**6.** What is circadian rhythm? Discuss the effects of external stimuli on circadian rhythm of an animal. 2+8=10

Or

"Honeybee is a social insect." Justify the statement.

\* \* \*

2016

**ZOOLOGY** 

(Major)

Paper: 6.1

( Animal Behaviour )

Full Marks: 60

Time: 3 hours

The figures in the margin indicate full marks for the questions

1.	Answer the following questions as directed	:
	•	$1 \times 7 = 7$

- (a) Ethoendocrinology deals with the relations between hormones and \_\_\_\_\_.

  ( Fill in the blank )
- (b) Imprinting is restricted to \_\_\_\_ age.

  (Fill in the blank)
- (c) The term 'ethology' was introduced by \_\_\_\_\_.

  ( Fill in the blank )
- (d) The full form of FAP is \_\_\_\_.

  ( Fill in the blank )

(e) Among primates, territorial monogamy is found in gorilla/gibbon/baboon.( Choose the correct answer )

(f) Emotional and physical stresses are managed by hormones produced from pituitary/gonad/adrenal.

( Choose the correct answer )

(g) Organisms which have better insight and memory are primates/insects/birds.( Choose the correct answer )

**2.** Give short answers to the following:  $2 \times 4 = 8$ 

- (a) Why is it necessary to study animal behaviour?
- (b) Define 'habituation learning' with a suitable example.
- (c) Write correlation between sign stimulus and innate releasing mechanism.
- (d) State different castes of ants that live in a colony.
- **3.** Answer any *three* from the following questions: 5×3=15
  - (a) Write a note on the advantages of territoriality in wild animals.
  - (b) Explain with an example the multiple gene effect on behaviour. 5

(c) What is reflex action? Discuss conditioned reflex with a suitable example. 1+4=5

- (d) What do you mean by biological communication? Discuss visual and acoustic means of communication. 1+4=5
- (e) Write briefly on homing behaviour in animals with examples. 5
- **4.** Discuss the difference between instinctive behaviour and learned behaviour with suitable examples. Write the usefulness of 'latent' learning.

  8+2=10

Or

What are the main components of aggressive behaviour? Write the factors responsible for aggressive behaviour in animals. 4+6=10

**5.** Write briefly the effect of hormones on the behaviour of an animal.

Or

What is pheromone? Describe the role of pheromones in the life of an insect. 2+8=10

A16**/500** 

(Turn Over)