



**Departments of Botany, Chemistry, Geography, Mathematics,
Microbiology, Physics and Zoology, Lady Brabourne College,
Kolkata**

(DST-FIST, 2019 supported)

Celebrates

AZADI KA AMRIT MAHOTSAV

AN INITIATIVE OF R&D, INFRASTRUCTURE DIVISION OF DEPARTMENT OF
SCIENCE & TECHNOLOGY (DST), GOVT. OF INDIA

A WEEK-LONG AWARENESS AND OUTREACH PROGRAMME FOR SCHOOL
STUDENTS UNDER 'SYNERGISTIC TRAINING PROGRAMME UTILISING
SCIENTIFIC AND TECHNOLOGICAL INFRASTRUCTURE' (STUTI)



Sl. No.	Department/Committee	Date	Time	Programme Details	Participating School(s)	Class
1.	Physics	22.02.2022	11am	1. Overview on the 'Nature of Light and Wave-Particle duality. 2. Emission Spectra will be shown from different sources like Sodium, Helium and Mercury using prism spectrometry. 3. Demonstration of Newton's rings promulgating 'wave' nature of light. Demonstrations of Photoelectric Effect and the dependence of Photocurrent on the wavelength and intensity of incident light to prove the manifestation of light	Ballygunge Shiksha Sadan(The BSS)	XI

				as 'Particle'.		
2.	Botany	23.02.2022	11am	1. Visit to Tissue culture Laboratory. 2. Visit to Molecular Biology Laboratory. 3. Preliminary training on Tissue Culture of plants.	St. Margaret's School	IX
3.	Mathematics	23.02.2022	12 noon	Theme: An Introduction to Statistics, its application and data representation, using charts and graphs along with some hands-on training using MS-Excel.	Christopher Road Govt. Sponsored School for girls	IX and X
4.	Chemistry	24.02.2022	12 noon	1. Demonstration/Experiments in Physical Chemistry Lab: pH metric & Conductometric titrations and Potentiometer. 2. Research Lab : Display and working of HITACHI Spectrofluorimeter procured from DST-FIST grant. 3. Organic Chemistry Lab : i. Determinations of Melting Point, Boiling Point and Special elements in organic compounds. ii. Handling of different apparatus. iii. Microwave assisted Organic synthesis in sophisticated Scientific Microwave Organic Synthesis instruments. Inorganic Lab: i. Flame Test, Borax Bead test. ii. Preparation of Complex and crystallisation. iv. Determination of Hardness of Water.	Jewish Girls School	XII
5.	Microbiology	25.02.2022	11am	Theme : Microbes in Environment 1. Demonstration in WET LAB: Topics : i. Soil Microbiota ii. Observing microbes	1. Sakhawat Memorial Govt. Girls High School 2. Gokhale Memorial Girls School	1. X 2. XII

				<p>isolated from natural source</p> <p>iii. Commercial applications of microbes</p> <p>2. Demonstration in DRY LAB: Topic: Brief Introduction to Equipments and Analytical Instruments used in Microbiology Laboratory</p>		
6.	Geography	25.02.2022	11.30 am	<p>Hands-on training in Practical Geography: Overview on :</p> <ol style="list-style-type: none"> 1. Aerial Photographs to identify various physical and cultural features of earth's surface. 2. Utility of Satellite Images. 3. Determination of height and angle of elevation and depression by Abney Level. 4. Determination of dip amount , dip direction, strike of a bedding plane & 5. Position of the surveyor on the topographical map by Clinometer. 	Sakhawat Memorial Govt. Girls High School	XII
7.	Zoology	26.02.2022	?	<ol style="list-style-type: none"> 1. Lecture on 'Effect of Climate change on flora and fauna' by Dr. Poulomi Maity, Associate Professor, Department of Zoology, lady brabourne college, to develop awareness among students to control erosion of biodiversity. 2. Display of a tropical rain forest with Museum specimens and models conveying the complex ecological interplay, will be put by the departmental students. 3. A model on stages of mitosis of cell division will be displayed. 4. Qualitative analysis of 	Adi MahakaliPathshala	XI

				<p>macromolecules will be demonstrated.</p> <p>5. A human skeleton will be displayed for the students.</p> <p>6. Various instruments and equipments will be shown to the students.</p>		
8.	Science Promotion	27.02.2022	?	<p>Online Poster Competition on the theme 'Sustainable Future and Ecosystem'</p> <p>Participants : School and College students</p>	All the participating School students and students of LBC	
9.	Science Promotion	28.02.2022	6.30 pm	<p>National Level Webinar in Celebration of National Science Day, 2022.</p> <p>Speakers:</p> <p>1. Dr. Uday Maitra, Bhatnagar Awardee, Professor, Department of Organic Chemistry, Indian Institute of Science, Bangalore</p> <p>2. Dr.Santasabuj Das, Director, ICMR- National Institute of Occupational Hazard (NIOH), Ahmedabad</p> <p>Distribution of Prizes of Poster Competition held on 27.02.2022</p>	All the participating School students and students of LBC, and the faculties of LBC and other colleges.	