

2010 Scheme

Q.P. Code: 103001

Reg. No.:

First Professional MBBS Degree Supplementary Examinations July 2023

Physiology - Paper I

Time: 3 Hours

Total Marks: 50

- Answer all questions to the point neatly and legibly • Do not leave any blank pages between answers • Indicate the question number correctly for the answer in the margin space
- Answer all parts of a single question together • Leave sufficient space between answers
- Draw table/diagrams/flow charts wherever necessary

Long essay (10)

1. A 20-year-old boy who lost about 2 litres of blood following a road traffic accident, when transfused with blood developed, irritability, itching at the infusion site and all over the body, pain in the back and difficulty in breathing
 - a) What can be the cause for the symptoms
 - b) Define Landsteiner's law
 - c) What is the physiological basis of blood grouping systems
 - d) What are the precautions to be taken before blood transfusion
 - e) What is autologous blood transfusion(1+2+2+4+1)

Short essays (2x5 =10)

2. Write briefly about intermediate and long term regulation of blood pressure
3. O₂ transport in blood

Answer briefly (5x3=15)

4. Composition and functions of saliva
5. Plasma proteins
6. Non-respiratory functions of lung
7. Tubuloglomerular feedbacks
8. Surfactant

Draw and label (2x2½ =5)

9. HCl secretion by parietal gland
10. Jugular venous pressure tracing. Explain the physiological basis

Explain the physiological basis of the following (5x2=10)

11. Pacemaker potential
12. Dietary fibre is significant
13. Haemolytic Disease of Newborn (HDN)
14. Vasa recta is having a significant role in urine formation
15. Shivering is a thermoregulatory response
