

**Research Centre
Mahavir Cancer Sansthan
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Contact Persons

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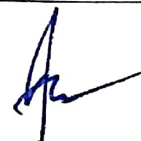
RESEARCH TRAINING MODULE FOR 15 DAYS

Week -1	<ul style="list-style-type: none">➤ Registration➤ Lecture on Microbiology Overview➤ Hospital Visit➤ Research Overview➤ Overview of Research Equipments➤ Microbiological Tests – Sterilization Method, Media Preparation, Microbial Culture Preparation and Staining Method➤ Haematological Tests – RBC, WBC count and Haemoglobin Percentage
Week – 2	<ul style="list-style-type: none">➤ Biochemical Test – Liver Function Test, Kidney Function Test, Protein and Cholesterol test➤ Short presentation of work (10 minutes)➤ Interaction with Microbiologist➤ Project Submission and Certification Distribution

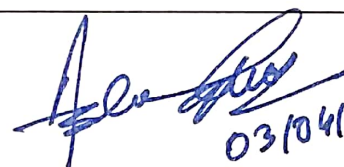


RESEARCH TRAINING MODULE FOR 30 DAYS

Week -1	<ul style="list-style-type: none">➤ Registration➤ Lecture on Microbiology Overview➤ Hospital Visit➤ Research Overview➤ Overview of Research Equipments <p><u>Methods for study of Microorganisms</u></p> <ul style="list-style-type: none">➤ Preparation of Cotton plug and permanent cotton plug➤ Method of Sterilization➤ Method of culture preservation and maintenance➤ Preparation of Liquid, and Solid Culture media➤ Demonstration of pH Measurement of a culture media➤ Preparation of Agar Slant➤ Culture transfer techniques➤ Direct Total Cell Count
Week – 2	<p><u>Techniques for pure culture of Microorganisms</u></p> <ul style="list-style-type: none">➤ Culture Transfer Techniques➤ Isolation of discrete colonies from a mixed culture➤ Isolation of Pure cultures from a Spread Plate Technique➤ Isolation of Pure cultures from a Pour Plate Technique➤ Isolation of Pure cultures from a Streak Plate Technique➤ Serial Dilution Method
Week – 3	<p><u>Methods for staining of Microorganisms</u></p> <ul style="list-style-type: none">➤ Preparation of bacterial smear➤ Differential staining technique➤ Simple staining method



	<ul style="list-style-type: none"> ➤ Negative staining method ➤ Gram staining method ➤ Fungal staining method
Week – 4	<p><u>Biochemical Activities of Microorganisms</u></p> <ul style="list-style-type: none"> ➤ Extracellular enzymatic activities of Microorganisms ➤ Carbohydrate Fermentation ➤ Triple Sugar – Iron Agar Test ➤ IMViC Test ➤ Short presentation of work (10 minutes) ➤ Projection Submission and ➤ Certificate Distribution


03/04/23

RESEARCH TRAINING MODULE FOR 2 MONTHS

Week - 1	<ul style="list-style-type: none">➤ Registration➤ Lecture on Microbiology Overview➤ Basic Fundamental Research of Microbiology
Week – 2	❖ Water and Waste Water Microbiology
Week – 3	❖ Microbiology of Milk and Food Product
Week - 4	❖ Medical Microbiology and Pathology
Week – 5	❖ Soil Microbiology
Week – 6	❖ Molecular Microbiology
Week – 7	❖ Diagnostic Microbiology and Immunology
Week – 8	<ul style="list-style-type: none">❖ Project preparation and Submission❖ Certificate Distribution



RESEARCH TRAINING MODULE FOR 3 MONTHS

Project work on different topics given below :-

1st Short presentation of Work (10 minutes) = 6th week

2nd Short presentation of Work (10 minutes) = 10th week

RESEARCH TRAINING MODULE FOR 6 MONTHS

Project work on different topics given below:-

1st Short presentation of Work (10 minutes) = 6th week

2nd Short presentation of Work (10 minutes) = 10th week

3rd Short presentation of Work (10 minutes) = 20th week

Topic for Study:

- **Self selected**
- **Selected after counseling**
- **Topic Selected from Data**
- **Mandatory to have impact on Cancer management**


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