



Govt. Science College, Jabalpur

B.Sc. 3rd year Microbiology

Microbial Genetics and Molecular Biology (Group A Paper I)

Course Learning Outcomes (CLO)

- ❖ Develop basic understanding of genetic material present in cells.
- ❖ Integrate knowledge of general principles of replication, transcription and translation.
- ❖ Employ knowledge about mutations and their repair mechanisms.
- ❖ Differentiate between genetic recombination and gene regulation in prokaryotes and eukaryotes.





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B.Sc. 3rd year

Microbiology

**Food Microbiology
(Group A Paper II)**

Course Learning Outcomes (CLO)

- ❖ Apply Fundamental Principles and methods of food preservation.
- ❖ Employ Internal and external factors that significantly affect the growth and survival of microbes in food.
- ❖ Identify the types of microorganisms present in various foods and their role in preservation, and causing spoilage of fresh produce and processed food products.
- ❖ Associate Micro-organisms responsible for food borne illnesses and their preventive measures.





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B.Sc. 3rd year Microbiology

Industrial Microbiology (Group B Paper I)

Course Learning Outcomes (CLO)

- ❖ Work on fermenter, medium formulation, sterilization.
- ❖ Formulate strategies of strain improvement of microorganisms for increasing production.
- ❖ Explore avenues of industrial microbiology.
- ❖ Appreciation of how microbiology is applied in manufacturing of day-to-day industrial products like alcohols, organic acids, solvents, antibiotics, paper and textiles.





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Microbes as Pathogen (Group B Paper II)

Course Learning Outcomes (CLO)

- ❖ Will have acquainted themselves with the terminology and scientific nomenclature used in describing disease and pathogenic features or microbial agents of disease.
- ❖ Will have gained an in depth knowledge about the spectrum of disease caused by bacterial and viral pathogens, and an understanding of the course of disease development and accompanying symptoms.
- ❖ Will acquire knowledge on the causation of fungal and protozoan diseases and methods of prevention and control.
- ❖ Will get an idea about some important plant pathogens and diseases caused by them.

