

**DEPARTMENT OF MICROBIOLOGY**  
**INTER-DEPARTMENTAL ACTIVITIES**

**LECTURE ON ANTIBIOTICS- NO ACTION TODAY, NO CURE TOMORROW**

**Date: 24.09.2019**

Dr. Lali Growther, Associate Professor and Head, Department of Microbiology delivered a lecture on Antibiotics-No action today, No cure tomorrow for the students of the department of Biotechnology. III.B.Sc Biotechnology students attended the programme. The mechanism of action of antibiotics, factors contributing to resistance and the threat due to the emergence of drug resistance were discussed. The need for the hospital infection control policy, regulated use of antibiotics, and the ways to control antibiotic resistance like avoidance of over the counter antibiotics was explained to the students.



**LECTURE ON BIOFERTILIZERS**

**Date; 21-09-2019**

The Department of Microbiology which is under DBT Star College Scheme organized DBT Star College Lecture Series, **Dr. N. HEMASHENPAGAM, Associate Professor of Microbiology** delivered a Guest Lecture on **“BIOFERTILIZER”** on **21<sup>st</sup> September 2019** to III BSc., Maths students. The Guest Lecture started with an Introduction about fertilizer, difference between chemical and biofertilizer, organisms involved for the production of biofertilizer, methodology of biofertilizer and application of biofertilizer. The session was very interactive and students clarified their doubts on various aspects of biofertilizer application in farming.



## **LECTURE ON MOLECULAR MARKERS**

**Date: 24.09.2019**

As a part of the Interdepartmental DBT lecture series programme, **Dr. G. Rajalakshmi**, Associate Professor and Head of the Department delivered a lecture on **“An overview of Molecular Markers and their applications”** to III B. Sc Microbiology students on **24.09.2019**. A PowerPoint presentation on the role of Molecular markers in Plant Breeding and Diagnostic assays was done. The students were made aware of the chronological development of marker studies. The principle and applications of DNA fingerprinting/ DNA profiling was discussed. At the end of the session,

students clarified their doubts on sample preparation for DNA fingerprinting and evaluation of banding pattern for RFLP, RAPD and AFLP studies.



## **LECTURE ON APPLICATION OF MATHEMATICS IN MEDICINE**

**Date: 24.09.2019**

### **Objective:**

To make the students to gain knowledge of mathematical applications in medicine

### **Details of the programme:**

- Seminar was Organized by PG & RESEARCH DEPARTMENT OF MICROBIOLOGY for interdisciplinary discussion
- Speaker: Dr.S.Anuradha, Professor and Head, Department of Mathematics
- About 60 students from Final year, PG and Research Department of Microbiology actively participated
- The seminar was about Mathematical applications in medicine and nature
- The purpose of the seminar was to develop and deploy the requirements of mathematical skill in the area of Medicine.
- The session was interactive and the discussion revealed the applications



### **Feedback:**

Students were able to know the basic applications of Mathematics in the field of Medicine

### **LECTURE ON BASICS OF GENETICS**

**Date; 25.09.2019**

The Department of Microbiology which is under DBT Star College Scheme organized DBT Star College Lecture Series. **Dr. R.MANJU, Associate Professor of Microbiology delivered a Guest Lecture on “BASICS OF GENETICS” on 25<sup>th</sup> September 2019** to III B.Sc., Computer Science students. The Guest Lecture started with an Introduction about Genetics, Chromosome-DNA, Genes, difference between Genotype and Phenotype with example, Genetic code involved in protein synthesis, General properties and types of Mutation, Hereditary disorder-Autosomal disorder. The session was very interactive and students clarified their doubts on various aspects.



## LECTURE ON GRAPHICS USING C++

DATE: 26.9.2019

The DBT Star College Scheme sponsored programme has been conducting various inter-discipline events for the students from different departments. On 26.9.2019, Mr.S.Aravind, Asst. Prof, Department of Computer Applications (BCA), acted as a resource person for the students from the Department of Microbiology. The participants were from II B.Sc Microbiology. The topic of the session was “Graphics using C++”.



**About the Topic “Graphics in C++”**



**Developing Graphics program using Help**

The following topics were discussed during the session:

1. Installation of compatible Version of Turbo C++ 4.0 in the windows OS.
2. How to develop graphics programs in C++ using Simple Method (Copy and Paste Method).

Using Help->Index, all the functions that are used in graphics was demonstrated to the students.

3. Example Programs:

- a. Drawing various Shapes
- b. Drawing and Moving an Object (Car)
- c. Demonstration of Rainbow Displaying in the screen.



**How to develop Graphics Programs in Quick way using help**



**Discussion about the Various Axis of Graphics Layout (UI)**



**How to copy and paste already existing graphics programs into new file.**



**Demonstration of Drawing and moving car using the menu Help in C++ Editor**

## LECTURE ON LIFE STYLE DISEASES

**Date: 27.09.2020**

A lecture on “Life style diseases” was conducted by the Department of Microbiology under DBT Star college scheme Interdisciplinary lecture series for beneficiary of students belonging to the Department of Computer Applications. On 27.09.2019, Dr. Arun kumar, G from the Microbiology department gave a brief lecture about the Life style diseases and topics were discussed more on the preventive measures and students interacted with various aspects.



**Giving brief about the topic**



**Discussing about sleep cycle**

The following topics were discussed during the session,

1. Introduction about Lifestyle.
2. Difference between a disease and disorder.
3. Sleep cycle and Biological cycle.
4. Things to avoid for the better lifestyle.
5. Things to do for the better lifestyle.

## LECTURE ON FOOD SAFETY

**Date: 27.09.2020**

A lecture on “**Food Safety**” was conducted by the Department of Microbiology under DBT Star college scheme Interdisciplinary lecture series for beneficiary of students belonging to the Department of Information Technology. Dr.A.Manivannan from the Microbiology department gave a brief lecture about the food safety and topics were discussed more on the hygienic practices and students interacted with various aspects.



The highlight of the session was

- ✓ Personal hygiene in food safety
- ✓ Eating hygienic foods
- ✓ Illustrated examples for food borne diseases
- ✓ Importance of consumer awareness

## **International Conference on “Exploring Microbes for Therapeutic Purposes BIOSUMMIT 2020**

**Date: 04-02-2020**

The PG and Research Department of Microbiology and Biotechnology of HICAS jointly organized the “BIOSUMMIT 2020” - An International Conference on “Exploring Microbes for Therapeutic Purposes” on 04.02.2020 under DBT Star College Scheme. Dr. G. Rajalakshmi, HoD - Dept. of Biotechnology and Convener of the Programme welcomed the gathering. Dr. A. Ponnusamy, Principal, Hindusthan College of Arts and Science gave the presidential address. Dr. Lali Growther, HoD - Dept. of Microbiology and Organizing Secretary of the Programme presented the overview about the conference. Mrs. Sarasuwathy Khannaiyann, Managing Trustee, Hindusthan Educational and Charitable Trust motivated, emphasized the need of attending such a programme by the students and inaugurated the programme by lighting Kuthuvilakku. Inaugural address was given by the Chief Guest Dr. Nguyen Khoi Nghia on “Soil Salinity - Their cause, effects and Solutions”. Dr.G.Rajivgandhi, Post Doctoral Researcher, Department of Microbiology, School of Life Sciences, Sun Yat-Sen University, China, Dr. N.



Manoharan, Associate Professor, Dept. of Marine Microbiology, Bharathidasan University, Tiruchirappalli were the other resource persons who presented their research ideas related the exploration of microbes as potential therapeutic source. Students from various institutions such as PSG, Ramakrishna, Krishna and RVS College of Arts and Science were participated in this programme. The students from the department of Microbiology and Biotechnology of HICAS also actively took part in this conference. The student participants of other institutions and HICAS presented their research work as oral and podium presentations. Dr. K. Kadirvelu, Joint Director, DRDO, Bharathiar University, Coimbatore was the guest of honour for the valediction of “BIOSUMMIT 2020”. The glimpses of the International Conference on “Exploring Microbes for Therapeutic Purposes” was presented by Dr. Mohammed Rafiq Khan, Assistant Professor, Department of Biotechnology, HICAS followed by Dr. K. Manimekalai, Assistant Professor, Department of Biotechnology of HICAS, who proposed the vote of thanks.

