

M.Sc.(Zoology) (CBCS Pattern) First Semester
Zoo-04 / PSCZOOT04 - Paper-IV : Advanced Reproductive Biology

P. Pages : 1

Time : Three Hours



GUG/W/18/11178

Max. Marks : 80

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

1. Describe in detail morphogenesis and hormonal control of regeneration in Hydra. 16

OR

Write notes on:

- a) Methods of Sexual reproduction in protozoa. 8
- b) Mechanism of vitellogenesis in insects 8

2. Describe in detail the process of spermatogenesis & its hormonal control. 16

OR

Write notes on:

- a) Cytological and molecular events of fertilization. 8
- b) Types of Cleavage. 8

3. Write an account on pheromones and Sexual behaviour in animals. 16

OR

Write notes on:

- a) Molecular mechanism of sperm capacitation. 8
- b) Sperm abnormality. 8

4. Write an account on Invitro fertilization (IVF) and its significance. 16

OR

Write notes on:

- a) Morphogenetic gradients. 8
- b) Cryopreservation of gametes. 8

5. Attempt the following: 16

- a) Metamorphic forms
- b) Embryonic induction
- c) Sperm decapitation
- d) Test tube baby
