

**A.S.D. Government Degree College for Women (A),  
Kakinada**

**DEPARTMENT OF MICROBIOLOGY**



**BEST PRACTICE**

**Research Based Pedagogy techniques**

**(RBPT)-STUDENT STUDY PRJECTS**

**Microbial analysis of Air Quality and Isolation of flora of College  
Campus**

# **Title: Study and Isolation of Microbial Air flora of our college**

## **Objective of the Practice**

- To inculcate research attitude among the students
- To test the microbial quality of the environment inside the campus
- To create an awareness in the students on the quality measurements to be maintained
- To practice the testing and reporting of samples
- To help & suggest administration in maintaining the hygienic conditions

## **The Context**

- In this practice students will collect the air samples different areas of the campus by Petri plate exposure method like Corridors, Toilets and principal's chamber, Hostel premises.
- The outcomes of the practice are observing the microbial diversity and enumeration of bacteria.
- Based on the analysed results and report, suggestions will be given to concerned departments.

## **The Practice**

- With this practice students will be able to learn about how to test microbial loads various samples. It enhances lab skills of students, knowledge about the microbial distribution in nature and also understand the context of maintaining the BSL quality measures.

## **Evidence of Success**

- Students got learned to maintain the sanitary conditions of toilets and understood the importance of personal hygiene and they have improved.

## **Resources Required:**

- Basic laboratory requirements for collection of Air flora

## **Conclusion:**

- This practice encouraged the student's enthusiasm in learning the skill and knowledge in the field of Microbiology. This supports brain storming activities in the students and also improves research attitude among the students.

**Evidence:**

Number of bacterial CFU/m<sup>3</sup> air at different sampling time of day at different time of exposure at A.S.D Govt Degree college for Women (A) Kakinada.

Petriplate Exposure time (Min)	Sampling time	Sampling sites at different Places			
		Botanical garden	Microbiology Department	zoology Department Corridor	College ground
30	4:30 p.m.	806	924	357	1087

Number of fungi CFU/m<sup>3</sup> air at different sampling time of day at different time of exposure at A.S.D Govt Degree college for Women (A) Kakinada.

Petriplate Exposure time (Min)	Sampling time	Sampling sites at different Places			
		Botanical garden	microbiology Department	zoology Department	College ground
30	4:30 p.m.	675	326	254	526



**Sampling at Microbiology Laboratory**



Sampling at Academic park of our college



Sampling at College cantene



Sampling at Botanical Garden



Sampling at College Ground & Open auditorium



**Sampling at College Hostel premises**