

# UNIVERSITY OF NORTH BENGAL

Accredited by NAAC with grade “B++”

B.Sc. Zoology FOUR YEAR UNDERGRADUATE PROGRAM  
(FYUGP)  
w.e.f. 2024-2025

Course Curriculum for Inter-disciplinary Courses (IDC) for  
both Single Major Single Minor Course & Multidisciplinary course

Under  
THE NEW CURRICULUM AND CREDIT FRAMEWORK, 2024



समानो मन्त्रः समितिः समानी

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## Semester-II

IDC: Conservation Biology (Paper Code: LSC1IDC202)

Paper Type: IDC

Credit: 3 [Theory +Tutorial]

Class Hours: 45 (Theory)

Full Marks: 60 (Theory 40 + Tutorial 20)

### Syllabus:

Theory	Class Hour(s)
<b>Unit I: History of Conservation Biology</b>	<b>02</b>
<ul style="list-style-type: none"><li>• Origin of 'Conservation Biology' as a new arena in the modern world.</li></ul>	
<b>Unit II: Classification of living organisms</b>	<b>06</b>
<ul style="list-style-type: none"><li>• Five Kingdom classification (Whitaker, 1969) (Basic concept).</li><li>• Basic concept of Biological species.</li></ul>	
<b>Unit III: Elementary concepts associated with Conservation Biology</b>	<b>08</b>
<ul style="list-style-type: none"><li>• Biome, Biosphere, Ecosystem, Biodiversity, (Definition and basic concept).</li><li>• Biodiversity hotspots, Megadiverse countries. (Definition and basic concept).</li></ul>	
<b>Unit IV: Values of biodiversity</b>	<b>04</b>
<ul style="list-style-type: none"><li>• Values of biodiversity.</li><li>• Significance of conservation biology.</li></ul>	
<b>Unit V: Loss of Biodiversity</b>	<b>04</b>
<ul style="list-style-type: none"><li>• Extinction (definition, reasons: habitat fragmentation &amp; degradation, overexploitation, climate change).</li><li>• Biodiversity loss in Indian context</li></ul>	
<b>Unit VI: Legal foundations of conservation</b>	<b>06</b>
<ul style="list-style-type: none"><li>• The titles of the laws and the dates of their implementation</li><li>• National and International organizations/ bodies/ programs (WWF, IUCN, CBD, CITES, MoEF,).</li></ul>	
<b>Unit VII: Idea of IUCN Red List</b>	<b>07</b>
<ul style="list-style-type: none"><li>• Elementary idea of IUCN Red List</li><li>• Conservation status of species (Asian Elephant, One-horned Rhinoceros, Royal Bengal Tiger) by IUCN Red List categories.</li></ul>	
<b>Unit VIII: Conservation Strategies</b>	<b>08</b>
<ul style="list-style-type: none"><li>• Concepts of Reserve Forest, Biosphere reserve, Wildlife sanctuary, National Park</li><li>• Keystone species, Endemic species (Definition and example).</li></ul>	

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| <ul style="list-style-type: none"><li>• Concepts of <i>ex situ</i> and <i>in situ</i> conservation.</li><li>• Animal conservation projects in India (Names and years of implementation).</li></ul> |
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<b>Suggested Readings</b>
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| 1. Groom. (2005). Principles of Conservation Biology. III Edition, Sinauer.     |
| 2. Joshi and Joshi. (2020). Textbook of Conservation Biology. Evincepublishing. |
| 3. Prasad, G. (2012). Handbook of Conservation Biology. Discovery Publishing.   |
| 4. Primack. (2014). Essentials of Conservation Biology. VI Edition, Sinauer.    |
| 5. Sodhi and Ehrlich. (2010). Conservation Biology for All. Oxford.             |

NB: MCQ Question pattern for end semester theory examination (Duration: 2 hrs.)