MANNAM MEMORIAL NSS COLLEGE, KOTTIYAM

STUDENT ENROLMENT LIST (2021-22)

Name of department : Department of Zoology

Name of course : Biodiversity Conservation

Sl No	Name of Student	Signature
1	ADITHYA S	
2	ANJALI B BABU	
3	ANJANA V U	
4	ARCHA A S	
5	DEVIKA G	
6	GEETHU B S	
7	HARIPRIYA K	
8	INDRAJA S	
9	NEETHU B S	
10	R KRISHNENDHU	
11	RAJSHREE S	
12	SAJIN CHANDRAN	
13	SANDRA SHAJI	
14	SILPA SYAM	
15	SULAIKHA S	
16	VARSHA G	
17	VINEETHA VIJAYAN	
18	ADITHYAN U S	
19	ANEENA NAIR R	
20	APARNA S B	
21	DEVIKRISHNA G	
22	DEVIKA J R	
23	GOURI RAJ R G	
24	JYOTHISH JAYAN	
25	KRISHNA PRIYA S	
26	LEKSHMI PRIYA G	
27	NAVAMY N	
28	RAJALEKSHMI R	
29	RAJARAJESWARY S B	
30	S R SREEHARI	

Lekshmy

(Co.ordinator & HOD)

DEPARTMENT OF ZOOLOGY
MMNSS COLLEGE, KOTTIYAM
ADD ON COURSE 2021-22
BIODIVERSITY CONSERVATION

Total hours: 30

Objectives of the course

- Experience and identify the diversity of plant and animal kingdom, from lower to higher level
- Recognize the need to conserve the wealth of Biodiversity
- Create social awareness in biodiversity conservation and sustainable utilization of bioresources

Course outcome

- Get a deep knowledge on biodiversity richness in global scale and biogeography of India.
- Assess the value of biodiversity wealth of our Nation.
- Analyze various threats to our biodiversity and able to suggest measures for conservation Strategies.
- Trained effectively and scientifically to convey the message of sustainable use of resources and conservation of biodiversity to the public and young generation.

Syllabus

MODULE 1 - Introduction (7 hrs)

Definition, Genetic diversity, Species diversity, Ecosystem diversity: Structural and functional aspects. Bio-geographic classification of India. Basic concepts of conservation biology, history of conservation biology, the value of biodiversity and conservation,

MODULE 2 - Value of Biodiversity (5 hrs)

Intrinsic, consumptive, productive use, social, ethical, aesthetic and option values. Utilitarian values of biodiversity- goods, services and information. Biodiversity and ecosystem functioning.

MODULE 3 - Threats to Biodiversity (10 hrs)

Habitat loss, pollution, species introduction, global climate change, overexploitation, poaching of wildlife. Rare species, genetic diversity of rare species, habitat loss and fragmentation. Extinction: mass extinction, extinction process, ecosystem degradation, over exploitation, invasive species. Human factors: social factors, economics, politics and action. Manwildlife conflicts. Endangered and endemic species of India, common plant species, common animal species.

MODULE 4 - Conservation of Biodiversit (8 hrs)

Strategies for conservation: In-situ and ex-situ conservation- environmental assessment, protected areas-biosphere reserves, national parks, sanctuaries, tiger reserves-project tiger. Ex situ conservation-Managed ecosystems, biological resources and gene banks, botanical gardens, bio-parks, simulated ex situ conservation strategies, valuing biological resources, ecotourism, .

References:-

- An, S., & Verhoeven, J. T. (Eds.). (2019). Wetlands: Ecosystem Services, Restoration and Wise Use (Vol. 238). Springer
- Carina Hoorn, Allison Perrigo, Alexandre Antonelli (2018). Mountains, Climate and Biodiversity John Wiley and Sons Ltd ,Oxford,UK.
- Copsey, J. A., Black, S. A., Groombridge, J. J., & Jones, C. G. (Eds.). (2018). Species Conservation: Lessons from Islands. Cambridge University Press.
- Dudgeon, D. (2020). Freshwater Biodiversity. Cambridge University Press.
- Fiedler P.L and Kareiva, P.M. (1997) Conservation biology Chapman and Hall International Thompson Publishing.USA
- Gabriel M. (2000) Biodiversity and conservation Oxford and IBH publishing company Pvt Ltd. New Delhi.

Lekshmy

(Course co-ordinator & HoD)

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Kottiyam, Kollam

2021-22

DEPARTMENT OF ZOOLOGY
COURSE : BIODIVERSITY CONSERVATION

COURSE SCHEDULE – BIODIVERSITY CONSERVATION

DATE	TIME	TOPIC
10/01/2022(Monday)	3.30 – 4.30 pm	Genetic diversity
11/01/2022(Tuesday)	3.30 – 4.30 pm	Species diversity, Ecosystem diversity
12/01/2022(Wednesday)	3.30 – 4.30 pm	Structural and functional aspects
13/01/2022(Thursday)	3.30 – 4.30 pm	Bio-geographic classification of India
14/01/2022 (Friday)	3.30 – 4.30 pm	Basic concepts of conservation biology
15/01/2022(Saturday)	9.00 – 1.00 pm	History of conservation biology, the value of biodiversity
17/01/2022(Monday)	3.30 – 4.30 pm	Utilitarian values of biodiversity
18/01/2022(Tuesday)	3.30 – 4.30 pm	Biodiversity and ecosystem functioning
19/01/2022(Wednesday)	3.30 – 4.30 pm	Habitat loss, pollution, species introduction
20/01/2022(Thursday)	3.30 – 4.30 pm	Global climate change, overexploitation
21/01/2022 (Friday)	3.30 – 4.30 pm	Habitat loss and fragmentation
22/01/2022(Saturday)	9.00 – 1.00 pm	Extinction
24/01/2022(Monday)	3.30 – 4.30 pm	Invasive species
25/01/2022(Tuesday)	3.30 – 4.30 pm	Human factors: social factors, economics, politics and action
27/01/2022(Thursday)	3.30 – 4.30 pm	Endangered and endemic species of India
28/01/2022 (Friday)	3.30 – 4.30 pm	Strategies for conservation: In-situ and ex-situ conservation
29/01/2022(Saturday)	9.00 – 1.00 pm	Ex situ conservation-Managed ecosystems
31/01/2022(Monday)	3.30 – 4.30 pm	Biological resources and gene banks
01/02/2022(Tuesday)	3.30 – 4.30 pm	Simulated ex situ conservation strategies
02/02/2022(Wednesday)	3.30 – 4.30 pm	Valuing biological resources
03/02/2022(Thursday)	3.30 – 4.30 pm	Top-down and bottom- up protocols for conservation
07/02/2022(Monday)	END COURSE EVALUATION	

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MMNSS COLLEGE, KOTTIYAM

DEPARTMENT OF ZOOLOGY

END COURSE EVALUATION OF ADD ON COURSE 2021-22

BIODIVERSITY CONSERVATION

Max marks: 25 **Time: 1 hr**

Section A. Answer **all questions** in one or two sentences **(5×1= 5)**

1. Name an artificial ecosystem with high productivity.
2. Define the Red Data Book.
3. What is a gene pool?
4. Expand IUCN.
5. What is a biodiversity hotspot?

Section B. Answer **any 4** of the following **(4×2=8)**

6. State two ways in which humans benefit from biodiversity.
7. In comparison to other animal groups, why are amphibians more vulnerable to extinction?
8. How can the loss of one species lead to the extinction of another?
9. State how the current occurrence of species extinction is different from the earlier mass extinction.
10. What is the reason behind the vast diversity in Indian ecology?
11. State a difference between endemic and exotic species.

Section C. Answer **any 3** of the following **(3×4= 12)**

12. What are the two main approaches to conserving biodiversity in India? Explain in detail.
13. What is biodiversity? Explain different types of biodiversity.
14. List down the consequences of loss of biodiversity.
15. Explain the ecosystem service. Write any four ecosystem services rendered by the natural ecosystem
16. Describe the threats to Biodiversity.

Mark sheet of end course evaluation of the Add on course Biodiversity Conservation (2021-22)

Sl. No:	Name	Candidate code	Mark (25)	Signature
1	ADITHYA S	25019116001	22	
2	ANJALI B BABU	25019116003	14	
3	ANJANA V U	25019116004	20	
4	ARCHA A S	25019116005	19	
5	DEVIKA G	25019116006	19	
6	GEETHU B S	25019116007	20	
7	HARIPRIYA K	25019116008	20	
8	INDRAJA S	25019116009	23	
9	NEETHU B S	25019116010	23	
10	R KRISHNENDHU	25019116011	21	
11	RAJSHREE S	25019116012	20	
12	SAJIN CHANDRAN	25019116013	22	
13	SANDRA SHAJI	25019116014	21	
14	SILPA SYAM	25019116015	20	
15	SULAIKHA S	25019116016	22	
16	VARSHA G	25019116017	21	
17	VINEETHA VIJAYAN	25019116018	19	
18	ADITHYAN U S	25019116019	16	
19	ANEENA NAIR R	25019116020	22	
20	APARNA S B	25019116021	19	
21	DEVIKRISHNA G	25019116022	18	
22	DEVIKA J R	25019116023	19	
23	GOURI RAJ R G	25019116025	25	
24	JYOTHISH JAYAN	25019116026	20	
25	KRISHNA PRIYA S	25019116027	22	
26	LEKSHMI PRIYA G	25019116028	16	
27	NAVAMY N	25019116031	21	
28	RAJALEKSHMI R	25019116032	22	
29	RAJARAJESWARY S B	25019116033	25	
30	S R SREEHARI	25019116034	16	

Dr. Lekshmy S
Course-Coordinator

Dr. LEKSHMY S
HOD, Dept Of Zoology
M M N S S College
Kottiyam - [illegible]

2021-22

DEPARTMENT OF ZOOLOGY

COURSE: BIODIVERSITY CONSERVATION

COURSE REPORT

Biodiversity conservation course provides an understanding of the concept and principle of biodiversity science. The course gives detailed information on the values of biodiversity, causes as well as current crisis, and consequences of biodiversity loss. The course helps to understand various means of conservation, restoration and sustainable utilization of biodiversity and provides an effective tool to bridge the knowledge gap for sustainable management of biodiversity.30 students participated in this course. The duration of the course was 30 hours. The course started on 10/01/2022. End course evaluation was conducted on 03/02/2022.

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Principal
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KOTTIYAM

FEEDBACK REPORT BY STUDENTS

The course provided in-depth knowledge about biodiversity conservation. we're in the midst of a global biodiversity crisis. The information got from the course helps to support community-led conservation initiatives that use responsible, sustainable, and biodiversity-friendly practices. Such practices protect our soil, water, forests, and wildlife. By the conservation of biodiversity, ecosystems thrive, protect us from natural disasters, regulate the climate, and provide food, fertile soil, and medicine.

MANNAM MEMORIAL N.S.S. KOTTIYAM, KOLLAM

Principal
M.M.N.S.S.COLLEGE
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