

# **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**

**(2x2½ =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.

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