

"Dissemination of Education for Knowledge, Science and Culture"

-Shikshanmaharshi Dr. Bapuji Salunkhe

Shri Swami Vivekanand Shikshan Sanstha's
Vivekanand College, Kolhapur
(Empowered Autonomous)
Department of Zoology
Academic year-2024-2025

Date: 01/09/2024

NOTICE

All students of B. Sc. II Minor are hereby informed that the open-book test for paper Ethology is scheduled on 03/09/2024. As part of continuous evaluation, attendance is compulsory for all.


Ms. Pallavi S. Shetfalkar
Teacher Incharge


Dr. G. K. Sontakke
Head
Department of Zoology
Vivekanand College Kolhapur
(An Empowered Autonomous Institute)

"Dissemination of Education for Knowledge, Science and Culture"

-Shikshanmaharshi Dr. Bapuji Salunkhe

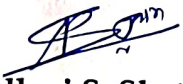
Shri Swami Vivekanand Shikshan Sanstha's
Vivekanand College, Kolhapur
(Empowered Autonomous)
Department of Zoology
Academic year-2024-2025

Date: 03/09/2024

B. Sc II Sem III (Minor)
Paper- Ethology
Open Book Test

**Question 1. What is Social Behaviour? Explain in detail schooling in fishes
and flocking in birds**

10 M


Ms. Pallavi S. Shetfalkar
Teacher Incharge

Shri Swami Vivekanand Shikshan Sanstha
Vivekanand College, Kolhapur (Empowered Autonomous)
Department of Zoology
B.Sc. II Minor
Academic Year 2024-2025

Open Book Test

Attendance

Name of student

Signature

Head
Department of Zoology
Vivekanand College Kolhapur
(An Empowered Autonomous Institute)

VIVEKANAND COLLEGE, KOLHAPUR (AUTONOMOUS)

SUPPLIMENT

9/10

Signature
of
Supervisor

[Signature]

Date: 09/09/2024

Suppliment No. : 1

Roll No. : 7966

Class : B.Sc - II

Subject: Zoology

Test / Tutorial No. : Open Book Test

Div. :

Ques. What is a Social Behaviour? Explain in detail schooling in Fishes. and Flocking in Birds.

Ans: The behavioural activities (hostile, friendly) associated with the numbers of individual living together.

(i) Schooling in fishes:

* Fishes living together in a group is called - "Shoal".
When a shoal moves in one direction, this behaviour is known as 'schooling'.

* The activity in which all shoal start to swim in one direction and start to behave as a single organism.

* The fish shoal for variety of reasons like -

- They are safe in numbers.
- Searching for food.
- Reproduction, etc.

* Schooling also help the fishes in conserving their energy to navigate through water currents.

* They use combination of senses like while swimming in a shoal like - Vision, sight, smell, lateral line, and pheromones to stay in a shoal.

* Fishes shoal in dark.

* School has 2 zones namely -

(A) Zone of Repulsion: Guides the fishes to keep equidistance from other individuals of a school.

(B) Zone of Orientation: Keep a track of neighbour's movement.

- Eg: Sardines are known to have a greatest shoal and follow one of the largest migration found on earth. The Sardine schooling has been seen spreaded over 17 miles with a depth of 25 meters.

(ii) Flocking in Birds:

* Birds have a reputation of flying over a large distance in search of food, better climates, etc.

* Flocking is the behaviour where group of birds combine together and start to work as a group.

* They flock to escape their predator, food searching and navigation.

* Birds like - Swan, Flaming are known to follow migration.

- Each flocking has following measures to manage flock -

① Leaders

② Replacement

③ Sick Birds

④ Fatigue

⑤ Resistance

Shapes of Flock -

- (i) Granular : Circular pattern flock
(Eg: Chel)
- (ii) V-shaped : Flight in 'V' shape.
(Eg: Flamingo & Crane)
- (iii) Dispersed : Flight spreaded in any pattern
(Eg: Pigeon).

* Benefits of Flocking:

- Searching food
- Reduce chance to fall for prey.
- evolution of new species
- Help in Migration.