

Question No.

Q.6

How does cryosphere affects the global climate? (150 words).

Ans.6

Cryosphere is a part of land surface on earth which is covered with ice sheets & snow throughout the year.

This includes Antarctica, Greenland, peaks of highest mountains & polar oceans.

They play a crucial role in affecting global climate which can be attributed by following facts :-

① High Albedo - It is the tendency to reflect back the solar radiations. Ice sheets have high albedo which results in high global warming & further contributes to melting of glaciers.

② Carbon Sinks - The soil in the poles or beneath ice-caps trapped huge tonnes of  $CO_2$ . If they are melted, then they can increase the amt. of methane which is a greenhouse gas.

③ Rising Sea Level - This is an alarming issue as no. of cities & parts adjoining sea are in threat as they can submerge.

# U.P.S.C

## UNIQUE IAS

STUDY CIRCLE SINCE 1990

④ Ocean Currents & Temperature - The cold ocean currents originates from poles & travels towards equator affecting the temp. & climate of adjoining countries. Any change in salinity of water affects the temperature.

Therefore, cryosphere is an important key to protect biosphere.

