FORMAT - II

12. INNOVATIVE / BEST PRACTICES

DEPARTMENT OF MICROBIOLOGY

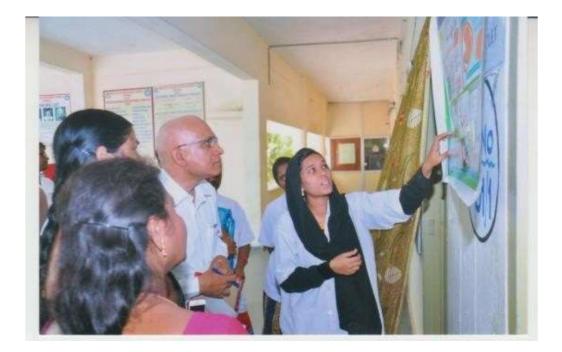
HEALTH AWARENESS

Seasonal Disease Awareness Programme

- Students of Microbiology Department have been conducting environmental Awareness rallies in Villages as part of Social Awareness Programme.
- This Programme encourages students to engage deeply in with their Communities on social issues which impact their lives and their shared future.
- Students conduct awareness camp on the cause active agents of different diseases in water logging areas, accumulation of waste in and around the village etc,..
- Faculty and students spoke to the villages that it is the responsibity of each person to their bit to pressure the environment, so that a healthy eco system is maintained and provide a green future for the next generation.
- Department has organised an awareness programme on 07-08-2017 on outburst of several diseases from clogged areas.
- Department has organised a health awareness programme in collaboration with health clinic (Bhadrakali Diagnostics) on 21/03/2020 to bring awareness on 'Health Aspects'.



Dr. Siva Subramaniam interacting with the participants



Inter College Poster Presentation

Around (50) students have participated and presented the posters on

- > Molecular diagnostic techniques of various diseases.
- Recently emerged microbial Pathogen.
- > Well known medical practitioners were invited as Judges.

Objectives:

The Students gained exposure to emerging microbial pathogen to radical environmental changes and attained awareness on the course of disease, organism, and clinical symptoms.

Result:

The Students could interact with many Microbiology students and gain Knowledge in Medical Microbiology.

NATURAL FARMING

Natural Farming is an ecological forming approach established by Masanobu Fukuoka(1913 – 2008), a Japanese farmer and Philosopher .

OBJECTIVES:

- Intensive Farming practice and human activities have disturbed the natural cycles of Nitrogen and Phosphorus.
- To define the scientific basis on the which the local environmental management and crop production is based.

Practice:

Students have practiced natural farming phenomenon at the plantation around the department.

Output:

- Virtuous nutrient cycle
- ➤ Safe
- Economical
- Ecological
- Standard Compost and Natural Fertilizers

STUDENTS PREPARING BIO INOCULANTS



ADDING INOCULANTS TO THE SOIL



LIVE PROJECTS

Live Projects are Regularly Being Planned for every academic year for both U.G & P.G Students.

Objective:

- Libraries have been an important part of learning pedagogy
- Exposes the students to hand-on practice the theory that they learn in the class room.
- To give the students an exclusive to real work environment and enhance the oral skills setup students with respective to improving their employability skills to match the industry expectations.

Out Come of Projects:

Locating, learning between the academy and the every day.

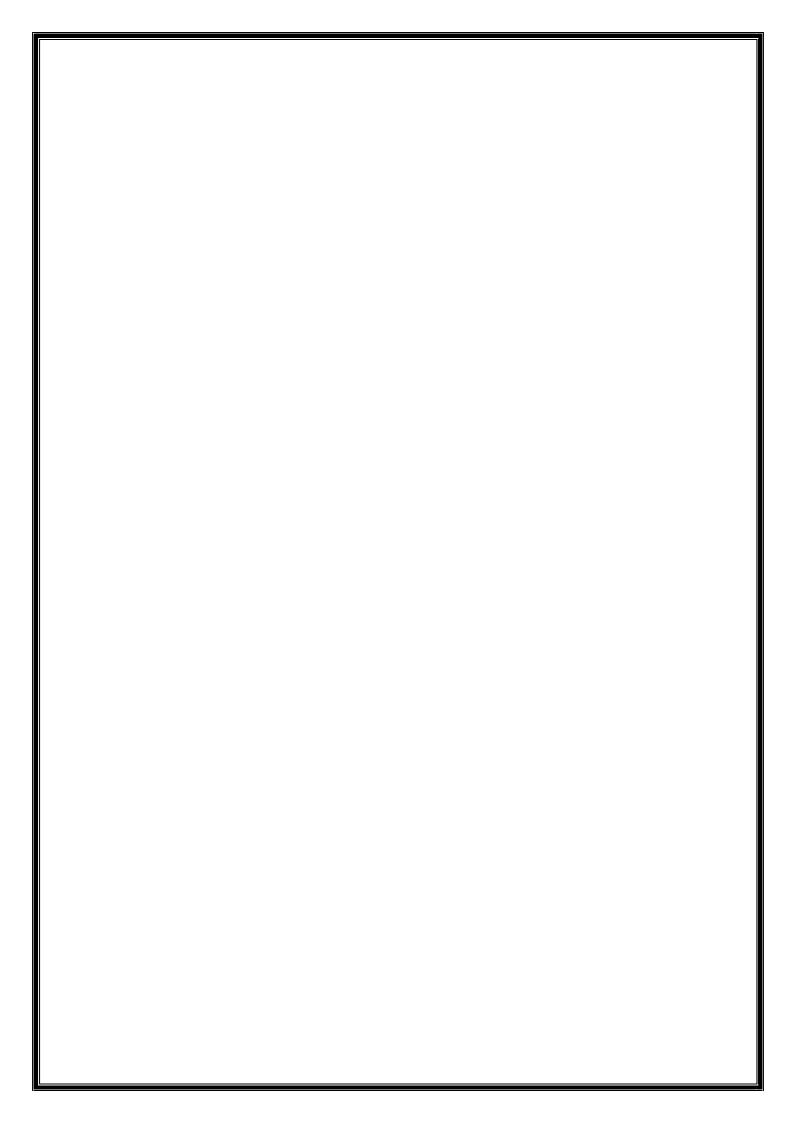
ISOLATION OF PYOGENIC BACTERIA FROM WOUND INFECTIONS











Industrial Visit/Research Centre/Field Visits

Objectives:

- Visit to Industry, research centre, etc..., focus on preparing the students to learn about the day to day workings of a particular area and understand its operations issues.
- The Visit also helps the student to Keep update regarding the current practices followed by the organisation and acquire traits that the Industry/ firm/organisation/institute demands from them.

Visited:

The Department has visited Kakatiya University , CCMB, NIN, Research Centres, Water Treatment Plants, Natural farming fields etc..

Outcome:

The Students were exposed to the real working processof an industry, farming, water treatments etc...







WORKSHOP

The Department has organised A Workshop in collaboration with Syteny life sciences pvt. Ltd.

The participants were our students and Microbiology students from the neighboring colleges under Kakatiya University.

Objectives :

To provide technical skills on various instruments, their operation on result output on DNA isolation, amplification, sero diagnosis etc.,

<u>Result:</u> Students gained Knowledge on the instrument not available at the institution and a real working process



Blood Grouping Camps & CBP

Date: 06/11/2020

It is a type of medical test called a complete blood count (CBC) if you're feeling more tired than usual, seem to have an infection, or have un explained bruising or bleeding.

The CBC is a common blood test that helps doctors get information about the three major types of cells in the blood:

- 1. Red blood cells. These are the cells that carry oxygen from the lungs to the rest of the body. The CBC measures the number of red blood cells n the body, along with other information about red blood cells, such as amounts of an oxygen-carrying protein called haemoglobin. This information can help doctors test a person for anaemia, which can happen due to loss of blood, or problems with the production or destruction of red blood cells.
- 2. White Blood cells. These cells help the body fight infection. The CBC measures the number of White blood cells (also called leukocytes) in the blood and also looks at the different types of white blood cells in the blood and how they relate to one another. Problems with the number of white blood cells can be signs that a person has an infection or other stress in the body. For ex. a bacterial infection can cause the white blood cell count to go up or down. Medications, like certain anticancer drugs , also can effect a person's white blood cell count.
- **3. Platelets'.** These cells play an important role in blood clotting and the prevention of bleeding. When a blood vessel is damaged or cut, platelets clump together and plug the hole until the blood clots. If the platelet count is too low, a person can be in danger of bleeding in any part of the body.

IMPACT OF THE PROJECT

It usually only takes a few hours or a day or so to get the results. It is a primary step pointing to anaemia , infection or other problems and to find out what the cause is and how to treat it.





D.t 11/03/2020

AWARENESS ON CORONA VIRUS

- Awareness camp on the most threatening disease SARS COVID has been organized by the students of Microbiology Department through models and poster presentation.
- This was initiated by Dr. G. Renuka to educate the students, staff and all other candidates in the college, this camp was also conducted off campus, we visited nearby schools and colleges and educated the students over there about the severe effects of the virus and also necessary precautions that are to be taken ware explained in addition to that importance of science and knowing about our body health and metabolism and all other our body health and metabolism and all other pre-requisites that are to be taken before were explained.
- This whole program was driven by the energetic students of the Microbiology Department Deep insights were given on the necessity of masks and sanitizers.
- Enlightened the audience on the Diagnoses of COVID.
- There has been a great confusion regarding the type of vaccine that has to be taken, type of vaccine and its effects was also explained.
- > Around 75 Participants witnessed the event.





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