

M.Sc. S.Y. (Zoology) (CBCS Pattern) Semester - IV
PSCZOOT15.4 - ZOO-XV - Special Group - Animal Physiology-IV
(Physiology of Respiration and Reproduction)

P. Pages : 1

Time : Three Hours



GUG/S/23/11442

Max. Marks : 80

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

1. Draw neat labelled diagram of the respiratory tract and describe mechanisms involved in breathing. **16**

OR

- a) Comment on primary lung volumes and derived lung capacities.
- b) How O₂ transported in the blood.

2. How is respiration regulated? Describe in detail the chemical regulation of respiration. **16**

OR

- a) What is chloride shift?
- b) Define oxygen dissociation curve can you suggest any reason for its sigmoidal pattern.

3. Comment an endocrine control of oogenesis. **16**

OR

- a) Describe in detail the structure and hormones of corpus luteum.
- b) Describe structure of follicular cells and comment on their hormones.

4. Describe the hormonal influence an lactation. **16**

OR

- a) What is Infertility? Comment an causes of infertility in males and females.
- b) Describe the structure of placenta and comment on functions of placenta.

5. Attempt of the following. **16**

- a) Partial pressure of CO₂ at lungs and tissue.
- b) Hypoxia
- c) Hormones of Sertoli cells
- d) Test tube baby.
