



		<p>sensitivity assay for the differentiation between sensitive and resistant microbes. Applications of microbiology in the healthcare sector.</p> <p><u>Introduction to Hematology &amp; Clinical Pathology – 25 days</u></p> <p>Brief introduction to Hematology and clinical pathology. Immunohematology in detail, ABO, Rh and other blood group system in detail. Methodology to identify blood groups and different aspects of blood transfusion techniques. Components of blood, checking specimen for clot &amp; hemolysis. Hematology auto analyzer, PT, APTT, assay of clotting factors, preparation &amp; staining of PBF, Urinalysis, semen, CSF and other body fluid investigations.</p> <p><u>Introduction to Histopathology – 10 days</u></p> <p>Brief introduction of histopathology, Elementary knowledge of specimen collection, tissue fixation, tissue processing, section cutting. Routine staining of tissue section: H &amp; E, special staining techniques: PAS, MGG, PAP's staining.</p> <p><u>Introduction to cytopathology– 5 days</u></p> <p>Brief Introduction of cytology and cytopathology. Elementary knowledge of specimen collection and transportation, precautions to be taken for gynaecological samples, understand about fixation and fixative. Understand about fluid specimen.</p>	<p>BIPS &amp; BCL</p> <p>BIPS &amp; BCL</p> <p>BIPS &amp; BCL</p>	<p>BIPS-HR &amp; BCL</p> <p>BIPS-HR &amp; BCL</p> <p>BIPS-HR &amp; BCL</p>
4.	<p>Sample collection, processing and lab management (15 days)</p>	<p>Pre analytical laboratory testing process- common pre analytical errors in the laboratory, requisition forms, sample collection manual, specimen transportation, specimen reception, acceptance and rejection criteria. Analytical laboratory testing process- specimen handling, broad understanding of setting up, calibrating, operating, cleaning, maintaining, troubleshooting and validation of laboratory equipment used in quantitative or qualitative analysis. To be able to run Quality Controls. Post-Analytical Laboratory Testing Process-protocol emphasizing on storage and retrieval of samples, specimens, data and record. assessment of results to initiate follow-up testing .Differentiation between clinically significant and insignificant findings</p> <p>Able to establish and monitor quality assurance programs or activities to ensure the accuracy of laboratory results</p>	<p>BIPS &amp; BCL</p>	<p>Dr. Bhavana &amp; BIPS-HR</p>

	<p>Equipment Handling</p> <p>10 days</p>	<p><u>SOPs of all instruments – 4 days</u></p> <p>Standard operating procedures for all the instruments to be used in diagnostic and research laboratory including basic instruments like weighing balance, pH meter, centrifuge, magnetic stirrer, autoclave, laminar air flow, etc. and specialized instruments like colorimeter, spectrophotometer, hematology and biochemistry autoanalyzer etc. Applications of each of these instruments.</p> <p><u>Calibration and maintenance of equipments – 3 days</u></p> <p>Maintenance of each of the above instruments and their regular calibration.</p> <p><u>Introduction to advanced techniques and future trends in laboratory sciences 3 days</u></p> <p>Introduction to advanced microbiological equipments including Bactec&amp;Vitek for automated analysis of the microbial colonies and RT-PCR &amp; automated RNA extraction. These will include the SOPs of the automated instruments, their maintenance, calibration and their applications.</p>	<p>BIPS &amp; BCL</p> <p>BIPS &amp; BCL</p>	<p>BCL</p>
<p>6.</p>	<p>Essentials (30 days)</p>	<p><u>Personal Hygiene – 2 days</u></p> <p>It would involve the presentation of human personnel at the work place, the rules and regulations to be followed and the personal hygiene measures to be taken according to the work specifications.</p> <p><u>Safety &amp; first-aid – 5 days</u></p> <p>In case of mishap such as cuts, wounds, fire or spillage of chemicals or reagents, the safety measures and the first aid to be carried out will be covered in this section. It would also include the use of certain basic medicines like analgesics, antipyretics, nausea, headaches, etc. to be consumed under emergency conditions.</p> <p><u>Bio-medical waste management – 3 days</u></p> <p>The waste collected post the experimentation including diagnostics, research or any other such activity to be segregated and disposed accordingly. This would include disposal of unused or used samples, syringes, chemicals, gels, toxic waste, etc.</p> <p><u>Professional behavior – 3 days</u></p> <p>This section would comprise of soft skills, presentation and behavioral aspects to be maintained at</p>	<p>BCL</p> <p>BCL</p> <p>BIPS &amp; BCL</p> <p>BIPS</p>	<p>BCL</p> <p>BCL</p> <p>BCL</p>

		<p>the workplace and also to deal with certain critical situations with supervisor or mentees.</p> <p><u>Infection control &amp; prevention – 5 days</u></p> <p>All the routine causes of infections in the samples, workplace or human personnel will be shared depending on the type of work carried out. This will be followed by the prevention and treatment strategies for the same.</p> <p><u>Patient’s Rights and responsibilities – 2 days</u></p> <p>The sense of responsibility and ownership of the assigned work will be taught in this section which is to be maintained. In addition, the basic rights during an employment such as number and nature of leaves, reporting authority, etc. to be covered.</p> <p><u>Basic computer knowledge – 4 days</u></p> <p>Basic computer knowledge including parts of a computer and their operations. Basic working of Microsoft office in detail including Word, Excel, Power point, etc. to be covered.</p> <p><u>Soft skills &amp; communication – 6 days</u></p> <p>This section will cover basic reading and writing skills in a professional set up. It would also include the verbal communication skills during a meeting, presentation or a discussion.</p>	<p>BCL</p> <p>BIPS</p> <p>BCL</p> <p>BIPS</p>	
7.	<b>Documentation (15 days)</b>	<p>All the experimentation, results and data are to be documented in a professional way in prescribed manner which can be analyzed with ease. This section will also include the observation of results and data and its analysis and reporting in an appropriate manner. Certain basic statistical tools will be also be included in this section which will be essential for data analysis during the research and experimentation.</p>	BCL	BCL
8.	<b>Quality Assurance (15 days)</b>	<p><u>Basics of quality assurance</u></p> <p><u>Accreditation systems</u></p> <p><u>Major lab errors</u></p> <p><u>Audit system</u></p> <p><u>Sensitization on current best practices in laboratory</u></p>	BCL	BCL