

SRR & CVR GOVT. DEGREE COLLEGE (A) VIJAYAWADA

DEPARTMENT OF MICROBIOLOGY

2022-2023



Laboratory Visit /Study Tour

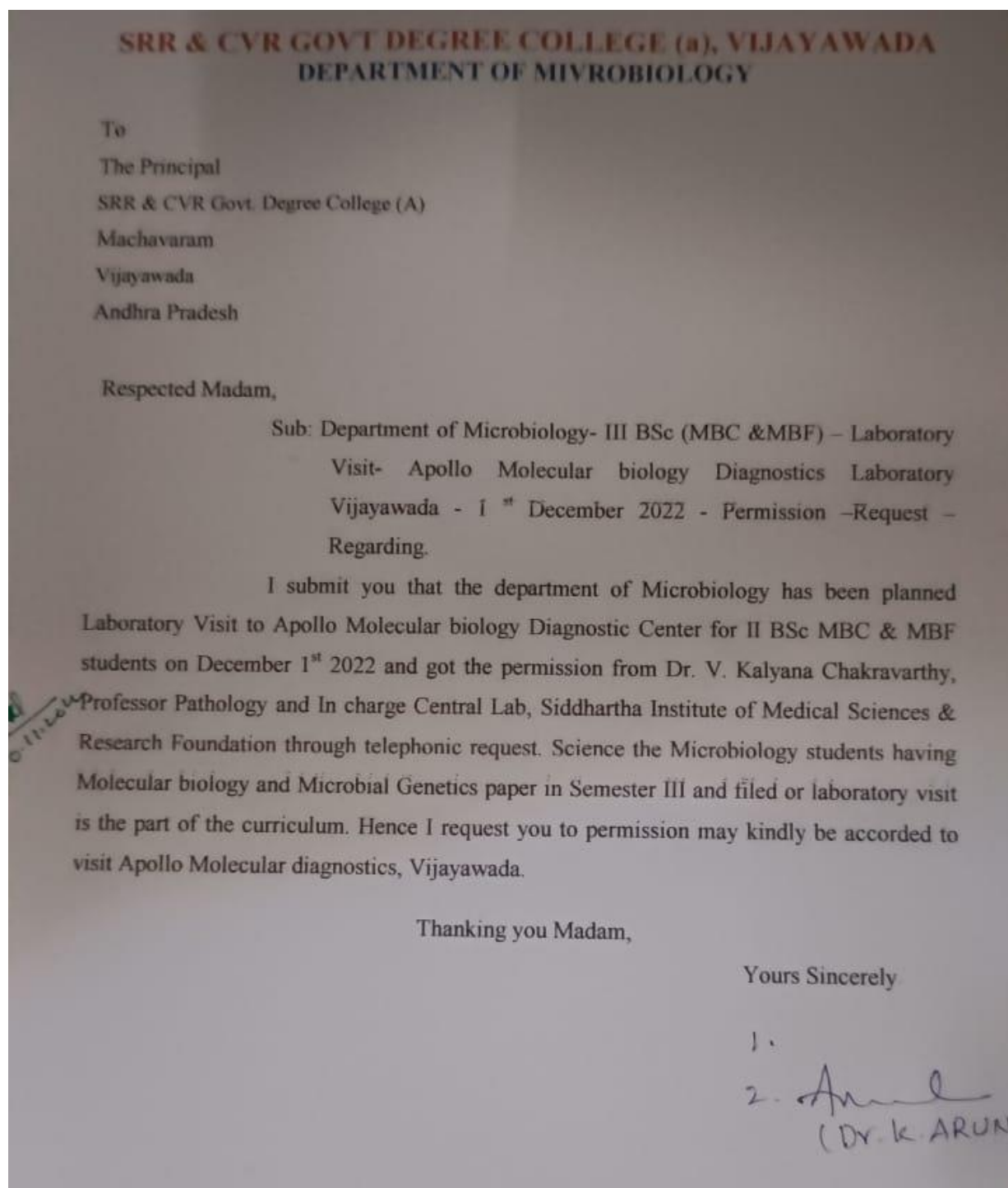
To



Molecular Biology Diagnostics Laboratory, Apollo, Vijayawada

1st December 2022

Permission Letter





Acceptance: Through telephonic call accepted the request and permitted the students to visit the Apollo Diagnostics laboratory on **1st December 2022 by Dr. V Kalyana Chakravarthi**, Professor in Pathology and In-charge Central Laboratory, Siddhartha Institute of Medical Sciences & Research Foundation.

SRR & CVR GOVT. DEGREE COLLEGE (A), Vijayawada

Department of Microbiology

Activity Register 2022-2023

Date	1-12-2022
Conducted through (DRC/JKC/ELF/NCC/NSS/ Departments etc.)	Department of Microbiology
Nature of Activity (Seminar/Workshop/Extn.Lecture etc.,)	Laboratory Visit/ Study Tour
Title of the Activity	II BSc (MBC & MBFT) Semester III
Name of the Department/Committee	Department of Microbiology
No. of students participated	35
Brief Report on the activity	<p>The Department of Microbiology has Organized Study trip to Apollo Molecular Diagnostics laboratory, Vijayawada on 1st December 2022. Students got the information on Real time RT-PCR is a nuclear-derived method for detecting the presence of specific genetic material in any pathogen, including a virus. Real time RT-PCR is one of the most widely used laboratory methods for detecting the COVID-19 virus. While many countries have used real time RT-PCR for diagnosing other diseases, such as Ebola virus and Zika virus, many need support in adapting this method for the COVID-19 virus, as well as in increasing their national testing capacities. Originally, the method used radioactive isotope markers to detect targeted genetic materials, but subsequent refining has led to the replacement of isotopic labelling with special markers, most frequently fluorescent dyes. This technique allows scientists to see the results almost immediately while the process is still ongoing, whereas conventional RT-PCR only provides results at the</p>

	<p>end of the process.</p> <p>They also visited Microbiolog and Biochemisry laboratories.</p> <p>Microbiology: The laboratory is equipped with automated systems to address blood culture and mycobacterium culture, bacterial determination and antimicrobial susceptibility thus shortening the turnaround time for reporting. The Microbiology Laboratory of Apollo Diagnostics provides clinical services for the diagnosis, prevention and treatment of infectious diseases. Several techniques like microscopy, isolation on culture media, detection of antibodies, etc. are employed to identify the presence of potentially pathogenic microorganisms such as bacteria, fungi, viruses and parasites. Antimicrobial susceptibility tests are executed on isolates to identify the most appropriate antibiotic for treating an infection.</p> <p>Biochemistry: Biochemistry is the study of chemical and biochemical components in the body for preventing, diagnosing and managing the disease. Diseases like diabetes, heart attacks, infertility, thyroid problems, cystic fibrosis and meningitis can be diagnosed by the examination of body fluids including blood, urine and CSF.</p> <p>Out Come: Students gain the knowledge on working principle of various equipments in the Diagnostic laboratory.</p>
Name of the Lecturers who Planned & conducted the Activity	Dr. K. Aruna 
Signature of the Dept. In-Charge/Convener of the Committee	D. Jyothi 
Signature of the Principal	
Remarks	

Students Attended 01-12-2022

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ACKNOWLEDGEMENTS

We express our deep sense of gratitude to **Dr. K. Bhagya Lakshmi, Principal SRR & CVR Govt. Degree College Autonomous, Vijayawada** for her support and constant encouragement to upgrade the knowledge and skills of students

WE indebted **Dr. V Kalyana Chakravarthi, Professor in Pathology, and In-charge Central Laboratory, Siddhartha Institute of Medical Sciences & Research Foundation, Vijayawada** for permitting the students of II BSc (MBC & MBFT), SRR & CVR GOVT. Degree College Autonomous, VIJAYAWADA.

We wish to express my sincere thanks to **Mr. Sudhakhar, Senior Technician and staff of Apollo Diagnostics, Vijayawada for guiding the** students to learn the aim and objectives of the laboratory.

D. Jyothi

Anil

PRINCIPAL



Students of II BSc MBFT doing Smear Preparation and Staining the Sample

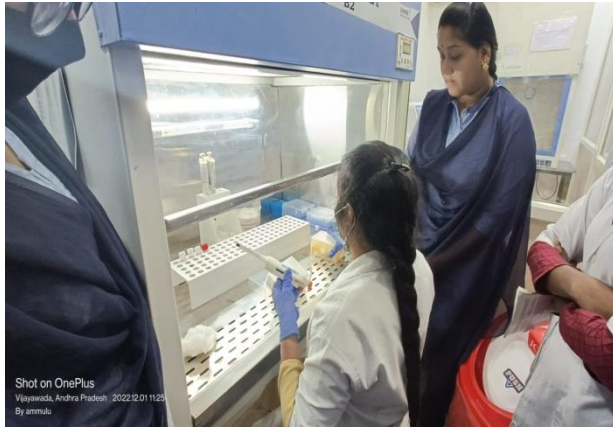


Putting the Sample in Master Mixer for Viral RNA Detection by RT-PCR for COVID-19



Lab Technician Demonstrated on Collection of Blood for various Diagnostic tests

Study Tour Dated: 01-12-2022 II BSc (MBC & MBFT) Semester III





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Study Tour Dated: 01-12-2022 II BSc (MBC & MBFT) Semester III