M.S. Ramaiah University of Applied Sciences

New BEL Road, MSR Nagar, Bangalore – 560054

RAMAIAH UNIVERSITY OF APPLIED SCIENCES

PO, PSO & CO

Programme: Bachelor of Medicine and of Bachelor of Surgery (MBBS)

Programme Code: 438

Programe Outcome (PO)

Programe Specific Outcome (PSO)

Course Outcomes (CO)

M.S. Ramaiah University of Applied Sciences ★ Bangalore - 560054 ★

Shalini

Principal and Dean
M.S. Ramaiah Medical College and Hospital
M.S. Ramaiah University of Applied Sciences
Bangalore-560054

Ramaiah Medical College (RMC)

Programme Outcomes

Under Graduate Programme: MBBS

MBBS graduate, on completion of program will demonstrate the following outcomes. Graduates will be able to:

PO1. Demonstrate adequate critical skills in medical practice knowledge and enabling them to make valuable contributions to patients and health care as members of the health team.

PO2. Be competent physicians in the diagnosis and management of common health problems of the community and individuals of all age groups.

PO3. Communicate effectively both orally and in writing on treatment and management of a variety of health care issues.

PO4. Appreciate and understand the socio-psychological, cultural, economic and environmental factors affecting health.

PO5.Describe and demonstrate team work in management / leadership skills.

Programme Specific Outcomes (PSOs)

The program-specific objectives of the MBBS course are as follows:

PSO1. Clinician who understands and provides preventive, promotive, curative, palliative and holistic care with compassion and empathy.

PSO2. Leader and member of the health care team and system with capabilities to collect, plan, analyze, synthesize and communicate health data and management appropriately.

PSO3. Communicate with patients, families, colleagues, members of health team and community.

PSO4. Lifelong learner committed to continuous improvement of skills and knowledge.

PSO5 .Professional, who is committed to excellence, is ethical, professionally responsive and accountable to patients, community and profession.

Course Outcomes (COs)

Course Title & Code: Human Anatomy (MBC101A)

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

CO-1. Describe the basic structural and functional aspects of general anatomical tissues

CO-2. DE Describe the anatomy, normal disposition, features, relations, functional, cross-sectional and radiological anatomy of upper limb, Thorax, Head & Neck and Neuroanatomy including bones of these regions.

CO-3. DE demonstrate structures of upper limb, Thorax, Head & Neck, Neuroanatomy and bones of these regions and their surface anatomy.

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CO-3. DE demonstrate structures of upper limb, Thorax, Head & Neck, Neuroanatomy and bones of these regions and their surface anatomy.

CO-4. Describe microscopic structure of general and relevant systemic Histology with their important functions.

CO-5. Identify microscopic structure of general and relevant systemic Histology with their important functions.

CO-6. Explain the principles & sequential development of general embryology and the relevant systemic Embryology and developmental basis of various major congenital anomalies.

CO-7. To demonstrate good attitude, ethical behaviour towards cadaver, fellow human beings and develop good communication skills.

Course Outcomes (COs)

Course Title & Code: Human Anatomy (MBC102A)

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

CO-1. Describe the normal disposition, features relations, functional, cross-sectional and radiological anatomy of Abdomen & Pelvis, lower limb including bones of these regions.

CO-2. Demonstrate structures of Abdomen & Pelvis, Lower limb including bones of these regions and their surface anatomy.

CO-3. Describe microscopic structure of relevant systemic Histology with their important functions.

CO-4. Identify microscopic structure of relevant systemic Histology with their important functions.

CO-5. Explain the principles & sequential development of the relevant systemic Embryology, the effects of common teratogens, genetic mutations & environmental hazards and developmental basis of various major congenital anomalies.

CO-6. Describe the principles of genetics, chromosomes and karyotype with abnormalities, Inheritance, Prenatal diagnosis, Genetic Counseling, Gene therapy, Human Genome project

Course Outcomes (COs)

Course Title & Code: Biochemistry (MBC103A)

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

CO-1. Describe structure, function, and metabolic interrelationship/integration of biomolecules - Carbohydrates, Lipids, Vitamins, Minerals & Water in health and disease

CO-2. Describe biochemical basis & associated consequences of Nutritional deficiency

CO-3. Explain the biochemical basis, associated consequences, rationale of clinical laboratory

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tests for diseases, acid based disorders inborn errors of Carbohydrate & Lipid metabolism, and interpret the results in the clinical context.

CO-4. Procedure to follow good laboratory practices; handle biological tissue, and body fluid along with judicious choice of investigations for screening and diagnosis in health & disease.

CO-5. Integrate the biochemistry knowledge with other medical subjects for better understanding of health and Diseases and demonstrate the skills of solving clinical problems and decision making.

Course Outcomes (COs)

Course Title & Code: Biochemistry (MBC104A)

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

CO-1. Describe structure, function, and metabolic interrelationship /integration of biomolecules - Proteins, Nucleic acids, Enzymes in health and disease along with organ function tests.

CO-2. Describe the molecular mechanism of gene expression and regulation, principles of genetic engineering and their application in medicine.

CO-3. Explain the biochemical basis, associated consequences, rationale of clinical laboratory tests for diseases, inborn errors of Proteins &Nucleic acid metabolism, and interpret the results in the clinical context.

CO-4. Structure, Biosynthesis, Function and disorders associated with Hemoglobin and other plasma proteins

CO-5. Perform routine and some special investigations making use of conventional instruments/techniques, analyzeand interpret the biochemical investigation data.

Course Outcomes (COs)

Course Title & Code: Physiology (MBC105A)

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

CO-1. Explain the normal functioning of cell, blood and its components, Cardiovascular system, Respiratory system, Gastrointestinal system, excretory system and their interactions for maintenance of homeostasis

CO-2. Discuss the basic principles, mechanisms, pathophysiology of disease states of Cardiovascular system, Respiratory system, Gastrointestinal system, renal system, components of blood and their management

CO-3. Acquire the skills to do experiments related to hematology, Human experiments / clinical examinations for study of Physiological functions and interpret the report critically.

CO-4. Gained the skills required to Communicate effectively and show respect towards the

subject / peer during clinical examinations be an efficient leader, health care team member with ethical principles

Course Outcomes (COs)

Course Title & Code: Physiology (MBC106A)

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

- **CO-1.** Acquired the knowledge of Nerve-Muscle Physiology, Endocrine Physiology, Nervous System, Special Senses, Reproductive and integrated Physiology.
- **CO-2.** Describe the pathophysiology of disease affecting muscular, nervous, endocrine, reproductive systems and their management.
- **CO-3.** Be conversant with applied, integrated, clinical investigation tests, recent advances relevant to muscular, nervous, endocrine, reproductive Physiology and interpret the results in the clinical context.
- **CO-4.** Acquire the skill to communicate effectively and show respect towards the subject / peer during clinical examinations.

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