

LAB FACILITIES

BIAM Model School & College is one of the most prestigious institutions in Dhaka as well as across Bangladesh. This institution has several facilities that provide controlled conditions in which scientific or technological research, experiments, and measurement can be performed very smoothly.

OBJECTIVES

- Help students to understand what they study by demonstrating practically face to face. This will help them to enhance their skills while studying.
- Give students first hand experience which open many better opportunities in learning.
- Develop student teacher bonding and peer interactions.
- Explore the new, the unknowns in order to satisfy their hunger for knowing more.
- Get updated with the new technologies used in labs.
- Conduct all the practical works approved by NCTB.

However, while our students are busy with their lab activities, it is our duty to ensure their utmost safety as well as for our lab instructors. **BMSC DOES NOT COMPROMISE WHEN IT COMES TO SAFETY MEASURES.**

- Each and every lab is well furnished and well ventilated, air conditioned.
- Labs are under CCTV coverage full time.
- FIRE EXTINGUISHERS and alarms are installed at the main entrance of the labs.
- Supply of regular water is also ensured.

- FIRST AID kits and other essentials are available nearby each labs.

PHYSICS LAB

Applying theoretical knowledge and using it in experiments is the most effective way to understand this subject. BMSC try their best for all round-development of students and in keeping with that consistency, we have a well-equipped and outfitted physics laboratory to foster and expedite learning in the most effective way.

This lab is situated on the 5th floor of the building. The lab is well equipped with various kinds of apparatus and is spacious as well. Around 35-40 students can carry out their lab work easily under one instructor. We also have one assistant lab instructor who can help everyone to solve any problem. This lab has numerous equipment starting from a basic screw gauge to modern integrated circuits for intermediate students. Some notable instruments are:

- Heating plates
- Optical bench apparatus and rods (Steel)
- Abonite rods Ammeter (0-0 6/0 - 3 amp)
- Analog Multi-meter
- Analog Voltmeter
- Bar magnet
- Battery holder cell box for one/two cells and red wooden box with brass terminals
- Bell jar & Air Pump
- Burette Clamp and Boss Head
- Calorimeter
- Capacitor apparatus

- Convex mirror 3"
- Convex-Concave lens
- Digital multi-meter
- Electroscope
- Fly Wheel Unit
- Fortune's Barometer
- Galvanometer (best quality) 30-0-30 bench type
- Heating plates
- Potentiometer
- Ammeter and voltmeter
- Potentiometer
- Post office box
- Mini vacuum chamber to measure small objects
- Calorimeter
- Capacitors
- Modern integrated circuits etc.

CHEMISTRY LAB

The chemistry lab is fully equipped to ensure that students are in touch with all the latest developments and techniques in this realm. The environment and setting of the lab nurture the intuitive and inquisitive minds of the children and enhance their zest to make scientific enquiries.

This lab is situated on the 5th floor of the building. Around 40 students can carry out their lab work easily under one instructor. One assistant lab instructor is also who can help everyone to solve any problem. All chemicals and hazardous substances are always kept under lock and key under the instructor of the lab. The showcases are designed as per the level of hazard of each substance. Here again starting from concentrated sodium chloride to pure aluminum, re-known

ones like potassium permanganate, dichromate, cyanide to silver chloride are available for class 10 and HSC level students to carry out their lab activities which are approved by NCTB.

Our chemistry lab has state-of-the-art apparatus:

- Computer aided environment
- Durable and high quality glass beakers
- Marked cylinders for measuring liquids
- Glass flasks
- Wickless alcohol lamps with stand
- Test tubes and stands
- Thermometer
- Tubing Pinch Clamps
- PH papers
- Rubber stoppers
- Ring stands
- Distillation equipment and many other equipment
- Well-maintained, good quality and safely stored stock of chemicals for conducting experiments
- Fire Fighting Equipment
- Well-stocked First Aid kit

Again, instruments like small test tubes to large beakers, synthetic gloves, Bunsen burner, special heat measuring instruments are also available. STUDENTS ARE ALWAYS REQUIRED TO WEAR SAFETY GLASSES, LAB COATS AND GLOVES FOR PERSONAL SAFETY.

BIOLOGY LAB

Our school is renowned for instilling discipline and affecting every aspect of a student's life. We strive to teach our children from a real life perspective and therefore take special interest in educating them in science. As a subject, science includes the observation, deployment and understanding of actual materials and objects. To ensure that students practice what they learn, we have separate laboratories and this portion will talk about the biology laboratory.

All the equipment and facilities in this laboratory are top class and have been sourced from some of the best suppliers of these particular tools. The aim of using top quality equipment is to ensure that our students face no difficulties and enjoy the learning experience while conducting experiments. Our aim is to make education fun and something that the students look forward to:

- Microscopes on each work space. Super sensitive, high-powered and high-priced. The clarity of these microscopes allows the smallest cells in organisms to be clearly visible.
- Slides to be placed beneath and over the cells to be viewed under the microscope. Good quality and crystalline glass.
- Test tubes - for the mixing of fluids and solutions. High quality toughened glass.
- Petri dishes for culturing, smearing and pressing of samples. Tough unbreakable glass.
- Dyes to colour the cell structures and indicators to determine their characteristics. Litmus paper is one such material.
- Sharp scalpels to enable neat and one-touch cutting of organisms. Students are taught how to use these instruments and a strict watch is kept while they are in use.
- Stainless steel forceps to pick up the testers. Students and teachers are expected to wear gloves and lab coats but still must use forceps to handle the samples.

- Beakers for solution mixing are made from clear and durable glass
- Glass flasks
- Proper guidance and handling is demonstrated to the students before they actually use this equipment.

Proper guidance and handling is demonstrated to the students before they actually use this equipment. There are many other such exciting and useful pieces of apparatus which aid the students in their quest for understanding the living world. Biology, as a science, instills a deeper and profound interest in the domain of living things. The experiments conducted in the laboratory combine with the classroom teaching to achieve the best results for the students.

COMPUTER LAB

Computer education became a part of the curriculum barely a decade ago. Initially, the computer was treated like a machine that the students learnt to switch on and off. As the size of the computer became smaller, the amount of information it could store became bigger. The potential of the computer as a disseminator of information is limitless. It has pervaded every facet of our lives. Where once it was just a machine used for calculations, today it is an extension of the books we use for learning.

It has become imperative that computer education periods be inbuilt into the weekly timetables. The school has been investing in state-of-the-art computer labs for the students. We update the technology regularly while also ensuring that the number of computers is enhanced periodically. The students get their fair share of computer time since we make certain that only two students get to work at a terminal.

The most significant lab which every teaching place requires. BMSC bears a quite big computer room for everyone, from students to teachers as well.

- Easily accommodates over 50 students at a time.
- Each and every student are given accessed to one computer each.
- Certified and high configured programs are used.
- This institution only authorizes to use licensed software.
- A big server is used to control all the lab computers.
- Trouble shooting in every computer is done once in a week.
- Has some powerful anti-virus software to cope up with any problem.

'WE BELIEVE IN THE SINCERE CO-ORDINATION AMONG TEACHER AND STUDENTS IN ORDER TO FLOURISH THE TALENT OF EACH AND EVRY STUENTS OF OURS THROUGH LAB ACTIVITIES.HENCE, WE ARE ALWAYS TRYING OUR BEST TO UPGRADE EACH AND EVERY SECTION OF OUR LABS WITH THE ADVANCEMENT OF TECHNOLOGY.'