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Q86

In the cities of our country, which among the following atmospheric gases are normally considered in calculating the value of Air Quality Index? 1. Carbon dioxide 2. Carbon monoxide 3. Nitrogen dioxide 4. Sulfur dioxide 5. Methane Select the correct answer using the code given below (a) 1, 2 and 3 only (b) 2, 3 and 4 only (c) 1, 4 and 5 only (d) 1, 2, 3, 4 and 5 Official key: B.

UPSC Civil Services Prelims 2016 · General Studies · 2 marks · Environment and Ecology

Environment, ecology, climate, biodiversity - Prelims GS Paper I.

Explanation**(a)**

Carbon dioxide is a greenhouse gas but is not among the pollutants used in India's National Air Quality Index. Pairing CO₂ with CO and NO₂ therefore fails. 1, 2 and 3 only is not the key.

(b) Official key

India's AQI (NAQI) is computed from a set that includes carbon monoxide, nitrogen dioxide and sulfur dioxide (along with PM₁₀, PM_{2.5}, ozone, ammonia and lead). Carbon dioxide and methane are not in that AQI basket. Statements 2, 3 and 4 only are correct, so (b) is the official key.

(c)

Carbon dioxide, SO₂ and methane mixes a greenhouse-gas pair with one true AQI gas and omits CO and NO₂. 1, 4 and 5 only is wrong.

(d)

All five would include CO₂ and methane, which AQI does not use. This option is not the key.

Summary

Official key is (b) 2, 3 and 4 only. The Central Pollution Control Board's National AQI (2014) uses **eight pollutants**: PM₁₀, PM_{2.5}, NO₂, SO₂, CO, O₃, NH₃ and Pb. CO₂ and methane matter for climate, not for the daily urban AQI colour scale. Candidates should not dump every carbon-containing gas into AQI. Only CO, NO₂ and SO₂ among the five listed gases count.

Related possible facts

These can be asked in a future Prelims paper.

NAQI launch

2014, CPCB under MoEFCC

Eight pollutants

PM10, PM2.5, NO2, SO2, CO, O3, NH3, Pb

Sub-index

Worst pollutant determines the overall AQI category

Categories

Good, Satisfactory, Moderate, Poor, Very Poor, Severe

GHG vs criteria pollutant

CO2 and CH4 are climate gases, not AQI criteria pollutants

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