ST. JOSEPH'S COLLEGE (AUTONOMOUS) BANGALORE - 27
B.Sc. ZOOLOGY - V SEMESTER
MID SEMESTER EXAMINATION- AUGUST 2019
ZO 5215: ECOLOGY, WILDLIFE AND ANIMAL BEHAVIOUR

Time: 1 hour **Max marks = 30**

PART - A

I. Answer any FIVE of the following questions: **5×2=10**

1. Differentiate between plankton and nekton
2. Pyramid of energy is always 'upright'. Substantiate
3. Construct a food web for a grassland ecosystem with 3 primary consumers.
4. Identify the type of innate behaviour

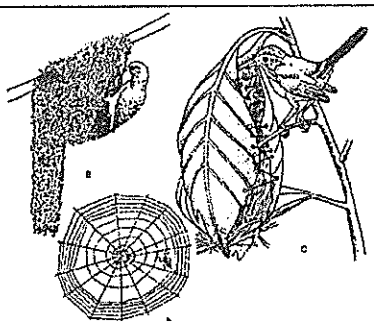

Figure 1

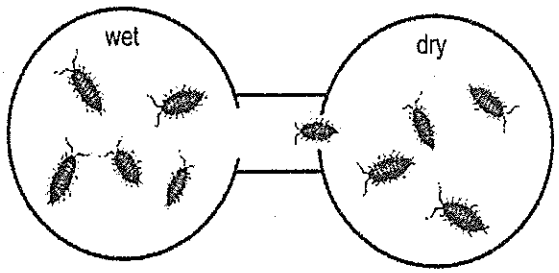

Figure 2

5. Comment on the role of studying animal behaviour on neurophysiology and psychology
6. Name the behaviour associated with
   a. Baby duck syndrome
   b. Knee-jerk response

PART- B

II. Answer any FOUR questions. Each question carries five marks **4x5 = 20**

7. Explain the zonations of the sea with a schematic representation
8. With the help of suitable diagram, explain the zonation of a lentic ecosystem
9. a. Explain the light-dark bottle method and CO_2 chamber method (4 marks).
   b. The net annual primary productivity of an ecosystem was measured to be 300 Kcal/m^2/day. The producers utilized 100 Kcal/m^2/day. What is the GPP of the ecosystem in terms of energy captured? (1 mark).
10. State and explain the laws of thermodynamics using Odum's universal energy flow model

PTO

11. a. Explain the behaviour associated with "cry wolf" fable with an example (2.5 marks)
    b. Match the type of behaviour in column 1 with examples in column 2 (2.5 marks)

P	Rheotaxis	1	Soil litter fauna
Q	Phototaxis	2	Drosophila flies in a culture bottle
R	Geotaxis	3	Cockroaches in crevice
S	Chemotaxis	4	Wind tunnel
T	Thigmotaxis	5	Salmon migration
		6	Pheromone traps