

## Program specific outcomes

### Department of Anatomy

#### Generic Outcomes

To provide comprehensive knowledge of the gross and microscopic structure and development of the human body provide a basis for understanding the clinical correlation of organs of structures involved and the anatomical basis for the disease presentation.

#### Program Specific Outcomes (PSOs)-UG

PSO1-Understanding of the gross and microscopic structure and development of the human body

PSO2-Comprehension of normal regulation and integration of the functions of the organs and systems on the basis of structures.

PSO3-Understanding of the clinical correlation of organs and structures involved and interpret the anatomical basis of the disease presentations.

PSO4-To instill professionalism by developing communication, leadership skills with ethical and moral values

PSO5-To develop life-long learning behavior by acquiring and updating existing knowledge and skills regularly for continuous professional development

#### Program Specific Outcomes (PSOs)-PG

A post graduate student having qualified the MD (Anatomy) examination should be able to:

1. Acquire competencies in gross and surface anatomy, neuroanatomy, embryology, genetics, histology, radiological anatomy, applied aspects and recent advances of the above-mentioned branches of anatomy to clinical practice. These are given in detail in subsequent sections.
2. Acquire mastery in dissection skills, embalming, tissue preparation, staining and museum preparation.
3. Acquire skills in teaching, research methodology, epidemiology & basic information technology.
4. Acquire knowledge in the basic aspects of Biostatistics and research methodology.
5. Has knowledge to plan the protocol of a thesis, carry out review of literature, execution of research project and preparation of report.

Dr. KAGNE. R.N  
DEAN  
SRI MANAKULA VINAYAGAR  
MEDICAL COLLEGE & HOSPITAL  
KALITHEERTHALKUPPAM,  
PUDUCHERRY-605107.

6. Has ability to use computer applications Microsoft office (Microsoft word, excel, power point), Internet, Searching scientific databases (eg. PubMed, Medline, Cochrane reviews).
7. Acquire skills in paper & poster preparation, writing research papers and Thesis.
8. Acquire capacity of not letting his/her personal beliefs, prejudices, and limitations come in the way of duty.
9. Acquire attitude and communication skills to interact with colleagues, teachers and students.
10. Practicing different methods of teaching-learning
11. Demonstrate the ability to identify applied implications of the knowledge of anatomy and discuss information relevant to the problem, using consultation, texts, archival literature and electronic media.
12. Demonstrate the ability to correlate the clinical conditions to the anatomical/embryological/hereditary factors.
13. Demonstrate the ability to evaluate scientific/clinical information and critically analyze conflicting data and hypothesis.

*Program Educational Objectives (PEOs)*

PEO1-Acquisition and transfer of knowledge, skills, attitude and professionalism to undergraduate and postgraduate students for quality care and outcome

PEO2-Acquire, conduct, interpret, publish and translate knowledge and skills relevant in improving the contemporary medicine.

PEO3-Coordinate, communicate and collaborate with national and international networks to update and disseminate information related to human well being

Dr. KAGNE R.N  
DEAN  
SRI MANAKULA VINAYAGAR  
MEDICAL COLLEGE & HOSPITAL  
KALITHEERTHALKUPPAM,  
PUDUCHERRY-605107.

**Department of Physiology**

*Generic Outcomes*

To provide comprehensive knowledge of normal functioning of various organ systems of the human body and to facilitate the understanding of physiological basis of health and diseases.

*Program Specific Outcomes (PSOs)-UG*

PSO1-Understanding the normal functioning of various organs and organ systems of the human body

PSO2-Understanding the patho-physiological basis of the disease

PSO3-Distinguish between normal and abnormal findings which he/she performed and observed during Physiology Practical

PSO4-To instill professionalism by developing communication, leadership skills with ethical and moral values

PSO5-To develop life-long learning behavior by acquiring and updating existing knowledge and skills regularly for continuous professional development

*Program Specific Outcomes (PSOs)-PG*

A post graduate student having qualified the MD (Physiology) examination should be able to

1. Understand and deal with all aspects of general, systemic and applied Physiology.
2. Teach effectively the basic physiological mechanisms of human body with reference to their implications in the pathogenesis of diseases (pathophysiology) affecting various organ systems and the physiological basis of their management to undergraduate medical, paramedical and all other basic science students.
3. Understand general principles of medical education (use of appropriate teaching techniques and resources).
4. Explain how the knowledge of physiology can be effectively used in a various clinical setting to solve diagnostic and therapeutic problems.
5. Interpret and evaluate research publications critically.
6. Use the library facilities (Literature database using computer, CD ROM, internet search and any other available newer techniques).

Dr. KAGNAR R N  
DEAN  
SRI MANAKULA VINAYAGAR  
MEDICAL COLLEGE & HOSPITAL  
KALITHEERTHALKUPPAM,  
PUDUCHERRY-605107.

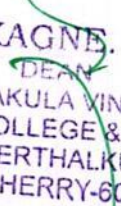
7. Conduct relevant clinical/experimental research which may have significant bearing on human health and patient care.
8. Interpret the research findings in the light of its basic and applied significance.
9. Acquire skills in conducting collaborative research in the field of physiology with allied sciences, clinical sciences and biomedical engineering.
10. Interact with the allied departments and render services in advanced laboratory investigations.
11. Serve as interface with society at large.
12. Acquire administrative skills to set up concerned department / laboratories and initiate purchase procedure and procure necessary items for running such laboratories.
13. Function as a member of a teaching or research team.

*Program Educational Objectives (PEOs)*

PEO1-Acquisition and transfer of knowledge, skills, attitude and professionalism to undergraduate and postgraduate students for quality care and outcome

PEO2-Acquire, conduct, interpret, publish and translate knowledge and skills relevant in improving the contemporary medicine.

PEO3-Coordinate, communicate and collaborate with national and international networks to update and disseminate information related to human well being

  
Dr. KAGNE. R.N  
DEAN  
SRI MANAKULA VINAYAGAR  
MEDICAL COLLEGE & HOSPITAL  
KALITHEERTHALKUPPAM,  
PUDUCHERRY-605107.

**Department of Biochemistry**

*Generic Outcomes*

To make the students understand the scientific basis of the life process at the molecular level and to orient them towards the application of the knowledge acquired in solving clinical problems.

*Program Specific Outcomes (PSOs)-UG*

PSO1-Understand the biochemical basis of health

PSO2-Understand the biochemical basis of diseases and their complications

PSO3-Understand the molecular aspects of cellular events

PSO4-Understand the genetic basis of diseases and their diagnosis

PSO5-Understand the nutritional importance of in health and diseases

PSO6-Understand the basis and rationale of Biochemical laboratory tests

PSO7-Demonstrate the ability to interpret the laboratory investigation results in clinical context

*Program Specific Outcomes (PSOs)-PG*

At the end of the MD training program in Biochemistry, the post graduate student should be able to:

1. Explain clearly concepts and principles of biochemistry and cell biology, including correlations of these with cellular and molecular processes involved in health and disease.
2. Develop skills as a self-directed learner, recognize continuing educational needs; use appropriate learning resources and critically analyze relevant published literature in order to practice evidence-based biochemistry.
3. Demonstrate competence in basic concepts of research methodology and epidemiology.
4. Effectively teach biochemistry to undergraduate students in medicine and allied health science courses to make them competent health care professionals.
5. Set up/supervise /manage a diagnostic laboratory in Biochemistry in a hospital, ensuring quality and reliable diagnostic service.
6. Develop the desired managerial and leadership skills and function as a productive member of a team engaged in health care, research and education.
7. Provide clinicians with consultation services for diagnostic tests in biochemistry and in interpretation of laboratory results.

Dr. KAGNE R N  
DEAN  
SRI MANAKULA VINAYAGAR  
MEDICAL COLLEGE & HOSPITAL  
KALITHEERTHALKUPPAM,  
PUDUCHERRY-605107.

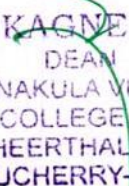
8. Demonstrate skills in documentation of reports.
9. Conduct Clinical and Molecular research which has an impact on the patient health care and treatment modalities.
10. Carry out a research project from planning to publication and be able to pursue academic interests and continue life-long learning to become more experienced in all the above areas and to eventually be able to guide postgraduates in their thesis work.

*Program Educational Objectives (PEOs)*

PEO1-Acquisition and transfer of knowledge, skills, attitude and professionalism to undergraduate and postgraduate students for quality care and outcome

PEO2-Acquire, conduct, interpret, publish and translate knowledge and skills relevant in improving the contemporary medicine.

PEO3-Coordinate, communicate and collaborate with national and international networks to update and disseminate information related to human well being

  
Dr. KAGNE. R N  
DEAN  
SRI MANAKULA VINAYAGAR  
MEDICAL COLLEGE & HOSPITAL  
KALITHEERTHALKUPPAM,  
PUDUCHERRY-605107.

## Department of Pathology

### Generic Outcomes

To provide the students with a comprehensive knowledge of the mechanisms and causes of disease in order to enable him/her to achieve complete understanding of the natural history and clinical manifestations of disease.

### Program Specific Outcomes (PSOs)-UG

PSO1: Comprehension of the causes, evolution and mechanisms of disease

PSO2: Knowledge of alterations in gross and cellular morphology of organs in disease states

PSO3: Ability to correlate the natural history and structural and functional changes with the clinical manifestations of diseases, their diagnosis and therapy

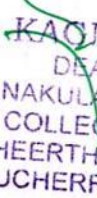
PSO4: Should be able to function as a team, develop an attitude of cooperation with colleague. Develop communication skill to convey the diagnosis.

PSO5: Update newer entities, recent classification and diagnostic methodology using problem-based learning

### Program Specific Outcomes (PSOs)-PG

At the end of the MD training program in Pathology, the post graduate student should be able to

1. Diagnose routine histopathology (surgical& gynae) and cytopathology cases, blood and bone marrow examination and various tests of Laboratory Medicine (clinical pathology) as well as Blood Banking (Transfusion Medicine).
2. Interpret and correlate clinical and laboratory data so that clinical manifestations of diseases can be explained.
3. Advise on the appropriate specimens and tests necessary to arrive at a diagnosis in a problematic case.
4. Should be able to teach Pathology to undergraduates, postgraduates, nurses and paramedical staff including laboratory personnel.
5. Plan, execute, analyze and present research work.

  
Dr. KAONE. R.N  
DEAN  
SRI MANAKULA VINAYAGAR  
MEDICAL COLLEGE & HOSPITAL  
KALITHEERTHALKUPPAM,  
PUDUCHERRY-605107

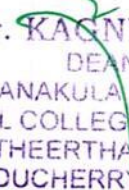
6. Make and record observations systematically and maintain accurate records of tests and their results for reasonable periods of time. Identify problems in the laboratory, offer solutions thereof and maintain a high order of quality control.
7. Should be familiar with the function, handling and routine care of equipment in the laboratory.
8. Able to collect specimens by routinely performing non-invasive out-patient procedure such as vein-puncture, finger-prick, fine needle aspiration of superficial lumps and bone-marrow aspirates and provide appropriate help to colleagues performing an invasive procedure such as a biopsy or an imaging guided biopsy.
9. Able to perform routine tests in a pathology Laboratory including grossing of specimens, processing, cutting of paraffin and frozen sections, making smears and staining.
10. Capable of safe and effective disposal of laboratory waste.
11. Able to supervise and work with subordinates and colleagues in a laboratory.
12. Should be able to function as a part of a team, develop an attitude of co-operation with colleagues and interact with the patient and the clinician or other colleagues to provide the best possible diagnosis or opinion.
13. Always adopt ethical principles and maintain proper etiquette in dealing with patients, relatives and other colleagues to provide the best possible diagnosis or opinion.
14. Develop communication skills to word reports and professional opinion as well as to interact with patients, relatives, peers and paramedical staff and for effective teaching.

*Program Educational Objectives (PEOs)*

PEO1-Acquisition and transfer of knowledge, skills and attitude to undergraduate, postgraduate students and colleagues for quality care and outcome

PEO2-To do research, interpret, publish and disseminate the knowledge in improving the contemporary medicine.

PEO3-To collaborate and communicate with national and international networks to update and disseminate information related to modern medicine.

  
Dr. KAGNE. R.N  
DEAN  
SRI MANAKULA VINAYAGAR  
MEDICAL COLLEGE & HOSPITAL  
KALITHEERTHALKUPPAM,  
PUDUCHERRY-605107.



### Department of Microbiology

#### Generic Outcomes

To provide an understanding of the natural history of infectious disease in order to deal with the etiology, pathogenesis, laboratory diagnosis, treatment and control of the infections in the community.

#### Program Specific Outcomes (PSOs)-UG

PSO1-Understanding of role of microbial agents in health and disease

PSO2-Understanding of the immune pathological mechanisms in health and disease

PSO3-Ability to correlate the natural history, mechanisms and clinical manifestations of infectious diseases as they relate to the properties of microbial agents

PSO4-Knowledge of the principles of infection control measures and implementation

PSO5-An understanding of the basis of choice of laboratory diagnostic tests and their interpretation, antimicrobial therapy and communication

#### Program Specific Outcomes (PSOs)-PG

A post graduate student upon successfully qualifying in the MD (Microbiology) examination should be able to

1. Demonstrate competence as a clinical microbiologist.
2. Interact effectively with the allied departments by rendering services in basic as well as advanced laboratory investigations.
3. Demonstrate application of microbiology in a variety of clinical settings to solve diagnostic and therapeutic problems along with preventive measures.
4. Play a pivotal role in hospital infection control, including formulation of antibiotic policy and management of biomedical waste.

#### Program Educational Objectives (PEOs)

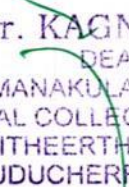
PEO1-Acquire knowledge, skills, and professionalism and transfer it to under graduate and post graduate students

Dr. KAGNE. R.N  
DEAN  
SRI MANAKULA VINAYAGAR  
MEDICAL COLLEGE & HOSPITAL  
KALITHEERTHALKUPPAM,  
PUDUCHERRY-605107

PEO2-Contribute to contemporary medicine by acquiring knowledge and skills in research and publishing

PEO3-Offer quality diagnostic services by practicing and collaborating with national quality control and accreditation agencies.

PEO4-To pursue specialization in various Microbiology branches like Infectious disease, Hospital infection control, Advanced Virology and Immunology.

  
Dr. KAGNE. R.N  
DEAN  
SRI MANAKULA VINAYAGAR  
MEDICAL COLLEGE & HOSPITAL  
KALITHEERTHALKUPPAM,  
PUDUCHERRY-605107.