

**M. D. (KRIYA SHARIR) (2012 - COURSE) : SUMMER – 2019**  
**SUBJECT : MODERN PHYSIOLOGY AND APPLIED ASPECT : PAPER – IV**

Day : Friday  
Date : 21/06/2019

Time : 10.00 AM TO 01.00 PM  
Max. Marks : 100

**S-2019-4188**

**N. B. :**

- 1) All questions are **COMPULSORY**.
- 2) Draw neat and labeled diagrams **WHEREVER** necessary.

**Long Answer Questions (Any 3 × 20 Marks Each = 60 Marks)**

- Q. 1** Describe role of different hormones at different stages of female life.
- Q. 2** Describe the types and mechanism of Respiration. Also write about exchange of gases.
- Q. 3** Write definition and classification of Immunity. Explain the mechanism involved in Humoral and Cell mediated immunity. Explain the importance of ELISA in immunity.
- Q. 4** Describe the physiology of Autonomic Nervous System.

**Short Answer Questions (Any 2 × 10 Marks Each = 20 Marks)**

- Q. 5** Write male reproductive system and spermatogenesis in detail.
- Q. 6** Write electrical and mechanical properties of cardiac and skeletal muscle.
- Q. 7** Write blood groups and principles of blood transfusions.

**Q. 8 Write short notes (Any 4 × 5 Marks Each = 20 Marks)**

- a) Genetic Code and its expression
- b) Recent advances in Tissue Engineering and Stem Cell
- c) Physiological response to Vega Vidharan
- d) Computerized Spirometry
- e) Control of Micturition

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