

**First Year BPT Degree Regular/Supplementary Examinations**  
**July 2021**

**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. List the nuclei and functions of hypothalamus. Describe in detail the functions of hypothalamus.
2. Define blood pressure and give the normal values. What are the determinants of blood pressure. Explain the short term and longterm regulation of blood pressure.

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

3. Where are the peripheral and central chemoreceptors located. Explain in detail the chemical regulation of respiration.
4. Define neuromuscular junction. Draw a neat labelled diagram. Explain the events.
5. Explain carbon dioxide transport in detail.
6. Describe in detail the structure and functions of basal ganglia. Add a note on Parkinson's disease.

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

7. Trace the auditory pathway
8. Endometrial changes in menstrual cycle
9. Differences between thyroid dwarf and pituitary dwarf
10. Oxygen-hemoglobin dissociation curve
11. VO<sub>2</sub> max
12. Stretch reflex
13. Oral contraceptive pills
14. Functions of pancreatic juice
15. Micturition reflex
16. Spermatogenesis

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