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
- Non-respiratory functions of lung
- 7. Tubuloglomerular feedbacks
- 8. Surfactant

Draw and label $(2x2\frac{1}{2}=5)$

- 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
