

**Q.P. CODE: 112010****Reg. No: .....****First Year B.Sc Nursing Degree Supplementary Examinations  
April 2019****Physiology****(2016 Scheme)****Time: 3 Hrs****Max. Marks: 75**

- Answer all questions
- Draw diagram wherever necessary

**Essay: (12)**

1. Describe the transport of oxygen and carbon-dioxide in the blood. Add a note on Oxygen Dissociation Curve. (4+4+4)

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

2. Describe the different types of blood groups. Add a note on Rh incompatibility. (4+3)
3. Define cardiac cycle and mention the duration. Describe the various events in the cardiac cycle. (3+4)

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

4. Describe the waves of ECG and mention its uses.
5. Excitation-contraction coupling.
6. Composition and functions of cerebrospinal fluid.
7. Describe the mechanism of inspiration and expiration.
8. Visual pathway.

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

9. Hormones regulating pancreatic juice secretion.
10. Neuro-endocrine reflex.
11. Spermatogenesis

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

12. Diffusion and osmosis.
13. Counter-current exchanger and counter-current multiplier.
14. First and second heart sound

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