

**First Year BPT Degree Regular/Supplementary Examinations**  
**August 2019**

**Paper II – Physiology**  
**(2016 Scheme)**

**Time: 3 hrs****Max marks: 100**

- Answer all questions
- Draw diagrams wherever necessary

**Essays** **(2x15=30)**

1. Draw the diagram of a chemical synapse. Classify synapses. Explain in detail the structure of synapse and impulse transmission. Add a note on the properties of synapse.
2. Define cardiac cycle. Explain in detail various phases of cardiac cycle and the pressure volume changes in the chambers of heart in each phase.

**Short Essays** **(4x10=40)**

3. Explain in detail electrocardiogram. Mention the changes in ECG in myocardial infarction.
4. Describe the structure of organ of corti with a neat diagram and explain the mechanism of hearing.
5. Name the respiratory centers in brain. Explain the neural regulation of respiration.
6. Name the ascending and descending tracts. Explain the ascending tracts with neat and labelled diagrams

**Short Answers** **(10x3=30)**

7. What are the functions of surfactant. Add a note on infant respiratory distress syndrome (IRDS).
8. Movements of small intestine
9. What are the types of nephrons. Give differences between the types of nephrons.
10. Intrinsic pathway of coagulation
11. Functions of cerebellum
12. Decompression sickness
13. Neuromuscular junction
14. Cretinism
15. What are the types of skeletal muscle exercises. Give two differences.
16. Tetany