

**First Year BPT Degree Supplementary Examinations March 2018**

**Paper II – PHYSIOLOGY**

**(2016 Scheme)**

**Time: 3 hrs**

**Max marks: 100**

- Answer all questions
- Draw diagrams wherever necessary

**Essays**

**(2x15=30)**

1. Describe the structure of skeletal muscle. Explain in detail the excitation-contraction coupling and mechanism of muscle contraction.
2. Mention the neural regulatory centers for respiration. Describe in detail the neural regulation of respiration. Add a note on periodic breathing.

**Short Essays**

**(4x10=40)**

3. What are the determinants of cardiac output and explain in detail the regulation of cardiac output.
4. Describe in detail the visual pathway with effect of lesions on field of vision
5. Explain the various mechanisms of transport across cell membrane in detail
6. Describe the pathway of pyramidal tract. Add a note on UMN and LMN lesions

**Short Answers**

**(10x3=30)**

7. Stages of erythropoiesis
8. Functions of bile
9. Vital capacity
10. Cushing's syndrome
11. Humoral immunity
12. Actions of testosterone
13. Decerebrate rigidity
14. Nerve supply of urinary bladder and micturition reflex
15. VO<sub>2</sub> max
16. Mechanism of gastric secretion

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