

QP Code:102114

Reg. No.:.....

**PG Degree Regular/Supplementary Examinations in Physiology  
(MD) July 2023**

**Paper II - Systemic Physiology (Haematology, CVS, GIT, Respiratory System,  
Renal Physiology)**

**Time: 3 hrs**

**Max marks:100**

- *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*

**Essay: (20)**

1. Explain intrinsic and extrinsic pathway of coagulation. Name the tests performed to the integrity of these pathways. Add a note on clinical significance of International Normalized Ratio (INR). (10+5+5)

**Short essays: (8x10=80)**

2. Explain cardio respiratory changes in high altitude
3. Explain the regulation of cardiac output with experimental evidence
4. Regulation of respiration
5. Static and dynamic Compliance – Definition, Measurement and clinical significance
6. Describe the renal handling of sodium with suitable diagram
7. Explain the mechanisms involved in production and maintenance of hyperosmolar medullary interstitium
8. Gastric acid secretion and regulation
9. Explain source, mechanism of action and regulation of Secretin and Cholecystokinin

\*\*\*\*\*