

**St Xavier's College (Autonomous), Ahmedabad**

**ELECTIVE COURSE**

**STUDY OF BIODIVERSITY IN CAPTIVITY AND IN NATURE**

**UNIT – 1**

Classification of Invertebrates – Arthropoda to Hemichordata, giving suitable examples.

**UNIT – 2**

Visit to the Kamala Zoological Park to study the various wild animals in captivity.

**UNIT – 3**

FLORAL DIVERSITY: Study of plants in natural environment & in garden settings.

**UNIT – 4**

Conservation Issues : *ex situ* & *in situ* measures; environmental activism. Visit to SERENITY Conservation Centre.

**Reference Books**

1. Textbook of Invertebrates, R. L. Kotpal
2. Manual of Zoology, E.K. Ayer
3. Textbook of Zoology, R. D. Vidyarthi
4. An Introduction to Biodiversity, B.R. Goel
5. Biodiversity, Supriyo Chakraborty
6. Biodiversity, Assessment and Conservation, Ed. By Pravin Chandra Trivedi, Agrobios.

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**ELECTIVE COURSE**

**Biodiversity**

**Unit - I**

Biodiversity –Definition, different levels, importance, threats, Global and local efforts for conservation.

**Unit - II**

Microbial Diversity - Different forms, Utility – industrial, pharmaceutical, agricultural, methods for isolation and identification

**Unit - III**

Plant Diversity – Sampling for quantification, different forms, agrobiodiversity, forests and medicinal plants

**Unit - IV**

Faunal Diversity – Origin of life, characteristics, different forms, invertebrates, vertebrates, evolutionary trend

**Suggested readings**

1. Biodiversity, TERI, New Delhi
2. Textbook of Microbiology, S Chand and Co., New Delhi
3. An Advanced Textbook on Biodiversity, Oxford & IBH, New Delhi
4. Ecology, Cengage Learning, New Delhi