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

Day : Friday

Time :10.00 AM TO 01.00 PM

Date : 21/06/2019

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

* * * * *