**MODERNIZATION OF LABS IN KENDRIYA VIDYALAYA NO. III BAAD MATHURA**

MODERNIZATION is refers to progressive transition from a traditional to a modern society this statement is true in the case of MODERNIZATION of labs. Kendriya Vidyalaya Sagathan has played a crucial role in modernization labs by providing equipment to enrich the science subjects and hands on learning.

Hands on learning has become a common phrase in science education. Like many other highly used terms and phrases, there are various interpretations of what is meant by the “hand - on learning” Rather than attempt offer a definitive operational definition, we present in this section a variety of viewpoints on what is meant by hands on learning in science. Then we address the issue of whether hands on learning is a new phenomenon and whether hand on approaches will continue to have a continual impact on science teaching and learning in schools.

The importance of student investigation of basic principles cannot be overstated. Hands on learning is the only way students can directly observe and understand science. As students develop effective techniques for observing and testing everything around them, they experiences are necessary if the youngsters of today are to remain “turned - on” to scientifically literate.

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| Sr. No. | Item/Facility | Specifications |
| 1 | Standard Room Size/Dimensions  | Lab size with capacity to accommodate a group of 25-30 Students for Class XI and XII. Has a working area 8mX7m with 1mX1m circulation area as per CBSE norms. It is attached with a teachers cum dark cum preparation room on one side. There is also be a provision of store room of area 3mX7m on the other side of the working area. Working platform, of height 85 cm from floor with 65 cm width, is constructed on both side of the room with tile top |
| 2 | Store | Store has sufficient no of almirahs to accommodate the items document, stock register etc. A wooden almirahs under the slab is also provided to accommodate modern equipment’s. |
| 3. | Teacher’s Room | For teacher to study and keep records, well equipped with furniture and inbuilt cup board  |
| 4 | Power Supply | 15 electrical points for doing electrical experiments at a time and LCD projector is projected all labs are also connected to Electrical generator to ensure all the time power supply |
| 5 | Fire Extinguisher  | Fire extinguisher is provided to all the labs for fire safety these fire extinguishers are replaced every with new one |
| 6 | Water Supply | all Labs is provided with water supply all the time |
| 7 | Exhaust & Ventilators | Exhaust : Chemistry lab is provided with Exhaust and other labs are provided with sufficient no of Ventilators |
| 8.  | Flooring  | All labs are provided with good flooring  |
| 9. | Interactive and Display Boards | One LCD projector with Visualizer and internet facility is provided to all the labs |
| 10  | Personal Computer and computer Table | One computer with configuration equipped with software for the syllabus as specified by CBSE for classes XI and XII a broadband connection with printer is provided. |
| 11.  | Mini Subject Library | Mini subject library is maintained in each Lab so that student and teacher may refer from time to time |
| 12 | LCD Projector | LCD Projector is mounted in each Lab |
| 13 | First Aid Kit | First Aid Kit is provided by MI Room of the Vidyalaya |
| 14 | Students stools |  25 to 30 stools are provided to each lab to accommodate 25 to 30 students, stools have sufficient height for the ample leg space under the table and have broad leg area to provide stability. |

(B) Usability/ Usage

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| Sr. No. | Item/ Facility | Specifications |
| 1 |  Practical  | Syllabi allocated is divided judiciously term wise from April to August and October to February. Practical and activities to be interlinked with syllabi. |
| 2. | Conduct of Projects  | Projects are given to XII class to complete by end of August  |
| 3 | Demonstrations |  The Syllabi is supplemented with demonstration /activities. Videos are selected from YouTube to give additional edge to teaching |
| 4. | Workshop and Seminars | Subject enrichment and science festival were organized in the Vidyalaya. This year science exhibition will be organized at the Vidyalaya level as usual.  |
| 5 | Science Exhibition  | Science exhibition at the vidyalaya level is organized every year  |
| 6 | Public Demonstration  | 28 February is organized as Science day every year in assembly to all the students of the Vidyalaya. |

Keeping Lab Functional

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| Sr. No. | Item/ Facility | Specifications |
| 1 | Maintenance of equipment | The equipment’s are maintained functional and necessary repair work whenever needed must be carried our periodically. The microscopes and other equipment’s are checked periodically. |
| 2 | Fire Extinguisher | Fire extinguishers are refilled or replaced every year with appropriate training to all the incharges and teachers |
| 3 | Electrical Maintenance  | Power points are checked for any naked wire, non-functionality, switch failures etc.  |
| 4 | Stock verification  | Stock verification is done every year as per KVS norms |
| 5 | Condemnation  |  the equipment’s that have become non-functional are condemned time to time |
| 6 | Procurement | the equipment are procured as per requirement from time to time as per KVS norms |

List of the equipment for the MODERNIZATION of labs is attached along with regular equipment’s as per the syllabus of CBSE