

**First Year BPT Degree Regular/Supplementary Examinations
January 2023**

**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. What are the determinants of arterial blood pressure. Explain in detail the regulation of blood pressure.
2. Describe in detail the physiological changes happening in the muscular, cardiovascular and respiratory systems during and after the exercise.

Short Essays

(4x10=40)

3. Explain in detail various lung volumes and capacities with normal values. Mention the methods of measurement of lung volumes and capacities.
4. Describe the composition, circulation and functions of CSF.
5. What are the types of pain and receptors for pain. Trace the pain pathway. Add a note on referred pain.
6. Explain Chemical regulation of Respiration.

Short Answers

(10x3=30)

7. Draw the diagram of nerve action potential. Explain ionic events responsible for various phases.
8. Define Erythropoiesis and factors affecting Erythropoiesis.
9. Reflex arc and its components.
10. Functions of Hypothalamus.
11. Functions of middle ear.
12. Deglutition.
13. What is hypoxia. List the types of hypoxia with examples.
14. Differences between type 1 and type 2 diabetes mellitus.
15. Spermatogenesis.
16. Erythroblastosis fetalis.
