



**SARVODAYA KELAVANI SAMAJ MANAGED,
SHREE MANIBHAI VIRANI & SMT.NAVALBEN VIRANI SCIENCE
COLLEGE**

AN AUTONOMOUS COLLEGE- AFFILIATED TO SAURASHTRA UNIVERSITY, RAJKOT

Re-accredited at the 'A' Level (CGPA 3.28) by NAAC
'STAR' College Scheme & Status by MST-DBT
A College with Potential for Excellence - CPE (Phase-II) by UGC
UGC-DDU KAUSHAL Kendra
Accredited at the G-AAA Highest Grade 'A-1' Level by KCG, Govt. of Gujarat
UGC-DDU KAUSHAL Kendra
GPCB-Government of Gujarat approved Environment Audit Centre

Department: Biology

Programme: **B.Sc. All Programmes**

<i>Semester – IV</i>		
<i>Course Code</i>	<i>Course Title</i>	<i>Credits</i>
22UBIGE01	<i>PART – II – GENERIC ELECTIVE COURSES WILD LIFE ECOLOGY</i>	2 Credits

Course Description:

The course “WILD LIFE ECOLOGY” is enable the students to understand the nature and occurrence of wild life and its ecology. The course specially designed for educating the students about importance of Wildlife, its necessity and its interaction with ecology. this course also educating the students about the need to necessity, conservation and protection about ecology and environment and wildlife as welfare of human and its future. For enabling the students to understand the roll of ecology in environment, its importance, habitat, interaction, and abiotic component cycle etc. Students can learn the importance of biotic interaction and habitat ecology, its importance and effect on ecology and environment. It enlightens how to maintain and conserve the environment for the future generation. It is also enlightens that what we need to do for our faith, feature and sustainability for the human

society and human fate.

Course Purpose:

This course is designed for complete understanding about Wildlife and its Ecology, Sustainability of Environment, and human welfare. Educating the students about the need to protect and preserve the environment as long range goal for welfare of future generation. With this course, the students can understand the needs of Ecology and Environment conservation and importance of wildlife. The goal of the course is to inspire the knowledge across intertrophic interaction among the biotic factors, adaptations of animals and adaptation approach, study of sanctuaries and National parks. They also learn about wildlife conservation, conservation Acts. By this course students get the complete awareness regarding the Wildlife and Ecology, Sustainable living and care of Environment and conservation of biodiversity.

Course Outcomes: Upon completion of this course, the learner will be able to

CO No.	CO Statement	Blooms taxonomy Level (K₁ to K₆)
CO ₁	<i>Describe a basic knowledge and understanding on Gradients of communities, Niches, Food webs and intertrophic interaction.</i>	<i>K1 and K2</i>
CO ₂	<i>Illustrate complete information about Adaptations, its applied aspects and Natural selection.</i>	<i>K2 and K3</i>
CO ₃	<i>Develop understanding and functioning of Sanctuaries.</i>	<i>K2 and K1</i>
CO ₄	<i>Observe identification, understanding about National parks.</i>	<i>K1 and K2</i>
CO ₅	<i>Illustrate conservation of wildlife, wildlife management, wildlife Acts.</i>	<i>K3 and K3</i>

Course Content	Hours
Unit-1: Ecosystem management and conservation	6 Hrs
<ul style="list-style-type: none"> • Introduction • Definitions • Gradients of communities • Niches • Food webs and intertrophic interactions 	
Unit – 2: Animals as individuals	6 Hrs

<ul style="list-style-type: none"> • Introduction • Adaptation • Examples of adaptation • Applied aspects • Natural selection 	
Unit – 3: Sanctuaries	6 Hrs
<ul style="list-style-type: none"> • Khijadiya bird sanctuary • Kutch desert wild life sanctuary • Nal-sarovar bird sanctuary • Barda wild life sanctuary • Hingolghadh sanctuary 	
Unit – 4: National Parks	6 Hrs
<ul style="list-style-type: none"> • Gir forest national Park • Marine national park • Velavadar kadiyar national Park • Ranthambhor tiger national park • 	
Unit – 5: Conservation	6 Hrs
<ul style="list-style-type: none"> • Wild life management • Wild life Acts • Wild life conservation • Control • Field Visit 	

Text Books

- *E. A. Thomas, Forest management, 3rd edition(2014), Bellington publication.*
- *Gopal Rajesh, Introduction to Wild life management, 2nd edition,*

Reference books

- *Anthony R. E., Wild life ecology, conservation and management, 2nd edition, Black well publishing*
- *Singh J. S., Singh S. P., Gupta S. R., Ecology, environment and resource conservation, Edition 2nd (2006) Anamaya publication, New Delhi.*

