

**B.Sc. ZOOLOGY
FOURTH SEMESTER
ANIMAL BEHAVIOUR
BSZ-402**

[USE OMR FOR OBJECTIVE PART]

**SET
A**

Duration: 3 hrs.

Full Marks: 70

Time: 30 min.

Marks: 20

1X20=20

(Objective)

Choose the correct answer from the following:

1. The ability of a single gene to have multiple effects is termed as
 - a. Pleiotropy
 - b. Epistasis
 - c. Polygenic inheritance
 - d. Co-dominant
2. Hippocampus is associated with
 - a. Aggression
 - b. Memory
 - c. Displeasure
 - d. None
3. In birds, progesterone hormone is important for
 - a. Incubation
 - b. Mating
 - c. Both
 - d. None
4. What is 'homing' refer to in animal navigation?
 - a. The behavior of animals moving in response to environmental cues.
 - b. The practice of animals using landmarks to find new habitats.
 - c. The ability of animals to return to a specific location after being displaced.
 - d. The method of animals establishing territories in a new environment.
5. Which of the following characteristics act as a sign stimuli for the male stickleback fish?
 - a. Position of the fin
 - b. Beating of the tail
 - c. Red color of abdomen
 - d. None
6. In stimulus filtering, male tree frog responds to
 - a. Co note
 - b. Qui note
 - c. Co-qui note
 - d. All of these
7. In which fish species does the female brood the fertilized eggs in her mouth during parental care?
 - a. Butter fish
 - b. Marine cat fish
 - c. Scoliodon
 - d. Tilapia

8. Thyroid Stimulating Hormone (TSH) controls production of
 - a. Thyroxin
 - b. Thyroid
 - c. Tropic hormone
 - d. None
9. How do animals navigate during migration?
 - a. By using landmarks and visual cues
 - b. By following the Earth's magnetic field
 - c. By using celestial cues such as the sun and stars
 - d. All of these
10. Which action of hormones are the key regulators for the desire to eat in human?
 - a. Leptin and Ghrelin
 - b. Epinephrine
 - c. Adrenaline
 - d. All of these
11. Who was the first ethologist to notice the type of learning known as Imprinting?
 - a. Thorpe
 - b. Konrad Lorenz
 - c. Ivan Pavlov
 - d. Nicolas Tinbergen
12. The tendency and act of an organism to defend a space and exclude other organisms of the same or other species from the defended area is called
 - a. Home Range
 - b. Territory
 - c. Territoriality
 - d. None of the above
13. A field study in which a group of animals is selected and the observer remains with this group for a considerable period of time to observe all activities of group is called as
 - a. Focal animal sampling
 - b. Ad-libitum sampling
 - c. Continuous sampling
 - d. Scan sampling
14. Monkey use a wide range of _____ for communication.
 - a. Facial expression
 - b. Group living
 - c. Social learning
 - d. Vocalization
15. The organism that can communicate through various types of communications is
 - a. Man
 - b. Elephant
 - c. Dolphin
 - d. None of the above
16. The unfertilized egg develops parthenogenetically into
 - a. Queen
 - b. Drone
 - c. Workers
 - d. None of the above
17. Circadian rhythm is capable of synchronizing to environmental variables such as light and temperature. This process is known as
 - a. Free running
 - b. Synchronizer
 - c. Zeitgeber
 - d. Entrainment

18. Initially ethology were first studied by
a. Scientists b. Professionals
c. Non professional d. Researchers
19. The name of three biologists who were jointly awarded Nobel Prize in 1973 for their contribution to ethology, are mention below, except
a. Franz Halberg b. Nicolas Tinbergen
c. Konrad Lorenz d. Karl von Frisch
20. The type of animal communications which is based on visible signals is
a. Auditory b. Tactile
c. Electrical signaling d. None of the above

(Descriptive)

Time : 2 hrs. 30 min.

Marks : 50

[Answer question no.1 & any four (4) from the rest]

1. What is learning? Name the different types of learning. 1+3+6=10
Describe any three types of learning.
2. Draw a flowchart regarding how genes regulate the behavior of an animal. Explain the method of studying behavioral genetics in animal with the help of an example. 3+7=10
3. Write a brief note on the following with reference to examples- 5+5=10
 - (a) Courtship in animal
 - (b) Parental care in animal
4. Explain the measurements of motivation in feeding and drinking. Also describe the models of motivation in animal. 5+5=10
5. Explain how hormones of gonads (male and female) and adrenal gland controls animal behavior. 7+3=10
6. Explain the social organization in Honey bee. 10
7. Write a note on the circadian rhythm. 10
8. Explain the different methods of study animal behavior on the lab. 10

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