

# FISHERY OCEANOGRAPHY

## Topics

National and International expeditions

Earth and the ocean basin, distribution of water and land

Relief of sea floor: Major feature of topography and terminology, major divisions

Relief in Indian ocean

Ocean Waves: definition and terms; classification, Difference between surface and long waves

Theories of wave formation; surface wave generation; spreading growth

Beaufort Scale; spilling and breaking waves; long waves, Seiches, internal waves

Ocean Tides; Fundamentals of tide formation; elementary tidal definition

Tidal inequalities; tide producing forces types of tides tidal bores, tide prediction

Ocean Currents: Definitions and features; measurements of currents; direct and indirect methods forces acting on sea waters;

Drift currents, Ekman spirals, thermohaline circulation

Characteristics; course; and significance of some major ocean currents of the world

El-Nino

Salinity and chlorinity; temperature; thermal properties of sea water

Colligative and other properties of sea water

Residence time of constituents in seawater

Properties of sea ice

General distribution of temperature, salinity and density

Water masses of Indian oceans

Chemistry of sea water

Nansen reversing water sampler

Bathythermograph

Grabs

Upwelling, sinking, gradient currents,

Corers

Current meters

Tidal gauges

Echo-sounder

SONAR

RADAR

Pacific Ocean and its Important Features.

Indian Ocean and its Important Features.

Atlantic Ocean and its Important Features.  
Arctic Ocean and its important Features.  
Antarctic Ocean and its important Features.  
Niskin-Water Sampler  
Tsunamis, Timeline  
Marine Life in Different Depths  
Seaweeds  
Marine Planktons  
Marine Coastal Structures  
Coastal Processes  
Remote Sensing of Coastal Waters