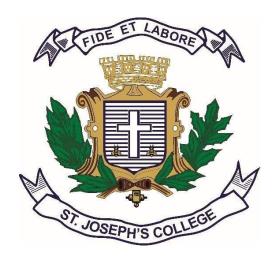
ST. JOSEPH'S COLLEGE (AUTONOMOUS)

BENGALURU-27



Re-accredited with 'A++' GRADE with 3.79/4 CGPA by NAAC Recognized by UGC as College of Excellence

DEPARTMENT OF ZOOLOGY

OPEN ELECTIVE SYLLABUS FOR UNDERGRADUATE PROGRAMME

FOR THE BATCH OF 2021-2024

SUMMARY OF CREDITS IN ZOOLOGY

DEPARTMENT OF ZOOOLGY (UG) (2021-2024)								
Semester 4	Code Number	Title	No. of Hours of Instructions	Number of teaching Hrs/ week	Number of credits	Continuous Internal Assessment (CIA) Marks	End Semester Marks	Total marks
Open Elective	ZOOE6	Animal Behavior	42	03	03	40	60	100
Total Number of credits:03								

Open Elective Course Outcomes and Course Content Under New Education Policy – Year 2021-22 for III Semester

Core Course Content

Course Title: Animal Behavior	Course Credits: 3				
Course Code: ZOOE6	L-T-P per week: 3-0-0				
Total Contact Hours: 42 hours	Duration of ESA: 120 minutes				
Formative Assessment Marks: 40	Summative Assessment Marks:60				

Course Outcomes (COs):

At the end of the course the student should be able to understand:

- Will provide a sound knowledge of how animals interact with one another and their environment.
- Understanding different behavioral patterns.
- Learners would gain an insight into different types of animal behavior and their role in biological adaptations.

Course Articulation Matrix: Mapping of Course Outcomes (COs) with Program Outcomes (POs)

Course Outcomes (COs) / Program	C	C	C	C	C	C	C	\mathbf{C}	C	C	C
Outcomes (POs)		C	C	C	C	C	C	\mathbf{C}	C	C	C
	T	2	3	4	5	6	7	8	9	1	1
	1									0	1
I Core competency	X										
II Critical thinking	X										
III Analytical reasoning	X										
IV Research skills	X										
V Team work											

Note: Course Articulation Matrix relates course outcomes of course with the corresponding program outcomes whose attainment is attempted in this course. Mark _X' in the intersection cell if a course outcome addresses a particular program outcome

	Course Content				
Units	UNDERSTANING THE NATURAL HISTORY OF ANIMAL BEHAVIOR	42hr			
1	Introduction: Aims and objectives, contributions of Konrad Lorenz, Karl Von Frisch and Niko Tinbergen. Approaches (Mechanistic, vitalistic, and ethological).	4hr			
2	Inborn Behavior: Characteristics, taxis, kinesis, reflexes & instincts with suitable examples. Migration in fishes and birds.	4hr			
3	Learning Behavior: Imprinting, habituation, associative learning (Classical and instrumental conditioning), latent learning, insight learning.	4hr			
4	Talking to strangers: Animal Communication: Chemical, auditory, visual, tactile(Features with examples). Preening and grooming.	5hr			
5	Living together-Animal societies: Hamilton's rule and Altruism; advantages and disadvantages of social grouping. Sociality in Insects, Bird Sociobiology: Cooperative breeding in birds and Brood Parasitism, Primate Sociality: Social systems in primates with examples.	6hr			
6	Sexual Behavior and parental care: Asymmetry of sex, Sexual dimorphism, Mate choice, Intra-sexual selection (male rivalry), Inter-sexual selection (female choice), Leks, promiscuity. Parental care in animals with suitable examples.	4hr			
7	Hunting and Escaping: Optimal foraging theory, Group foraging with special reference to birds. Prey-predator strategies with examples	3hr			

Chronobiology: Types of Biorhythms, biological clock Hibernation and aestivation

Home making: Nest building in fishes, amphibians, reptiles, birds and mammals with

Behavioral genetics: Genes and behavior, Evaluation of behavior, Co-evolution

Human behavior: Understanding emotional intelligence, gestures, adolescence,

Field ethology: Techniques involved in study of Animal Behavior.

3hr

2hr

2hr

3hr

2hr

8

9

10

11

12

in animals.

suitable examples

References:

- 1.Biological Rhythms: Vinod Kumar (2002) Narosa Publishing House, Delhi/ Springer-Verlag, Germany
- 2. Chronobiology Biological Timekeeping: Jay. C. Dunlap, Jennifer. J.Loros, Patricia J. DeCoursey (ed). 2004, Sinauer Associates, Inc. Publishers, Sunderland, MA, USA
- 3. David Attenborough (1991). The Trials of Life: A Natural History of Animal Behavior. Little Brownand Company
- 4. John Alcock, Animal Behavior, Sinauer Associate Inc., USA.
- 5. Mandal FatikBaran (2015). Textbook Of Animal Behaviour. PHI Learning Pvt. Ltd.
- 6. Manning, A. and Dawkins, M. S, An Introduction to AnimalBehaviour, Cambridge, University Press, UK.

Pedagogy: Written Assignment/Presentation/Project / Term Papers/ Seminar

Formative Assessment				
Assessment Occasion	Weightage in Marks			
House Examination/Test – Mid semester test	20			
Written Assignment/Presentation/Project /Seminar - I	10			
Written Assignment/Presentation/Project /Seminar - II	10			
Total	40			

End Semester Question Paper Pattern:

Questions	With choices	Total mark
1 mark	20 x 1	20
2 marks	5 x 2 (7 questions)	10
5 marks	2 x 5 (4 questions)	10
10 marks 2 x 10 (3 questions)		20
TOT	60	