

**Q.P. CODE: 112010**

**Reg. No: .....**

**First Year B.Sc Nursing Degree Supplementary Examinations  
February 2022**

**Physiology  
(2016 Scheme)**

**Time: 3 Hrs**

**Max. Marks: 75**

- *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 diagrams wherever necessary*

**Essay: (12)**

1. Describe the steps of blood coagulation (clotting). Name two anticoagulants. Add a note on Hemophilia. (7+2+3)

**Short essays: (2x7=14)**

2. Draw and label the visual pathway. Add a note on myopia (4+3)  
3. Discuss the molecular basis of skeletal muscle contraction. Add a note on Rigor Mortis.

**Short notes: (5+2) (5x5=25)**

4. Functions of Surfactant  
5. Describe the mechanism of gastric HCL (hydrochloric acid) synthesis. List the factors regulating it.  
6. Micturition reflex  
7. Describe spermatogenesis and the factors regulating it  
8. Special features of coronary circulation

**Answer briefly: (3x4=12)**

9. Neuroendocrine reflex  
10. Describe referred pain and its mechanism  
11. Erythroblastosis Fetalis

**Differentiate between: (3x4=12)**

12. Extracellular fluid (ECF) and Intracellular fluid (ICF)  
13. Central and peripheral cyanosis  
14. Adult and fetal Hemoglobin

\*\*\*\*\*