



Microbiology Internship

1. **Marine Microbial Ecology:** Studies the diversity and activities of microorganisms in oceanic environments.
2. **Soil Microbial Ecology:** Focuses on the interactions and functions of microorganisms in soil ecosystems.
3. **Microbial Symbiosis:** Examines the mutually beneficial relationships between microbes and other organisms.
4. **Bacteriophage Therapy:** Explores the use of bacteriophages to treat bacterial infections, especially those resistant to antibiotics.
5. **Microbial Electrochemistry:** Investigates how microorganisms generate and interact with electrical currents in microbial fuel cells or bioelectrochemical systems.
6. **Nanotechnology in Microbiology:** Applies nanoscale technology to study microbial processes and develop microbial applications in medicine and industry.
7. **Archaeal Genetics:** Studies the genetic makeup and functions of Archaea, a unique group of microorganisms distinct from bacteria and eukaryotes.
8. **Environmental Virology:** Examines the role of viruses in environmental ecosystems, including their impact on microbial populations and ecological processes.
9. **Microbial Stress Response Mechanisms:** Researches how microorganisms respond to environmental stresses, such as changes in temperature, pH, and salinity.
10. **Clinical Microbiome Research:** Investigates the community of microorganisms living on and in the human body and their impact on health and disease.
11. **Synthetic Biology in Microbial Systems:** Uses engineering principles to design and construct new biological parts, devices, and systems in microorganisms.
12. **Microbial Community Profiling:** Analyzes the composition and function of microbial communities in different environments using genomic and metagenomic approaches.
13. **Anaerobic Microbiology:** Studies microorganisms that live and grow in environments without oxygen.
14. **Microbial Biofilms in Industrial Systems:** Investigates the formation and control of biofilms that can cause fouling and corrosion in industrial settings.
15. **Microbial Proteomics:** Focuses on the large-scale study of proteins, particularly their structures and functions, produced by microorganisms.
16. **Airborne Pathogens Study:** Researches pathogens that are transmitted through the air, focusing on their detection, control, and impact on public health.
17. **Mycobacterial Research:** Studies the group of bacteria that includes pathogens such as *Mycobacterium tuberculosis*, the cause of tuberculosis.
18. **Microbial Secondary Metabolites:** Examines the bioactive compounds produced by microorganisms that can be used in health, agriculture, and industry.
19. **Industrial Enzyme Production:** Focuses on the use of microorganisms to produce

- enzymes for industrial applications, such as in detergents, food processing, and biofuels.
20. **Microbial Phylogenetics:** Studies the evolutionary relationships between microbial species using genetic data.
 21. **Microbial Biopolymers:** Investigates the production and properties of biopolymers, such as xanthan and alginate, which are produced by microorganisms for various industrial applications.
 22. **Extreme Environment Microbiology:** Studies microorganisms that live in extreme conditions, such as high temperatures, acidic environments, or high salt concentrations, to understand their adaptations and potential uses.
 23. **Microbial Signal Transduction:** Explores the mechanisms by which microorganisms perceive and respond to their environment through biochemical signaling pathways.
 24. **Microbial Biotechnology for Sustainability:** Focuses on using microbial processes to develop sustainable technologies for energy production, waste recycling, and environmental remediation.
 25. **Psychrophilic Microorganisms:** Studies organisms that thrive at extremely low temperatures, often below the freezing point of water, to understand their adaptations and potential applications in biotechnology.
 26. **Thermophilic Microorganisms:** Focuses on organisms that thrive at very high temperatures, typically found in hot springs and hydrothermal vents, exploring their enzymes for industrial applications.
 27. **Acidophilic Microorganisms:** Studies microorganisms that grow optimally in acidic environments, understanding their potential in mining, waste management, and industrial processes.
 28. **Alkaliphilic Microorganisms:** Investigates organisms that thrive in alkaline environments, exploring their uses in bioremediation and industrial processes that require high pH conditions.
 29. **Microbial Biofuels:** Researches the production of biofuels like ethanol and biodiesel from microbial sources, aiming to find sustainable energy alternatives.
 30. **Paleomicrobiology:** Examines ancient microorganisms preserved in archaeological and geological contexts to understand historical ecosystems and the evolution of microbial life.
 31. **Microbial Pathogen Surveillance:** Focuses on monitoring and detecting microbial pathogens to manage and control infectious disease outbreaks.
 32. **Microbial Dynamics in Wastewater Treatment:** Studies the role of microorganisms in wastewater treatment processes to improve efficiency and reduce environmental impact.
 33. **Virulence Factor Research:** Investigates the molecules produced by pathogens that contribute to their ability to cause disease, aiming to develop targeted therapies.
 34. **Antiviral Compounds Research:** Focuses on discovering and developing new antiviral agents that can inhibit the replication of viruses and treat viral infections.
 35. **Microbial Contributions to Climate Change:** Examines how microorganisms influence climate through processes like methane production and carbon sequestration.
 36. **Microbial Pesticides:** Researches the development of microbial-based agents that can control agricultural pests in a more environmentally friendly way compared to chemical pesticides.
 37. **Microbial Forensics:** Applies microbiological methods to criminal and environmental investigations to track sources of outbreaks and biothreat agents.

38. **Human Skin Microbiome:** Studies the complex community of microorganisms that live on human skin, understanding their role in health and disease.
39. **Oral Microbiology:** Investigates the microorganisms that inhabit the oral cavity, focusing on their roles in oral health and disease.
40. **Microbiological Safety of Food:** Focuses on detecting and controlling microorganisms in food that pose health risks, ensuring food safety and public health.
41. **Probiotics and Prebiotics Research:** Studies the benefits and mechanisms of probiotics and prebiotics in promoting gut health and enhancing the immune system.
42. **Mycotoxins in Food and Feed:** Investigates the occurrence, impact, and control of toxic compounds produced by fungi in food and animal feed to ensure safety and reduce health risks.
43. **Bacterial Spore Formers Research:** Explores the biology of spore-forming bacteria, which are important in both health (probiotics) and disease (pathogens like *Bacillus anthracis*).
44. **Antibiotic Resistance Gene Transfer:** Studies the mechanisms through which bacteria acquire and spread genes that confer resistance to antibiotics, with the aim of developing strategies to combat resistance.
45. **Microbial Sensors and Biosensors:** Focuses on developing devices that utilize microorganisms or their components to detect environmental changes, toxins, or pathogens.
46. **Microbial Consortia Engineering:** Researches the design and optimization of microbial communities for improved performance in industrial applications, such as biofuel production and waste degradation.
47. **Helminthology:** Studies parasitic worms and their interactions with hosts, aiming to understand the mechanisms of infection and develop effective treatments.
48. **Microbial Ecology of Built Environments:** Investigates the microbial communities in human-made environments like buildings and transport systems, understanding their impact on human health.
49. **Geomicrobiology:** Explores the interactions between microbes and minerals, understanding how these interactions affect geological processes and vice versa.
50. **Space Microbiology:** Studies the survival, growth, and adaptation of microorganisms in space environments, aiming to understand their implications for space travel and extraterrestrial colonization.
51. **Microbial Interactions with Nanomaterials:** Examines how microorganisms interact with nanoscale materials, which has implications for nanotechnology safety and microbial pathogenicity.
52. **Cyanobacterial Toxins:** Researches the production of toxins by cyanobacteria, their effects on aquatic ecosystems and human health, and methods to control their proliferation.
53. **Microalgal Biotechnology:** Focuses on the exploitation of microalgae for products such as biofuels, pharmaceuticals, and nutraceuticals, leveraging their rapid growth and biochemical diversity.
54. **Microbiota-Gut-Brain Axis:** Studies the interactions between the gut microbiota and the brain, exploring how gut bacteria influence brain function and behavior.
55. **Epigenetics in Microorganisms:** Investigates how changes in gene expression in microbes that are not caused by changes in the DNA sequence can influence microbial function and adaptation.

56. **Bacterial Persistence and Dormancy:** Examines the mechanisms by which bacteria enter states of reduced metabolic activity, which often contributes to antibiotic resistance.
57. **Phycomicrobiology:** Studies the interactions between microorganisms and plants, including both beneficial relationships (such as nitrogen fixation) and pathogenic interactions.
58. **Marine Biotechnology:** Explores the use of marine microorganisms and their compounds in developing new products for medicine, industry, and environmental management.
59. **Microbial Electrosynthesis:** Researches how microorganisms can be used to produce chemicals and fuels directly from electricity and carbon dioxide, offering a form of sustainable production.
60. **Biofilm Engineering and Control:** Focuses on the structure, function, and dynamics of biofilms, developing strategies to prevent their formation or to harness their properties in industrial applications.
61. **Microbial Systematics:** Focuses on the classification and identification of microorganisms using genetic and phenotypic characteristics to understand their diversity and evolutionary relationships.
62. **Comparative Microbiome Studies:** Investigates the similarities and differences among microbiomes from different environments, hosts, or health states to understand microbial influences on ecosystem and host health.
63. **Microbial Degradation of Synthetic Polymers:** Studies the ability of microorganisms to break down synthetic materials, aiming to develop biodegradable alternatives and bioremediation strategies.
64. **Antifungal Resistance:** Examines the mechanisms through which fungi develop resistance to antifungal agents, with the goal of developing new treatments and prevention strategies.
65. **Industrial Production of Vitamins by Microbes:** Researches the use of microorganisms to produce vitamins in a cost-effective and sustainable way for food fortification and supplements.
66. **Microbial Pathways for Carbon Sequestration:** Studies how microorganisms can be used to capture and store carbon, potentially reducing greenhouse gas emissions and mitigating climate change.
67. **Microbial Informatics:** Applies data science and bioinformatics tools to analyze microbial data, improving our understanding of microbial functions and interactions.
68. **Biodeterioration and Biocorrosion:** Investigates the damaging effects of microorganisms on materials and structures, such as metals and stone, and seeks protective strategies.
69. **Evolutionary Microbiology:** Studies the evolutionary processes that shape microbial diversity, adaptation, and speciation over time.
70. **Microbial Public Health Issues:** Focuses on the impact of microorganisms on public health, including the spread of infectious diseases and the development of public health policies.
71. **Microbial Diagnostics Development:** Develops new methods and technologies for rapidly identifying and quantifying microbial pathogens in clinical and environmental samples.
72. **Molecular Pathogenesis:** Investigates the molecular mechanisms by which pathogens cause disease, aiming to identify targets for therapeutic intervention.
73. **Microbial Adaptation to Humans:** Studies how microorganisms adapt to the human body and the consequences of these adaptations for health and disease.

74. **Mucosal Immunology and Microbes:** Examines the interactions between microbial communities and the mucosal immune system, focusing on the impacts on health and disease prevention.
75. **Infectious Disease Modeling:** Uses mathematical and computational models to understand the dynamics of infectious diseases and to inform control and prevention strategies.
76. **High Throughput Microbial Phenotyping:** Utilizes advanced technologies to rapidly assess the characteristics of large numbers of microbial strains, enhancing our understanding of microbial diversity and function.
77. **Microbial Ecology of Foods:** Studies the microorganisms involved in the spoilage, fermentation, and safety of foods, aiming to improve food quality and safety.
78. **Microbial Quality Control in Pharmaceutical Manufacturing:** Ensures the absence of unwanted microorganisms in pharmaceutical products, critical for product safety and efficacy.
79. **Microbial Conservation and Preservation:** Focuses on the methods and importance of conserving microbial diversity for future research, industry, and ecosystem health.
80. **Applied Mycology and Plant Pathology:** Studies fungal diseases of plants, aiming to develop effective control measures and improve agricultural productivity.
81. **Microbial Genomics for Outbreak Tracking:** Utilizes genomic sequencing to track and understand the spread of microbial pathogens during disease outbreaks, aiding in containment and prevention efforts.
82. **Industrial Microbial Bioprocesses:** Explores the use of microorganisms in industrial processes such as fermentation, bioconversion, and biocatalysis, aiming to optimize production and reduce costs.
83. **Bacterial Cell Surface Studies:** Investigates the structure and function of bacterial cell surfaces to understand interactions with the environment and host organisms, which has implications for disease and biotechnology.
84. **Microbial Toxicology:** Studies the effects of toxic substances on microorganisms and how microbes can be used to detoxify environments, contributing to pollution control and environmental health.
85. **Mycological Research in Agriculture:** Focuses on the role of fungi in agriculture, including their impact on plant health and soil fertility, and their potential as biopesticides or biofertilizers.
86. **Functional Foods and Microbes:** Investigates how microorganisms can enhance the nutritional and health properties of foods, including the development of probiotics and fermented foods.
87. **Microbiologically Influenced Corrosion (MIC):** Studies the role of microorganisms in the corrosion of metals and other materials, aiming to develop strategies to mitigate this costly industrial problem.
88. **Microbial Interactions in Animal Hosts:** Explores the complex relationships between microorganisms and their animal hosts, including both pathogenic and symbiotic interactions.
89. **Microbial Processes in Biogeochemical Cycles:** Examines the role of microorganisms in the cycling of essential elements like carbon, nitrogen, and sulfur across different ecosystems.
90. **Microbial Production of Biodegradable Plastics:** Researches the use of microorganisms

to produce plastics that are environmentally friendly and capable of decomposing naturally.

91. **Microbial Ecology of Animal Feed:** Studies the microbial content of animal feed, its impact on animal health and productivity, and strategies to manipulate these communities for better outcomes.
92. **Microbial Quality of Drinking Water:** Focuses on ensuring the microbial safety of drinking water, studying pathogens and non-pathogenic microorganisms that influence water quality.
93. **Antimicrobial Coatings:** Investigates the development of surface coatings that inhibit microbial growth on various surfaces, important for healthcare, food safety, and industrial applications.
94. **Viral Oncology:** Explores the use of viruses to treat cancer, either by targeting and killing cancer cells or by stimulating the immune system to attack them.
95. **Microbial Contributions to Biodiversity:** Studies how microorganisms contribute to and maintain biodiversity within various ecosystems, highlighting their roles in ecological stability and resilience.
96. **Microbial Fuel Cells:** Researches the generation of electricity from the metabolic processes of microorganisms, which can be used as a sustainable energy source.
97. **Industrial Application of Extremozymes:** Explores the use of enzymes from extremophilic microorganisms in industrial applications, taking advantage of their stability under extreme conditions.
98. **Microbial Kinetics:** Studies the rates of microbial processes, including growth and metabolism, to optimize industrial processes and environmental interventions.
99. **Bioaugmentation in Environmental Cleanup:** Involves the addition of cultured microorganisms to contaminated environments to accelerate the degradation of pollutants.
100. **Microbial Resistance to Heavy Metals:** Investigates how microorganisms develop resistance to heavy metals and how these traits can be exploited for bioremediation and recovery of valuable metals.

Fee Structure

Note 1: Fee mentioned below is per candidate.

Note 2: Fee of any sort is NON REFUNDABLE once paid. Please cross confirm all the details before proceeding to fee payment

2 Days Total Fee: Rs 1800/-

Reg Fee Rs 540/-

5 Days Total Fee: Rs 3360/-

Reg Fee Rs 1008/-

10 Days Total Fee: Rs 3360/-

Reg Fee Rs 1008/-

Microbiology Internship

15 Days Total Fee: Rs 5684/-

Reg Fee Rs 1705/-

20 Days Total Fee: Rs 8400/-

Reg Fee Rs 2520/-

30 Days Total Fee: Rs 13341/-

Reg Fee Rs 4002/-

45 Days Total Fee: Rs 20329/-

Reg Fee Rs 5500/-

2 Months Total Fee: Rs 25200/-

Reg Fee Rs 5500/-

3 Months Total Fee: Rs 38400/-

Reg Fee Rs 5500/-

4 Months Total Fee: Rs 51000/-

Reg Fee Rs 5500/-

5 Months Total Fee: Rs 64200/-

Reg Fee Rs 5500/-

6 Months Total Fee: Rs 76800/-

Reg Fee Rs 5500/-

7 Months Total Fee: Rs 90000/-

Reg Fee Rs 5500/-

8 Months Total Fee: Rs 102600/-

Reg Fee Rs 5500/-

9 Months Total Fee: Rs 115200/-

Reg Fee Rs 5500/-

10 Months Total Fee: Rs 128400/-

Reg Fee Rs 5500/-

11 Months Total Fee: Rs 141000/-

Reg Fee Rs 5500/-

1 Year Total Fee: Rs 154200/-

Reg Fee Rs 5500/-

Please contact +91-9014935156 for fee payments info or EMI options or Payment via Credit Card or Payment using PDC (Post Dated Cheque).