

Open Elective Course Outcomes and Course Content

Under New Education Policy – Year 2021-22 for

I Semester

Core Course Content

Course Title: Indian Wildlife Biology	Course Credits: 3
Course Code: ZOOE2	L-T-P per week: 3-0-0
Total Contact Hours: 42 hours	Duration of ESA: 2 hours
Formative Assessment Marks: 40	Summative Assessment Marks: 60

Course Outcomes (COs):

At the end of the course the student will be able to:

- Gain knowledge about Wildlife biology and conservation.
- Acquaint knowledge on wildlife management, laws and practices
- Acquaint the knowledge about basic procedure and methodology of field wildlife biology
- Learn various concepts of biodiversity conservation.
- Students can involve in conservation initiatives, volunteer for wildlife censuses
- Get employment in fields related to conservation

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

Course Outcomes (COs) / Program Outcomes (POs)	C	C	C	C	C	C	C	C	C	C	C
	C	C	C	C	C	C	C	C	C	C	C
	T	2	3	4	5	6	7	8	9	10	11
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

Content	Hrs
Unit I : Wildlife Ecology	14
<ul style="list-style-type: none"> ● Definition of Wildlife: Causes of wildlife depletion; Economic importance of wildlife; need for wildlife conservation; rare, endangered, threatened and endemic species of fishes, amphibians, reptiles, birds and mammals in India- India as a mega wildlife diversity country. Zoogeographic regions, endemism ● Species interactions: Plant-animal interactions; mutualism, commensalism, competition and predation. Link between biodiversity and climate change ● Wildlife Census Techniques: Direct count (block count, transect methods, Point counts, visual encounter survey, waterhole survey); Indirect count (Call count, track and signs, pellet count, pugmark, camera trap)-Identifying animals based on indirect signs; Capture-recapture techniques ● Animal communication: Purpose and importance of communication – Types of communications - Visual, auditory, chemical and vocalization in birds & mammals. 	
Unit II: Human Dimensions of Wildlife Conservation, Conservation Strategies/ Approaches	14
<ul style="list-style-type: none"> ● Community Participation, Traditional Resource Dependence, Sustainable Livelihood, Community Forests, Eco-development and Eco-development Committees, Biodiversity Management Committees, Ecotourism ● Sacred Grooves, Corridors, Citizen science and People participation in Conservation. ● Captive breeding programs, population reintroductions and translocations ● Livestock - Wildlife Interaction, Human-Wildlife Conflicts and Mitigation. 	
Unit III: Conservation Laws, Policies and Management	14
<ul style="list-style-type: none"> ● Protected areas: in situ & ex situ conservation methods – National Parks, Wildlife Sanctuaries, Conservation Reserves, Community Reserves, Biosphere Reserves in India ● National Wildlife Conservation Policy and Action Plans: Wildlife (Protection) Act. ● National Conservation Authorities (National Biodiversity Authority and National Tiger Conservation Authority), and International Conventions viz., RAMSAR Convention, Convention on Biological Diversity, Convention on Migratory Species. ● Eco-sensitive Zones, Wetlands of National Importance, Project Elephant, Project Snow Leopard, Important Bird Areas, Coastal and Marine Biodiversity, Forestry and Forest Management in India. ● Biodiversity Hotspots. Keystone, Umbrella and Flagship species, 	

Reference Books:

1. Alcock, J. (2005) Animal Behaviour: An evolutionary approach. Sinauer Assoc., Sunderland, Mass.
2. Anon, 1992. Conservation on biological diversity. Text and annexure – WWF-India
3. Saharia, V.B. 1982 Wildlife in India, Nataraj Publishers, Dehra Dun

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
TOTAL		60