



# **SNS COLLEGE OF TECHNOLOGY**

Vazhiampalayam, Coimbatore-35

**(An Autonomous institution)**

Accredited by **NBA-AICTE** and Re-Accredited by **NAAC-UGC with A+ Grade**

Approved by **AICTE**, New Delhi & Affiliated to **Anna University**, Chennai



## **DEPARTMENT OF CHEMISTRY**

**COURSE NAME : 23CHT103- ENVIRONMENTAL SCIENCE AND  
SUSTAINABILITY**

**I YEAR / I SEMESTER**

**UNIT : 1.ENVIRONMENT AND BIODIVERSITY**

**TOPIC : 3. INTRODUCTION TO BIODIVERSITY**



# BRAINSTORMING WITH RECAP

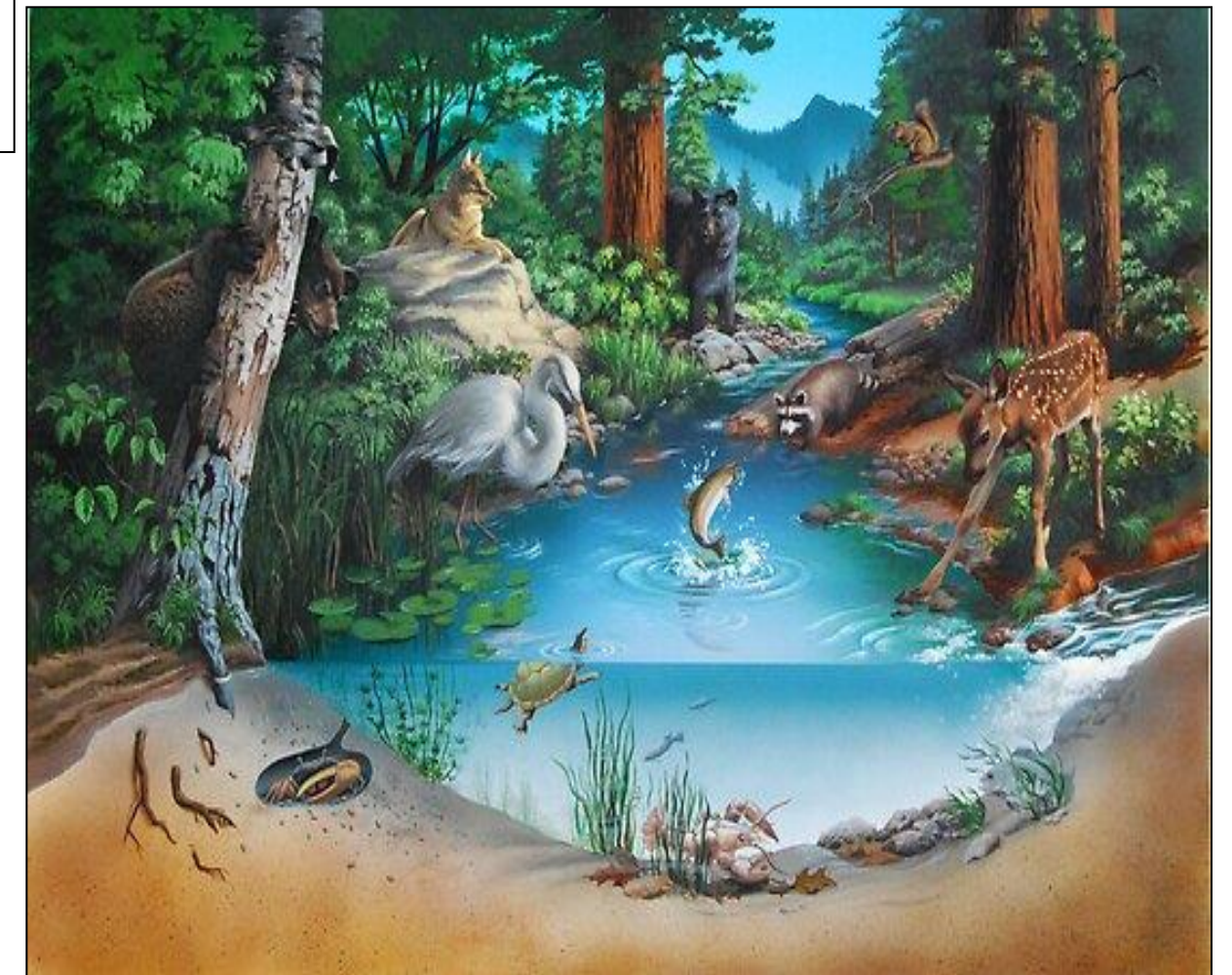
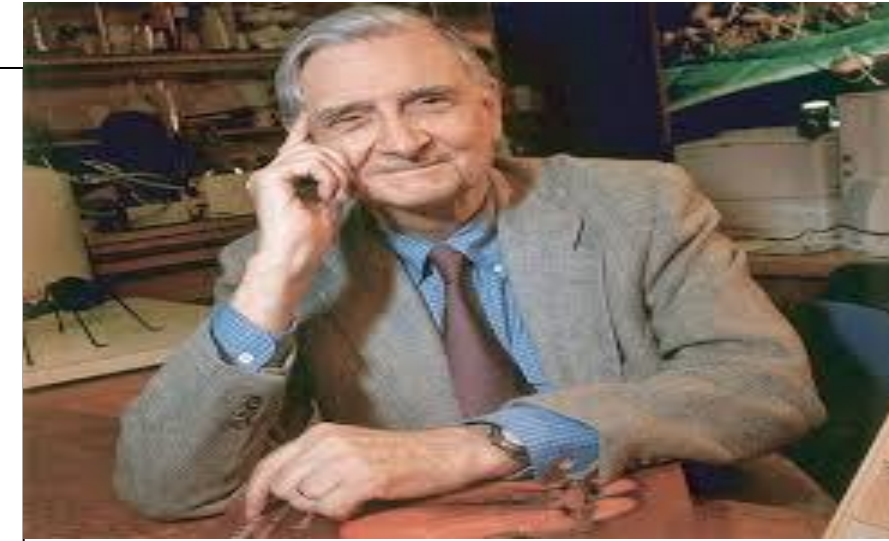




# INTRO TO BIODIVERSITY



- The term first coined by **Walter G. Rosen in 1986.**
- **Bio -life**
- **Diversity - variety**
- **Definition:** The variety & variability among all groups of living organism & the ecosystem in which they occur.







# SIGNIFICANCE



- Provide fresh water, Air & Productive land
- Provides human life, food, medicine
- Develops forestry, fisheries, agriculture





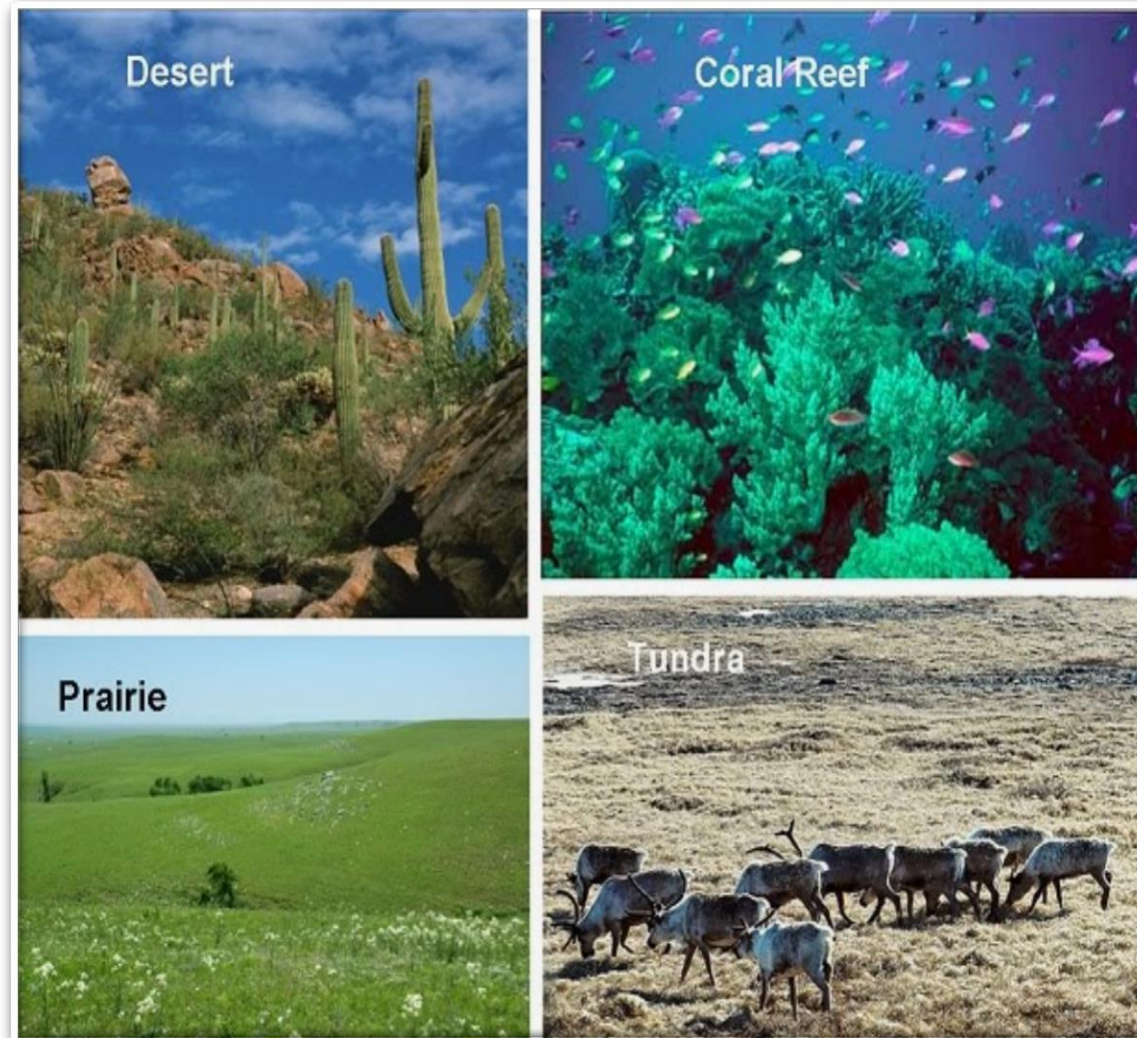


# CLASSIFICATION

## 1. DIVERSITY OF GENETICS



## 3. DIVERSITY OF ECOSYSTEM



## 2. DIVERSITY OF SPECIES







# 1. GENETIC BIODIVERSITY

- Diversity within the species (variation of genes within the species)
- **Example:** Rice varieties, teak, dogs, etc







## 2. SPECIES BIODIVERSITY

- Diversity between different species
- **Example:** plant species, animal species



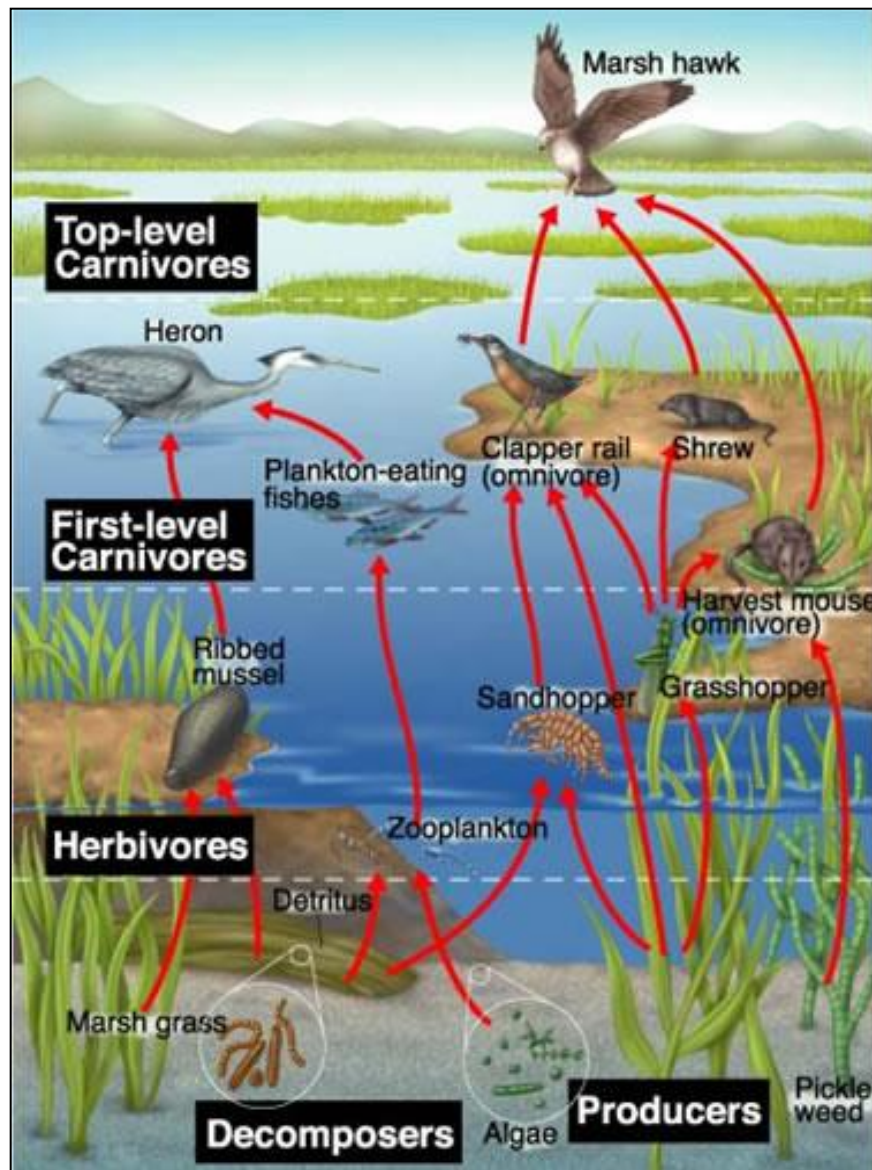




# 3. COMMUNITY / ECOSYSTEM BIODIVERSITY



- Diversity at habitat level between different species
- **Example:** River ecosystem, pond, desert, marine ecosystem







# Activity



1. Which of the following region is known as a hotspot for cactus biodiversity?

- A. Sahara Desert B. Tehuacan valley  
C. Caatinga scrub D. None of the above

Ans: Tehuacan valley

2. On which date International Day for Biodiversity is observed?

- A. May, 15 B. May, 20 C. May, 22 D. June, 5

Ans: C. May, 22

3. Which day is Earth Day?

- A. April 22 B. December 21  
C. August 12 D. March 21

Ans: April 22

4. In 2016, the Paris Agreement was signed on Earth Day. True/false

Ans: True

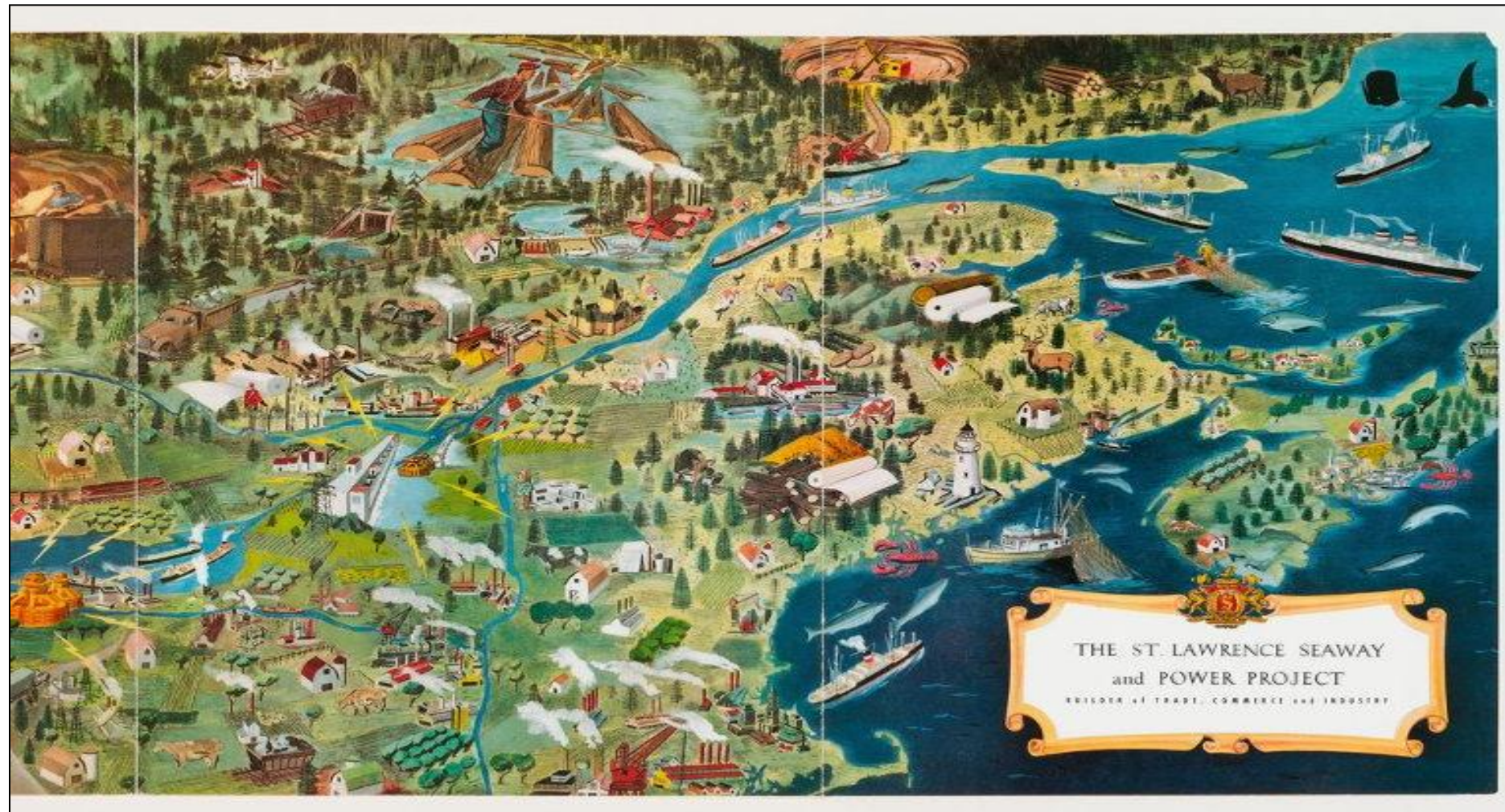




# LOSS OF BIODIVERSITY



- Hybrid seeds
- Medicinal become extinct
- Shrinkage of forest
- Pollution
- urbanization







# ASSESSMENT



**1. Draw the flow chart for levels of biodiversity**





# SUMMARY





# REFERENCES



1. Dr. A.Ravikrishnan, Environmental science & Engineering” Srikrishna hitech Pub. Co. Ltd,2013.
2. G.Tayer Miller :Environmental Science”, Cenage Learning India Pvt Ltd, 2011.
3. Benny joseph, “Environmental science & engineering” Tata McGraw-Hill.Pub.Co.Ltd. New Delhi.2009.

