AIR QUALITY MONITORING @ 40 FEET HEIGHT – Report Date: 29.9.2022
(BASED ON US-EPA AQI STANDARDS AND THE DAYALBAGH AQI COLOUR CODE)

Permissible Limits (24 Hour Mean): PM$_{10}$ = 150; PM$_{2.5}$ = 35, all units are in µg/m^3 Sampling Duration = 24 hrs (9:00 AM to 9:00 AM)

Today: 28-09-2022 to 29-09-2022 from 9:00 a.m. to 9:00 a.m. **Yesterday:** 27-09-2022 to 28-09-2022 from 9:00 a.m. to 9:00 a.m.

LOCATION	DAYALBAGH (TIME WEIGHTED AVERAGE DATA) AQI PM$_{2.5}$ Today	Yesterday	PM$_{10}$ Today	Yesterday	RH %	WS m/s	WD	T °C Max	Min	SR W/m²	RF mm	SANJAY PLACE (ARITHMETIC MEAN DATA) AQI PM$_{2.5}$ Today	Yesterday	PM$_{10}$ Today	Yesterday	RH %	WS m/s	WD	T °C Max	Min	SR W/m²	RF mm
4 / 97	72	76	49	46	71	1.9	ENE	38.5	27.2	192	0											
3 / 34	91	99	44	44	71	1.9	ENE	38.5	27.2	192	0	132	144	90	88	61	0.9	E	37.9	27.6	210	0
Science Faculty	97	99	47	39	71	1.9	ENE	38.5	27.2	192	0											

Views of AQI Research Group: Air Quality Index values w.r.t. PM$_{2.5}$ have marginally improved at Dayalbagh sites due to change in Wind Direction, although the meteorological conditions (low wind speed, moderate Relative Humidity) are almost similar to yesterday. The Air Quality Index w.r.t. PM$_{2.5}$ remains in *Moderate* category at Dayalbagh sites and in the *Unhealthy for Sensitive Groups* category at Sanjay Place while, w.r.t. PM$_{10}$ it is in *Good* category at all the Dayalbagh sites and remains in *Moderate* category at Sanjay Place.

Good 0 - 50	Moderate 51 - 100	Unhealthy for Sensitive Groups 101 - 150	Unhealthy for All 151 - 200	Very Unhealthy for All 201 - 300	Hazardous for All 301 - 400	Hazardous for All 401 - 500

NOTE: 1 A continuing study conducted as part of **Dayalbagh Sigma Six Qualities and Values Model** implementation.

2 DEI is using United States Environmental Protection Agency (USEPA) methodology and online calculators to calculate AQI. For fair comparison with UPPCB Sanjay Place Weather Station readings, their PM$_{2.5}$ concentration readings are fed in USEPA online calculator for AQI calculation.

3 Formula for AQI calculation for a Pollutant –

$$I = \frac{I_{high} - I_{low}}{C_{high} - C_{low}} * (C - C_{low}) + I_{low}$$

where: I = Air Quality Index; C = Pollutant Concentration (PM$_{2.5}$); C$_{low}$ = Concentration Breakpoint ≤C; C$_{high}$ = Concentration Breakpoint ≥C; I$_{low}$ = Index Break point corresponding to C$_{low}$; I$_{high}$ = Index Breakpoint corresponding to C$_{high}$; *Multiplication Sign

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