

WILD LIFE BIOLOGY

Semester	Subject Code	Category	Lecture		Theory		Practical	Credits
			Hrs/ week	Total Hours/ Semester	Hrs/ week	Total Hours/ Semester		
III		Elective-III	3	45	3	45	Nil	3

COURSE OBJECTIVES:

- To learn the fundamentals of biodiversity and gain insights on values of wildlife.
- To study grounds of habitat loss in animals and ensure species assessments.
- To familiarize with tools and techniques employed for studying wildlife, habitat and ecosystem process.
- To know laws and regulations adopted for animals.
- To provide students with a multidisciplinary education in Wild life biology.

COURSE OUTCOMES:

On the successful completion of the course, students will be able to:

CO Number	CO Statement	Knowledge Level (K1-K4)
CO1	To get employment opportunities in the wild life conservation .	K3
CO2	To learn about the wild life inventory studies of Vertebrates , Invertebrates and Plants .	K1
CO3	To know about the Conservation priorities.	K4
CO4	To acquire knowledge on wild life senses techniques.	K3
CO5	To gain knowledge on the working of various International and National animal laws and projects.	K4

Knowledge Level : K1-Remember ; K2 –Understand ; K3 – Apply ; K4 – Analyze

MAPPING WITH PROGRAMME OUTCOMES

COS	PO1	PO2	PO3	PO4	PO5
CO1	S	M	M	S	S
CO2	M	S	S	M	S
CO3	S	M	S	M	S
CO4	M	S	M	S	M
CO5	S	M	S	M	S

S- Strong; M – Medium ; L- Low

DISTRIBUTION OF MARKS: THEORY 100%

UNIT – I**9 Hours****INTRODUCTION AND SCOPE OF WILDLIFE**

Wildlife concept, Causes of wildlife depletion, degradation and destruction of wildlife habitats, exploitation for commercial purposes, deforestation, urbanization, and industrialization, hunting, forest fire, and for agricultural expansion.

UNIT – II**9 Hours****SIGNIFICANCE OF WILDLIFE MANAGEMENT**

Importance of wildlife conservation –(ecological, ethical, educational, scientific, commercial, aesthetic and recreational) wildlife categories- endangered, threatened, vulnerable, rare and extinct species. Red data book, green data book. Wild life corridors, human wildlife conflicts, Role of tribes in wild life management

UNIT-III**9 Hours****WILDLIFE SURVEY AND INVESTIGATORY STUDIES**

Direct count: Line transects, Point counts. Mark-recapture. Indirect count: pellet count, calls, sent mark, camera trap, radio telemetry, remote sensing. Behavioral sampling
Total species list, total genera or families list, parallel-line searches, encounter rates, documenting rarities, sample collection of dead (plants, fungi, invertebrates, fishes, amphibians reptiles, birds and mammals), labeling and preservation.

UNIT – IV**9 Hours****WILDLIFE CONSERVATION**

Wild life legislation: IBWL, Wild life protection Act, 1972. wild life conservation strategies: IUCN classification, protected area network. In situ conservation- wild life sanctuaries, national parks, bioserves and their management, Ex situ conservation- captive breeding, modern zoo, safari, zoo authority of India, Artificial insemination, cryopreservation and germplasm banks

UNIT – V WILDLIFE PROJECT**9 Hours**

- A. Tiger project- Tiger species, distribution, threats, conservation action taken,
- B. Elephant project: Elephants species, distribution, threats, conservation action taken.
- C. Crocodile Project- crocodile species, distribution, threats, conservation action taken.
- D. Vulture crisis in India, Wildlife Laws.

TEXT BOOKS:

S.NO	AUTHORS	TITLE	PUBLISHERS	YEAR OF PUBLICATION
1.	Sutherland W.J	The conservation hand book: research, management and policy	Blackwell Science Ltd	2000
2.	William Morris, Daniel Doak, Martha Groom et al.	A Practical handbook for Population Viability Analysis	The Nature Conservancy	1999
3.	Rodgers, W.A. and H.S. Panwar .	Planning a Protected Area Network in India	Wildlife Institute of India, Dehra Dun	1988

4.	Anon.	Convention on Biological Diversity - Text and annexes	World Wide Fund for Nature - India.	1992
5.	Giles, H	Wildlife Management Techniques	Natraj Publishers, Dehra Dun	1984

REFERENCE BOOKS

S.NO	AUTHORS	TITLE	PUBLISHERS	YEAR OF PUBLICATION
1.	Martin and Bateson	Measuring Behaviour	Cambridge University Press	2007
2.	Andrawartha, H.C. and L.C. Birch.	The distribution and abundance of animal.	The University of Chicago press, London	1974
3.	Agarwal, V.P.	Forests in India	Oxford and IBH Publishing Co. New Delhi	1980
4.	Davis, M.	Infectious diseases of wild mammals.	The IOWA state	1981
5.	Saharia, V.B.	Wild life in India	Nataraj Publishers, Dehra Dun.	1982
6.	Gopal, R.	Fundamentals of Wildlife Management.	Justice Home. Allahabad.	1992

WEB SOURCES:

www.wildlifebiology.org

www.environmentalscience.org

www.ncbs.res.in

www.nature.com

TEACHING METHODOLOGY

- Class room teaching
- Assignments, Seminars and Models
- Group Discussions
- Home test
- PPT Presentations
- Board and chalk
- Demonstration from the Video slides, Animated videos and interactive software.

SYLLABUS DESIGNERS

- Dr D.Sasikala, Assistant Professor & HOD
- Dr.V.Kiruthiga, Assistant Professor
- Dr V.Rekha, Assistant Professor
- DrA.Vinodhini, Assistant Professor
- Dr.G.Vidhya, Assistant Professor
- Dr. S. Vijayakumari, Assistant Professor