

Entrance Exam Study Guide (EESG)

Topics for direct admission into year 1 of College of Medicine

Example Questions for Entry Exam

Section A: Biology

1. A Eukaryotic cell, its contents and functions
2. Basic tissues of the human body, their types and main functions
3. Systems and organs of the human body and their main functions with special focus on: Cardiovascular system, Nervous system, Respiratory system, Gastrointestinal system, Reproductive system and Skin.
4. Basic events in inflammation (body response to injury)
5. Classification of micro Organisms
6. Basics of microbe host interaction
7. General structure bacteria, viruses, fungi and protozoans
8. Names & defining features of causative agents for diseases such as malaria, tuberculosis, and AIDS.
9. Homeostasis

Section B: Chemistry and Biochemistry

1. Types of bonds
2. Types of chemical reactions
3. The following topics
4. Molarity
5. Molality
6. Normality
7. pH and Buffers
8. Acid and bases

Section C: Biochemistry

1. Carbohydrates
2. Lipids
3. Proteins
4. Nucleic acids
5. Genetic basis of inheritance
6. Vitamins
7. Enzymes

Section D: Physics

The following topics

1. Matter
2. Energy
3. Light
4. Electricity
5. Sound
6. Waves
7. Transport mechanisms across cell membrane –diffusion, active and passive transport, filtration, and osmosis.

The End

1. Which part of the cell is the typical place of protein synthesis?
 A) rough endoplasmic reticulum.
 B) smooth endoplasmic reticulum.
 C) Golgi complex.
 D) nucleus.

Key: A

2. Which of the following ions is mainly responsible for contraction in the skeletal muscles?
 A) sodium.
 B) potassium.
 C) phosphate.
 D) calcium.**

Key: Calcium

3. Which one of the followings is not part of respiratory system?
 A) lungs.
 B) trachea.
 C) bronchioles.
 D) oesophagus

Key: Oesophagus

4. The respiratory center is situated in _____?
 A) hypothalamus and medulla oblongata.
 B) pons and medulla oblongata.
 C) cerebrum and pons.
 D) cerebellum and medulla oblongata.

Key: Pons and medulla oblongata