

## **MARINE OCEANOGRAPHY**

Introduction to Oceanography: Basics, ocean basins origin (plate tectonics, seafloor spreading), Nature and scope, history, branches of oceanography, Ocean floor, continental shelf, trenches, abyssal plains, Marine sediments, Coral reefs, seawater composition and characteristics; Characteristics of the Ocean Waves, tsunamis, tides, ocean currents, Storm surges, and cyclones: cause and effects, characteristics, environmental consequences, and management; Phenomenon observed in the Ocean ,Ocean Salinity: Salinity change, causes, distribution, and implications. Ocean temperature: Temperature change, causes, vertical and horizontal distribution, and implications. Marine Environment: Marine climatic Zone, El Niño; Ocean and global environment: Man-Ocean relation, Sea-level change: Definition, causes, past, present, and future trends of S.L. changes, Consequences of S. L. changes, Oceanic regions & Marine resources, Marine pollution.