

Bachelor of Science (B.Sc.) (Part - II) Fourth Semester
B.Sc. 2431 - Zoology Paper-I (Animal Behavior and Evolution)

P. Pages : 1

Time : Three Hours



GUG/W/18/1304

Max. Marks : 50

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

1. Describe Reflexes and its adaptive significance. 10

OR

 - a) Pavlovian experiment of classical conditioning.
 - b) Mechanism of Navigation.
2. Write an essay on Biochemical origin of Life. 10

OR

 - a) Post mating mechanism of isolation.
 - b) Gene pool
3. Attempt the following. 10
 - a) Nest building behavior.
 - b) Advantage of dominance hierarchy.
 - c) Adaptive radiation in limb pattern of placental mammal.
 - d) Hardy – Weinberg law.

OR

 - e) Building of spider's web.
 - f) Reproductive fighting.
 - g) Struggle for existence.
 - h) Bottle neck's effect.
4. Attempt the following. 10
 - a) Nature of behaviour.
 - b) Filial imprinting.
 - c) Parallel Evolution
 - d) Genetic drift.

OR

 - e) Reflexes.
 - f) Societies.
 - g) Oparin's concept.
 - h) Sibling species.
5. Write 4-5 lines on the following **any ten**. 10
 - i) Reotaxis.
 - ii) Cuckoos.
 - iii) Patellar Reflex.
 - iv) Confidence hierarchy.
 - v) Gravity cues.
 - vi) Signals of dominance.
 - vii) Ebionts.
 - viii) Overproduction.
 - ix) Artificial selection.
 - x) Deme.
 - xi) Phyletic speciation.
 - xii) Climatic isolation.
