

AIR QUALITY MONITORING @ 40 FEET HEIGHT – Report Date: 28.9.2022

(BASED ON US-EPA AQI STANDARDS AND THE DAYALBAGH AQI COLOUR CODE)

Permissible Limits (24 Hour Mean): PM₁₀ = 150; PM_{2.5} = 35, all units are in µg/m³ Sampling Duration = 24 hrs (9:00 AM to 9:00 AM)

Today : 27-09-2022 to 28-09-2022 from 9:00 a.m. to 9:00 a.m. **Yesterday:** 26-09-2022 to 27-09-2022 from 9:00 a.m. to 9:00 a.m.

L O C A T I O N	DAYALBAGH (TIME WEIGHTED AVERAGE DATA)											SANJAY PLACE (ARITHMETIC MEAN DATA)										
	AQI				Meteorological Parameters							AQI				Meteorological Parameters						
	PM _{2.5}		PM ₁₀		RH %	WS m/s	W D	T °C		SR W/ m²	RF mm	PM _{2.5}		PM ₁₀		RH %	WS m/s	W D	T °C		SR W/ m²	RF m m
								Max	Min										Max	Min		
	Today	Yesterday	Today	Yesterday								Today	Yesterday	Today	Yesterday							
4 / 97	76	80	46	39	72	1.9	SE	36.5	25.3	199	0	144*	91	88	75	65	0.9	N	36.2	27.5	209	0
3 / 34	99	93	44	38	72	1.9	SE	36.5	25.3	199	0											
Science Faculty	99	99	39	43	72	1.9	SE	36.5	25.3	199	0											

Views of AQI Research Group: Air Quality Index values are nearly similar to yesterday at Dayalbagh sites probably due to stable meteorological conditions (low wind speed, moderate Relative Humidity) and change in Wind Direction.

*PM_{2.5} values for Sanjay Place were available after 3:00 pm since yesterday.

The Air Quality Index w.r.t. PM₁₀ is in *Good* category at all the Dayalbagh sites while it 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
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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