

M.Sc.- II (Zoology) CBCS Pattern Semester-IV  
**PSCZOOT15.4 - Paper-XV - Core Elective Special Group Paper-IV : Animal  
Physiology-IV (Physiology of Respiration and Reproduction)**

P. Pages : 1

Time : Three Hours



**GUG/W/23/11442**

Max. Marks : 80

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- Notes :
1. All questions are compulsory.
  2. All questions carry equal marks.
  3. Draw well labeled diagrams wherever necessary.

1. Write an essay on the respiratory tract and describe the structure of the lungs. 16

**OR**

Write notes on-

- a) CO<sub>2</sub> and O<sub>2</sub> transport in the blood. 8
- b) Mechanism of exchange of respiratory gases at pulmonary surface. 8

2. Give a detailed account on the oxygen dissociation curve. 16

**OR**

Write notes on-

- a) Chemical regulation of respiration. 8
- b) Types of hypoxia. 8

3. Write an essay on the endocrine control of spermatogenesis. 16

**OR**

Write notes on-

- a) Luteal cells and their hormones. 8
- b) Structure and process of corpus luteum-formation. 8

4. Give a detailed account on the structure and functions of placenta. 16

**OR**

Write notes on-

- a) Hormonal influence on lactation. 8
- b) In Vitro Fertilization (IVF) and Test Tube Baby. 8

5. Attempt the following. 16

- a) Tidal volume Vital capacity.
- b) Chloride Shift.
- c) Leydig cells.
- d) Estrogen.

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