

Prince Shri Venkateshwara Arts and Science College

– Band: 151– 300 Accredited with ISO 9001:2015, ISO 140001:2015, ISO 50001:2018, ISO

Certified Institution

Affiliated to University of Madras/Recognized by UGC under section 2(f) UGC Act 1956

DEPT: MICROBIOLOGY

SEM: 1

COURSE OUTCOMES

416C1C: GENERAL MOCROBIOLOGY, PHYSIOLOGY, MICROBIAL DIVERSITY, IMMUNOLOGY AND MICROBIAL GENETICS

C101.1	Apply microscopic techniques and staining methods in the identification and differentiation of microbes.
C101.2	Apply the knowledge on the sterilization of glass wares and media by different methods and measurement of cell growth.
C101.3	Perform and evaluate immunological reactions to aid diagnosis.
C101.4	Assess the level of lymphocytes in a blood sample and purify immunoglobulin employing appropriate techniques.
C101.5	Determine the amount of DNA and RNA in samples.

SEM: 2 416C2C: MEDICAL BACTERIOLOGY, MYCOLOGY, VIROLOGY AND PARASITOLOGY

C102.1	Collection of different clinical samples, transport, culture and examination.
C102.2	Identify medically important bacteria, fungus and parasites from the clinical samples by staining and biochemical tests.
C102.3	Promote diagnostic skills; interpret laboratory tests in the diagnosis of infectious diseases.
C102.4	Perform antibiotic sensitivity tests and compare with the standard tests.
C102.5	Screening of industrially important microbes for metabolite production.



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SEM: 3

516C3D: SOIL, ENVIRONMENTAL, FOOD AND DAIRY MICROBIOLOGY

C201.1	Assess the microbial quality of water and air and relate the results to standards
C201.2	Synthesize biofertilizers and vermicompost. Cultivate mushrooms using solid waste.
C201.3	Check the quality of milk, perform quality analyses.
C201.4	Isolate microbes from fermented foods and spoiled food, differentiate microbes on the basis of staining and enzyme production and detect toxicity of food.
C201.5	Identify various plant pathogens.

SEM: 4

516C4B: MOLECULAR BIOLOGY AND RECOMBINANT DNA TECHNOLOGY

C202.1	Demonstrate isolation of nucleic acid through electrophoretic techniques.
C202.2	Able to select recombinant clones. Utilize various molecular techniques for detection of mutants.
C202.3	Employ PCR technique in medical and forensic science.
C202.4	Expertise in protein purification methods to implement in Genetic Engineering.
C202.5	Analyze protoplast and spheroplast, and employ immobilization technique in enzyme engineering.