

SCOPE OF OCEANOGRAPHY:

- In a very simple term the study of hydrosphere (oceans and seas), say watersphere covering 97.2 percent of all water, both in liquid and solid form (ice) is called oceanography or the geography of ocean, which includes the consideration of description and analysis of physical and biological aspects of hydrosphere.
- The subject matter and contents of the study of the science of oceanography may be summarized as follows :

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| <ol style="list-style-type: none">1. marine geological and tectonic aspects<ol style="list-style-type: none">a. Origin of oceansb. Origin of ocean basins-Continental driftc. Plate tectonics and sea-floor spreading2. Marine geomorphological aspect reliefs of the ocean basins<ol style="list-style-type: none">i. continental shelf and slopeii. deep sea plains and trenchesiii. submarine canyons :- coastal processes and coastal landforms3. Physical and chemical aspects temperature of ocean water<ol style="list-style-type: none">i. density of ocean waterii. viscosity, pressure and compressibilityiii. water masses and their distributional patternsiv. salinity of ocean waterv. marine sediments and deposits4. dynamics of oceans<ol style="list-style-type: none">i. sea wavesii. ocean currents ocean tides tsunamisiii. tidal surges | <ol style="list-style-type: none">5. global atmosphere-ocean circulation :<ol style="list-style-type: none">i. atmospheric circulation and ocean currentsii. southern oscillation and Walker circulationiii. El Nino6. coastal habitats and bionics<ol style="list-style-type: none">i. coastal habitats<ul style="list-style-type: none">➤ estuaries➤ wetlands➤ lagoons➤ mangrovesii. coastal biomes<ul style="list-style-type: none">➤ littoral biome➤ sublittoral biome➤ pelagic biome7. marine organisms and marine ecology<ol style="list-style-type: none">i. classification of marine organismsii. marine ecological productivityiii. marine food chains and biogeochemical cyclesiv. marine plantsv. marine animals8. coral reefs and atolls9. marine resources10. man and marine environment |
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In summary, the scope of oceanography is vast and encompasses a wide range of topics related to the study of the ocean and its many features. The field includes the study of oceanic currents, marine ecosystems, coastal erosion, oceanic climate patterns, and the impact of human activities on the ocean environment. Oceanographers work in a variety of settings, including universities, government agencies, and private industry, to advance our understanding of the ocean and its vital role in the Earth's ecosystem.