

Physiology

1st Year MBBS

1. **Roll No. 1-40**

A) Develop **5 MCQs** from unit of Cell Physiology, membrane Physiology & Nerve & Muscle Cell Physiology. At least 2 should be scenario based.

B) **SEQs**

1. Enlist the functions of plasma protein.
2. Briefly explain two instances where positive feedback mechanism can be useful.
3. Describe latch phenomenon and its significance

2. **Roll No. 41-80**

A) Develop **5 MCQs** from Heart Physiology. At least 2 should be scenario-based.

B) **SEQs**

1. Draw and label cardiac cycle.
2. Describe different phases of action potential in cardiac muscle cells.
3. How coronary blood flow regulated.

3. **Roll No. 81 – 120.**

A) Develop **5 MCQs** from circulatory Physiology related to biophysics, vascular system, Microcirculation & control of circulation.

B) **SEQs**

1. Describe regulation of cerebral blood flow
2. a) Define cardiac output and cardiac index.
b) How cardiac output is measured by using oxygen tick principle.
3. Enlist all the mechanisms controlling arterial blood pressure.

4. **Roll No. 121 – 160.**

A) Develop **5 MCQs** from Circulatory Physiology related to cardiac output, muscle blood flow coronary circulation & control of circulation.

SEQs

1. What is the significance of Renin-Angiotensin system?
2. Give brief account of Baroreceptor reflex.
3. Write note on oxygen lack theory on local blood flow.

5. **Roll No. 161 -200.**

- A) Develop **5 MCQs** from blood physiology. At least 2 should be scenario based.
- B) **SEQs**
- a) What is sickle cell disease & crisis.
b) Explain its pathophysiology.
 - Name clotting factors. Explain the intrinsic pathway of blood clotting.
 - List stages of erythropoiesis. Name stimulus for erythropoietin secretion.
6. **Roll No. 201 – 250**
- A) Develop **5 MCQs** from respiratory physiology. At least 2 should be scenario based.
- B) **SEQs**
- a) Enlist four factors that determine the gas exchange through respiratory membrane.
b) Draw and label oxyHb – Association – Dissociation curve
 - Draw and label spirogram. What is the significance of FEV₁/FVC.
 - What is the peripheral chemoreceptors. Give its role in control of respiration.
7. **Roll No. 251 – onward**
- A) Develop **5 MCQs** from aviation, space, & deep sea diving physiology & temperature regulation.
- B) **SEQs**
- What is the mechanism of the acclimatization to low oxygen at higher altitude?
 - What is SCUBA? Give its significance.
 - a) Give five functions of skin.
b) What are the various temperature decreasing mechanism in the human body.

Specific Instructions:

Nil.

General Instruction

- All students are required to prepared individual assignments.
- It will be assessed by the IT department for plagiarism/ copying etc.

3. It is required that no two assignments are similar/ identical, if so both will be cancelled.
4. This assignment carries weightage (%age) to be included in internal assessment.
5. Those who fail will have this percentage deducted from their internal assessment.
6. Format for first page is also provided on website.

Note: Students are directed to submit their assignments on assignmentfmuf@gmail.com

For submission of assignment students must follow following format in subject bar

Discipline	Class	Subject	Name	Roll No.
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Example:

MBBS:	Final Year:	Surgery:	Syed Abdul Ahad:	22:
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