

M.S. Ramaiah University of Applied Sciences

New BEL Road, MSR Nagar, Bangalore – 560054



**RAMAIAH
UNIVERSITY**
OF APPLIED SCIENCES

PO, PSO & CO

Programme: MD in Biochemistry

Programme Code: 129

Programme Outcome (PO)

Programme Specific Outcome (PSO)

Course Outcomes (CO)

Shalini

Principal and Dean



Ramaiah Medical College (RMC)

Programme Outcomes

Post Graduate Programme: MD in Biochemistry

Programme Outcomes (PO) for MD Biochemistry Postgraduate students:

- PO1. Develop the knowledge, skills and attitude to be a competent diagnostician (C, P).
- PO2. Demonstrate a commitment to excellence and continuous professional development with integrity, compassion and sensitivity to patient care. (A)
- PO3. Acquire and develop the knowledge, skills and attitude required to be a competent and ethical researcher and teacher. (A, C, P)
- PO4. Be able to independently perform investigative procedures with a reasonable degree of professionalism and competence. (P)

Programme Specific Outcomes (PSOs)

Programme specific outcome (PSO) for MD Biochemistry Postgraduate students:

- PSO1: Teach competently the physiological concepts governing the maintenance of homeostasis in various organ systems to medical and paramedical courses.(C)
- PSO2: Conduct the electro diagnostic tests like EEG, AFT, ECG etc and interpret the results for research and diagnostic needs.(P)
- PSO3: Understand the physiological response of the body to yoga, high altitude and in sports and its application in research.(C)
- PSO4: Conduct research, including collaborative research and publish the articles in indexed journals. (C,P)
- PSO5: Function as an effective team member / leader of teaching and research team with good communication skills and ethical principles.(A)

Course Outcomes (COs)

Course Title & Code: Biomolecules, Analytical techniques and research methodology. (MDC509A)

At the end of the course, the students should be able to:

CO-1.	The student should be able to understand and clearly explain concepts of biochemistry and correlate them with processes at cellular and molecular levels along with their role in health and disease. These are given in detail in subsequent sections. (C, A, P)
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- CO-2. Explain energy transactions in a living system, and describe the importance of biomolecules in sustaining the life process. (C, A, P)
- CO-3. Acquire skills in teaching, research methodology, biostatistics epidemiology & basic information technology Acquire knowledge and apply the principle of statistics, biostatistics and epidemiology to the evaluation and interpretation of molecular and metabolic disease states. (C, A, P)

Course Outcomes (COs)

Course Title & Code: Metabolism & Nutrition (MDC510A)

At the end of the course, the students should be able to:

- CO-1. Should be able to understand and clearly explain concepts of biochemistry and correlate them with metabolic processes at cellular and interpret their role at molecular levels along with their effect in health and disease. (C, A, P)
- CO-2. Describe pathways of the intermediary metabolism along with their individual and integrated regulation and apply the knowledge in understanding the functioning of the body. (C, A, P)
- CO-3. Understand the overview of metabolism and intermediary metabolism. (C, A, P)

Course Outcomes (COs)

Course Title & Code: Molecular biology & Immunology (MDC511A)

At the end of the course, the students should be able to:

- CO-1. Demonstrate comprehensive knowledge and able to explain concepts of biochemistry and correlate them with processes at molecular levels along with their role in health and disease. Able to develop differential diagnoses for molecular and metabolic causes of diseases. (C, A, P)
- CO-2. Demonstrate the application of various aspects of genetic engineering in medicine (C, A, P)
- CO-3. Demonstrate ability to integrate principles of immunology and role of micro and macronutrients in Biochemistry. (C, A, P)

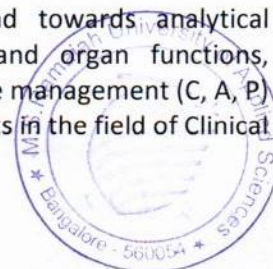
Course Outcomes (COs)

Course Title & Code: Clinical Biochemistry (MDC512A)

At the end of the course, the students should be able to:

- CO-1. Demonstrate knowledge of Basic principles and practice of clinical biochemistry along with Total quality management and Quality Control. (C, A, P)
- CO-2. Demonstrate comprehensive knowledge to clinical correlate and towards analytical procedures including diagnostic assessment of body systems and organ functions, endocrinology and recent advances in Biochemistry, Biomedical waste management (C, A, P)
- CO-3. Demonstrate knowledge of contemporary advances and developments in the field of Clinical

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- Biochemistry and comprehensive knowledge in differential diagnoses for molecular and metabolic causes of diseases (C, A, P)
- CO-4.** Demonstrate standard operating procedures of various methods and techniques used in clinical biochemistry. (C, A, P)

Course Outcomes (COs)

Course Title & Code: Thesis – Biochemistry (MDP503A)

At the end of the course, the students should be able to:

- CO-1.** Describe the techniques of research, identify available literature and critically analyse the same. (C)



Registrar
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