

First Year BPT Degree Supplementary Examinations July 2022**Paper II – Physiology****(2016 Scheme)****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*

Essays**(2x15=30)**

1. Describe the molecular mechanism of skeletal muscle contraction. Write a note on excitation-contraction coupling.
2. Describe the pressure and volume changes during cardiac cycle with a neat labelled diagram. Explain the waves of ECG.

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

3. Discuss the ionic basis of action potential with a labelled graph.
4. Draw a diagram of spirogram. Explain lung volumes and capacities.
5. Name the descending tracts of spinal cord. Describe the origin, course and termination of pyramidal tract. Write a note on hemiplegia.
6. Describe GFR. Explain factors influencing GFR.

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

7. Physiological actions of cortisol.
8. Clinical classification of anaemia.
9. Name and explain briefly four contraceptive methods in females.
10. Functions of saliva.
11. Enumerate signs and symptoms of diabetes mellitus.
12. Differences between UMN and LMN lesions.
13. Name and explain in brief the types of deafness and the tests to differentiate them.
14. Respiratory changes during exercise.
15. Properties of synapse.
16. Maternal changes during pregnancy.
