

**B.Sc. 6<sup>th</sup> Semester (Hons.) Examinations, 2020 (CBCS)**

**Subject: Zoology**

**Paper-DSE-T-5: (Animal Behaviour)**

**Full Marks: 40**

**Time: 2 Hrs**

*Candidates are required to give their answer in the own words as far as practicable*

*Answer any **eight** questions of the following*

**8×5=40**

1. What is imprinting? Explain with suitable example.
2. Explain fixed action pattern citing proper example.
3. With suitable diagram explain how waggle dance is helpful to determine the direction and distance of the food source in honey bees?
4. Briefly discuss the Thorndike's four questions in explaining behaviour.
5. Illustrate how light can control melatonin synthesis via neural network in human.
6. Outline the possible theories that could explain that why female mate choice has evolved in nature.
7. What is biological clock? How synchronization of biological clock occurs?
8. What is Hamilton's rule of inclusive fitness? With help of inclusive fitness, explain whether altruism occurs in bee colony if there is 20,000 workers, all of which are daughters of the existing queen?
9. Discuss sexual conflict in parental care with a suitable example.
10. Discuss circadian rhythm with suitable example.

## **Paper-DSE-T-6: (Wild Life Conservation)**

**Full Marks: 40**

**Time: 2 Hrs**

*Candidates are required to give their answer in the own words as far as practicable*

*Answer any **eight** questions of the following*

**8×5=40**

1. State the role of Remote Sensing and GIS in evaluation and management of wildlife.
2. Elaborate the application of extinction threshold in wildlife metapopulation conservation.
3. ‘Habitat destruction poses the most serious threat to the survival of wildlife’ – Elucidate the idea in the light of wildlife management.
4. What are pug marks? Discuss its importance in census of wildlife.
5. Write a vivid description on ‘Tiger Project’ in India.
6. What are the positive and negative values of wildlife?
7. Difference between national park and wildlife sanctuary with suitable example.
8. What is carrying capacity? In which way it is estimated?
9. Describe continuous grazing system with pros and cons.
10. Comment on ‘reintroduction necessary for population stability’. Give suitable example.