

2010 Scheme

Q.P. Code: 103001 Reg. No.:

First Professional MBBS Degree Supplementary Examinations July 2025 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 40 year old woman was presented with fever and reddish purple spots on her skin for the past two weeks. Her platelet count was 40000/cumm of blood.
 - a) Name the most probable condition.
 - b) What are platelets. Add a note on the structure and function of platelets.
 - c) Comment on the bleeding time and clotting time expected in this patient. (1+6+3)

Short essays (2x5 =10)

- 2. Describe the pressure changes in left ventricle and aorta during one cardiac cycle.
- 3. Describe carbon-dioxide transport in blood."

Answer briefly (5x3=15)

- 4. Describe the movements of small intestine.
- 5. Name the proteolytic enzymes of the pancreas. How is protein digested by these enzymes
- 6. What is jaundice. What are its types. What is the cause for clay colored stools in obstructive jaundice.
- 7. Enumerate plasma proteins. Describe the functions of plasma protein.
- 8. Explain the role of vasarecta in renal function.

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

- 9. Draw a neat, labelled diagram of the action potential of ventricular muscle.
- 10. Draw a neat labelled diagram showing the structure of the renal filtration membrane.

Explain the physiological basis of the following

(5x2=10)

- 11. Positive P wave in ECG.
- 12. Salivation occurs at the sight of a favorite food.
- 13. Windkessel effect in aorta.
- 14. Chloride shift.
- 15. Joint pains/Bends in decompression sickness.
