CDSIMER

Ref No: CIR / 2021 /ACA / 0036

Date: 16/06/2022

To,
The First MBBS Students,
CDSIMER DSU

Circular- First Internal Assessment for Phase I MBBS

The timetable for the first internal assessment (theory & practical) for Phase I MBBS students (2021-22 batch) is as given below.

THEORY		
DATE	**TIME**	**SUBJECT**
14/07/2022 Thursday	10 AM to 1 PM	**ANATOMY**
15/07/2022 Friday	10 AM to 1 PM	**PHYSIOLOGY**
16/07/2022 Saturday	10 AM to 1 PM	**BIOCHEMISTRY**

PRACTICAL				
DATE	**TIME**	**SUBJECT**		
18/07/2022 Monday	9 AM to 4 PM	**A BATCH**	**B BATCH**	**C BATCH**
		ANATOMY	PHYSIOLOGY	BIOCHEMISTRY
19/07/2022 Tuesday	9 AM to 4 PM	**B BATCH**	**C BATCH**	**A BATCH**
		ANATOMY	PHYSIOLOGY	BIOCHEMISTRY
20/07/2022 Wednesday	9 AM to 4 PM	**C BATCH**	**A BATCH**	**B BATCH**
		ANATOMY	PHYSIOLOGY	BIOCHEMISTRY

BATCH A: HSC21MB0001 to HSC21MB0050
BATCH B: HSC21MB0051 to HSC21MB0100
BATCH C: HSC21MB0101 to HSC21MB0150

Dr. Prashanth Kumar M. MBBS, MD, FAIMER
Vice Principal
Dr. Chandramma Dyavaiah Sagar
Institute of Medical Education & Research, DSU
Devarakaggalahalli, Kanakapura Road,
Ramanagara Dist. - 562112. Karnataka

Dr. Prashanth Kumar M
Vice Principal
CDSIMER, DSU

Portions

Anatomy (Theory & Practicals):

- **Gross Anatomy** – General Anatomy, Upper limb, Thorax
- **Embryology –** General Embryology, Development of cardiovascular system.
- **Histology** – General histology
- **Osteology** – Upper limb bones, thoracic vertebra, ribs.

Physiology:

Theory:

1. **General Physiology:** Body fluid compartments, Cell Physiology and membrane transport, Homeostasis-its constancy and regulatory mechanisms. Mechanism and significance of programmed cell death**,** Membrane potentials, Intercellular junctions and Communications
2. **Blood:** Plasma proteins- Classification, functions and changes in health and disease, Formation and functions of RBCs, WBCs and Platelets and changes in their count in health and disease, Hemoglobin **–** Types, Synthesis**,** Iron Metabolism, Jaundice, Anemia Immunity **–** Definition, types, antigens, antibodies, Development of Immune response, Immune tolerance, Autoimmunity, Hypersensitivity, Immunodeficiency diseases Hemostasis, Mechanism of Blood Coagulation, Anticoagulants ,Fibrinolytic Mechanism, Hemophilia, Blood groups and Blood transfusion
3. **Nerve:** Neuron- Structure & types, Neuroglia- types & Functions, Genesis of RMP, Action potential- phases and ionic basis, Strength duration curve, Refractory period, Propagation of action potential, Classification of Nerve fibers, Degeneration and Regeneration of Nerve Fibers ,Neuromuscular Junction- Structure ,Neuromuscular transmission , Disorders of Neuromuscular junction, Excitation-contraction coupling, characteristics of muscle contraction, Muscle disorders. Smooth Muscle – Types, Structure, Properties, steps in Smooth Muscle Contraction , characteristics of smooth muscle contraction
4. **Cardiovascular System**: Anatomical and functional overview of heart.

Properties of Cardiac muscle, Pacemaker tissue & Conducting system of heart Recording, features and uses of normal ECG. Cardiac axis & vector. Cardiac Cycle

5. **Respiratory System:** Non respiratory functions of lung , Mechanics of Breathing , Work of Breathing and Compliance ,V/P Ratio, Surface tension and pulmonary surfactant.

THEORY QUESTION PAPER PATTERN:

Type of Question	Number of Questions	Marks for each question	Total Marks
Long Essay	2	10	20
Short Essay	9	5	45
Short Answer	5	3	15
Multiple Choice Questions (MCQs)	20	1	20
Total			**100**

Practical:

1. Estimation of Hemoglobin by Sahli's Method
2. Determination of Red Blood Cell Count
3. Determination of Blood Indices
4. Determination of Total Leucocyte Count
5. Determination of Differential Leucocyte Count
6. Determination of Blood Group
7. Determination of Bleeding Time and Clotting Time

PRACTICAL PATTERN

Experiment	Number of Questions	Total Marks
Major Experiment	1	20
Minor Experiment	1	10
Problem Chart	1	10
OSPE(Identification of different white blood cells)	1	20
Case based Viva	As applicable	20
Total	Practical + Viva	60+20

Note: Completed record and log books should be submitted on the day of Practical Exam.

Biochemistry:

Theory:

- Chemistry of Carbohydrates
- Chemistry of Proteins
- Chemistry of Lipids
- Nucleotide & Nucleic acid Chemistry
- Enzymes and clinical enzymology
- Digestion & Absorption of Carbohydrates
- Digestion & Absorption of Proteins
- **Carbohydrate Metabolism:** Glycolysis, Gluconeogenesis, Glycogen metabolism, HMP Shunt, Glycogen Storage Disorders
- **Protein Metabolism:** Transamination, Deamination, Ammonia metabolism, Urea Cycle, Urea Cycle Defects, Hyperammonemia.
- Plasma Proteins
- Vitamins-A,D,E and K

Practical:

Qualitative analysis-Normal and Abnormal Urine

Quantitative Experiments:

- Estimation of Glucose by GOD- POD method.
- Estimation of Urea by DAM method.
- Estimation of Total Protein by Biuret method.
- Estimation of Albumin by BCG method and A: G ratio.

Viva Voce: All Theory Topics