What is the the Air Quality Index (AQI) ?

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<u>In news</u>— As the problem of air pollution in Delhi-NCR and surrounding areas has made its annual November-December appearance in policy debates and public discussion, the Air Quality Index (AQI) has been mentioned repeatedly.

About the Air Quality Index (AQI)-

- AQI is a number, which is a measure of air quality. The higher the AQI, the worse the air. After staying above 450 for a couple of days.
- The colour-coded AQI index was launched in India in 2014, and it helps the public and the government understand the condition of the air and what subsequent measures are to be taken to combat the situation, based on its severity.
- There are six categories of AQI, namely 'Good' (0-50), 'Satisfactory' (50-100), 'Moderately polluted' (100-200), 'Poor' (200-300), 'Very Poor' (300-400), and 'Severe' (400-500).
- Launched by the central government in 2014 as part of the Swachh Bharat campaign, the AQI was to help simplify the common understanding of pollution.
- An expert group comprising medical professionals, air quality experts, academia, advocacy groups, and others was constituted and a technical study was awarded to IIT Kanpur.
- IIT Kanpur and the Expert Group recommended an AQI scheme.
- According to the Central Pollution Control Board, part of the Ministry of Environment, Forests and Climate Change, the AQI transforms complex air quality data of various pollutants into a single number (index value), nomenclature and colour.

- The pollutants measured include PM 10, PM 2.5, Nitrogen Dioxide, Ozone, Carbon, etc.
- There is a calculation that goes behind the index. There are six or eight pollutants in the affected air and each of these pollutants is given a weight based on a formula. That weight depends on the kind of impact it has on human health.
- The worst of these weights is given as composite air quality, so instead of giving you six different numbers, and six different colours, it throws up one single colour, one single number to denote the overall impact. Monitoring stations across the country assess these levels.
- Among the more harmful pollutants are those of a smaller size, such as particulate matter (PM) 2.5, which is an atmospheric particulate matter of diameter smaller than 2.5 micrometres (or around 3 per cent of the diameter of a human hair.