"Education through self-help is our motto"-KARMVEER



Rayat Shikshan Sanstha's

Sadguru Gadage Maharaj College, Karad (An Autonomous) Department Of Zoology **Organizes**

"Six Days Sector Specific Training on Health and Animal Husbandry Sector" **Under EEC Hub** 27th Jan to 2 Feb 2023

The Sector Specific Training on Health and Animal Husbandry Sector from 27th Jan to 2 Feb 2023 by Department of Zoology for B.Sc. III and M.Sc. students to enhance their knowledge and to provide them opportunity to hands on training of various instruments to learn advanced Molecular Techniques and business oriented skills.

Activities carried out-

 Aquarium Construction Vermi Technology Genetically Modified Organism analysis and PCR Protein purification and DNA finger printing Animal Tissue Culture Pearl Culture

Inauguration Function

Department of Zoology in collaboration with EEC Hub organized Six Days Sector Specific Training on Health and Animal Husbandry Sector from 27th Jan to 2 Feb 2023. Inauguration of programme was done in the auspicious presence of Prof. S. A. Patil Vice Principal, S.G.M College, Karad as president, Prof. (Dr). S. S. Patil, retired Professor of Krishna Mahavidyalay Rethre (budruk) as a Chief Guest, Prof V.S.Ranbhare (Head of the Department), Dr.(Mrs.).V.S.Shewale (Coordinator of programme), all staff members of Zoology department and students.

Prof. V.S. Ranbhare welcomes and introduced the Six Days Sector Specific Training programme and Chief Guest Prof. (Dr). S. S. Patil. Prof. S. A. Patil Vice Principal, S.G.M College, Karad felicitated Prof. (Dr). S. S. Patil with flower, a book, and Sadguru Magazine. Prof. (Dr). S. S. Patil delivered chief guest speech and talked about the need to conduct training programs for UG and PG students. Prof. S. A. Patil, Vice Principal, S.G.M College, Karad delivered presidential speech. During his speech he discussed about the aims of the Sector Specific Training organized for the students. The Inauguration function concluded by Vote of Thanks delivered by Prof. (Dr.). A. U. Sutar. Entire function organised successfully under the guidance and support of Hon. Dr. M. M. Rajmane saheb, Principal, S.G.M. College, Karad.

Activity 1

Under Six Days Sector Specific Training programme, "Glass Fish Aquarium and Vermitechnology" lecture and hands on training was conducted on 27 Jan to 28 Jan 2023. In this Training program session students from M.Sc. I, M.Sc.II and B. Sc. III. Zoology were registered and actively participated.

On 27th Jan 2023 in Session I, Dr. S. S. Patil delivered a lecture on "Glass fish aquarium: construction, management and maintenance". During session, he discussed Types of Glass container/vessels, Material required to construct Aquarium, Size and Thickness of Glass, Types of roof/cover, coloured stones, Artificial Aquarium plants, aeriator, water filter, Toys, Filters, Air pipe, natural plants, Dry feed, Live/frozen feed, Fish net, Fish hoopers, posters, types of aquarium fish etc.

In Session II Hands on Practical Training was conducted by Dr. S. S. Patil. During Hands on Training, he demonstrated Construction of Glass Fish Aquarium and shown different coloured stones, Artificial Aquarium plants, aeriator, water filter, Toys, Filters, Air pipe, natural plants, Dry feed, Fish net, types of aquarium fish to all participants.

On 28th Jan 2023 in Session I, Dr. S. S. Patil delivered a lecture on "Vermitechnology". During session, he discussed new models of vermitechnology, vermiwash, benifacial aspects of vermiwash, material and method to collect vermiwash, qualitative and quantitative analysis of vermiwash and applications of vermiwash etc.

In Session II, Hands on Practical Training was conducted by Dr. S. S. Patil guided all the participants to construct Glass Fish Aquarium. Activity was concluded by Prof. (Dr.).A. U. Sutar. Total 40 students of B.Sc-III, M.Sc-I, M.Sc-III and all zoology staff participated in the programme.

















Activity 2

Under Six Days Sector Specific Training programme, "Techniques in cell and Molecular Biology" hands on training and lecture was conducted on 30th January to 1st February 2023. In this Training program session, students from of M.Sc. I, M.Sc.II and B. Sc. III. Zoology were registered and actively participated.

On 30th January 2023 in Session I, Dr. Hemant Kawalkar delivered a lecture on "Analysis of Genetically Modified Organism (GMO) and PCR". During session, he discussed principles, applications of GMO and PCR analysis and shown videos of procedures.

In Session II Hands on Practical Training was conducted by Dr. Tareeka Sonawane. During Hands on Training, she demonstrated the method of pipetting and reagents required for PCR. She guided all students for additions to make master mix for PCR and setting the program on Thermocycler and preparation of Agarose electrophoresis gel.

On 31th January 2023 in Session I, Dr. Hemant Kawalkar delivered a lecture on "Protein purification and DNA fingerprinting". During session, he discussed types of protein purification methods, procedures, commercial kits used for purifications, restriction enzymes used in DNA fingerprinting, procedure and interpretation and analysis of results.

In Session II, Hands on Practical Training was conducted by Dr. Tareeka Sonawane. During Hands on Training, she guided students to run agarose gel electrophoresis and also worked on protein purification techniques by column technique.

On 1st February 2023 in Session I, Dr. Mustansir Bhori delivered a lecture on "Animal Tissue Culture". During session, he discussed Cell culture techniques, principle and application of animal cell culture, Types of culture, primary cell culture, suspension cell culture etc.

In Session II, Hands on Practical Training was conducted by Dr. S. S. Kudale. During Hands on Training, he demonstrated and guided the blood cell separation technique, types of culture vessels and viable cell counts. Activity was concluded by Mr. A. R. Nagavekar. Total 40 students of B.Sc-III, M.Sc-I, M.Sc-II and all zoology staff participated in the programme. Total 40 students of B.Sc-III, M.Sc-I, M.Sc-II and all zoology staff participated in the programme.

























Valedictory function

Valedictory function of Six Days Sector Specific Training on Health and Animal Husbandry Sector organized by Department of Zoology in collaboration with EEC Hub was conducted on 2nd February 2023 in the presence of Hon. Dr. M. M. Rajmane saheb, Principal, S. G. M. College, Karad as president, Chief guest Mr. Dilip Kamble, all staff members of zoology department and students.

Prof. V.S. Ranbhare welcomes and discussed overview of the Six Days Sector Specific Training. The Hon. Dr. M. M. Rajmane saheb, Principal, S.G.M College, Karad felicitated Chief Guest Mr. Dilip Kamble with flower, a book, and Sadguru Magazine. Mr. Dilip Kamble delivered chief guest speech and talked about the need to conduct training programs for UG and PG students and performance of students during hands on training. Hon. Dr. M. M. Rajmane saheb, Principal, S.G.M College, Karad delivered presidential speech. During his speech he discussed about the aims of the Sector Specific Training organized for the students. The valedictory function concluded by Vote of Thanks by Dr. P. V. Khairmode. Anchoring was done by Mr. Aditya Nagvekar sir.

The program was conducted under the valuable guidance of Principal Hon. Dr. M. M. Rajmane saheb, and Vice principal, Prof. S. A. Patil, S.G.M College, Prof V. S. Ranbhare, Head of the Department, Dr. Mrs.V. S. Shewale, Co-ordinator of workshop and other authority persons. Total 40 students of B.Sc-III, M.Sc-I, M.Sc-II and all zoology staff participated in the workshop. All participant, teachers and students have given a valuable co-operation for making the training program successful.

Outcome of activity:

Practical Experience: The hands-on training program will provide students with practical experience in using various molecular techniques such as DNA extraction, PCR, gel electrophoresis, process of pearl culture, different types of fish can be housed in aquariums. This experience will help students to better understand the theoretical concepts that they have learned in their classroom and textbooks.

Skill Development: The training program will help students to develop various skills such as pipetting, gel preparation, and data analysis. These skills are essential for a career in the molecular biology field. Workshops often provide students with the opportunity to get hands-on experience in pearl culture and aquarium construction. This can help them develop practical skills and gain confidence in their abilities.

Competitive Advantage: Students who have attended a hands-on training program in molecular techniques will have a competitive advantage over those who have not. Employers in the field of molecular biology often prefer candidates with practical experience, and students who have attended such programs will be better equipped to meet the demands of the job market.

Business ideas: Through attending the workshop, students may be exposed to new business ideas and opportunities related to pearl culture and aquarium construction. This can inspire them to develop their own business ideas and explore new markets.

In conclusion, attending a hands-on training program in molecular techniques can provide students with practical experience, skill development, confidence building, networking opportunities, competitive advantage in the job market and business ideas.

Number of students present/ Number of Beneficiaries: UG/PG-40

Zoology Department S.G.M. College, Karad



S.G.M.College, Karad