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# Topic Wise Content



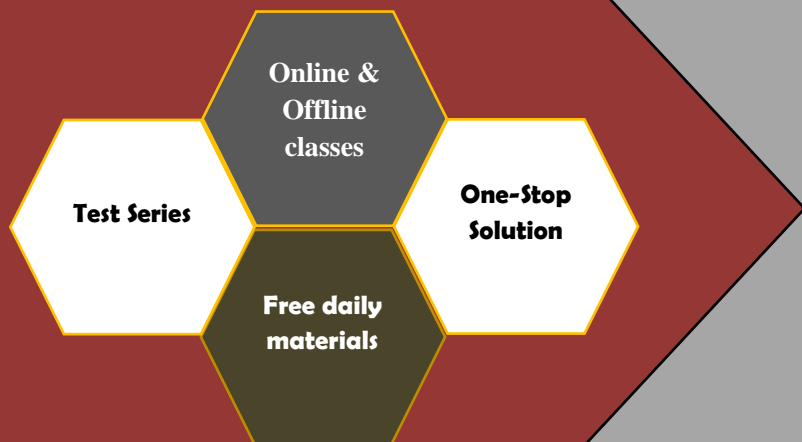
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## Indian SARS-CoV-2 Genomics Consortium

Notes for civil services preparation



UPSC

General Studies

## Indian SARS-CoV-2 Genomics Consortium (INSACOG)

Indian SARS-CoV-2 Genomics Consortium (INSACOG) is a multi-lab agency set up by the Government with a view to sequencing and analysing the genome data with respect to the SARS-CoV-2 virus.

### What is INSACOG?

INSACOG is a national multi-agency consortium of Regional Genome Sequencing Laboratories (RGSLs) set up by the Indian Government in December 2020 to monitor the genomic variations in the covid-19 causing SARS-CoV-2 virus.

- Initially, there were ten laboratories in the consortium but now, the number has been expanded to include 28 laboratories.
- RGSLs are responsible for genome sequencing and identification of variants of concern/variants of interest, potential variants of interest, and other mutations. Read more on coronavirus variants in the link.
- The idea behind the establishment of the INSACOG is to expand the whole genome sequencing of the coronavirus to understand how it spreads and evolves.
- It is set up under the Ministry of Health and Family Welfare, GOI.
- INSACOG is a joint initiative of the Health Ministry, the Department of Biotechnology (DBT), Council of Scientific and Industrial Research (CSIR) and the Indian Council of Medical Research (ICMR).
- Genome sequencing is important because it helps to understand the role of certain mutations in increasing the virus's infectivity, immune escape, the ability of the virus to evade antibodies all of which have ramifications for vaccine efficacy.

### INSACOG Objectives

The stated objectives of INCASOG are:

1. To ascertain the status of Variants of Interest (VoI) and Variants of Concern (VoC) in India.
2. To establish sentinel surveillance and surge surveillance mechanisms for early detection of genomic variants and assist in formulating effective public health response.
3. To determine the presence of genomic variants in samples collected during super-spreader events and in areas reporting increasing trend of cases/deaths, etc.