially the poor patients in government hospital in Kodungallur.
- Environment responsibility: to inculcate environment responsibility among the students and spread awareness about conserving nature for sustainable development various activities are conducted throughout the year.
- Visit to old age homes is also taken up by various departments from time to time.
- Community services are extended in form of Entry to Service-a coaching program to face various competitive exams, coaching for National Eligibility Test etc are provided free of cost to students and public.
- Student counselling for both academic and non-academic purposes are undertaken by the faculty as per the need for not only the students of the college but also to students of other institutions.
- Compulsory social service is made a part of the curriculum and students of all the departments actively take part in such ventures.
- Palliative Care is yet another societal obligation activity taken up on a regular basis. Volunteers participated in various programs like rallies, seminars etc. in connection with Palliative care.
- Sports training: Department of Physical Education provides coaching to the students of various schools in the adjacent community.

