

AIR QUALITY MONITORING @ 40 FEET HEIGHT – Report Date: 1.10.2021

(BASED ON US-EPA AQI STANDARDS)

Permissible Limits (24h Mean) : PM₁₀ = 150; PM_{2.5} = 35 (US EPA), all units are in µg/m³

Site Location	Sampling Time (24 hrs)	DAYALBAGH (TIME WEIGHTED AVERAGE DATA)										SANJAY PLACE (ARITHMETIC MEAN DATA)									
		AQI				Meteorological Parameters @ Dayalbagh						AQI				Meteorological Parameters @ Sanjay Place					
		PM _{2.5}		PM ₁₀		RH %	WS m/s	WD	T °C	SR W/m ²	RF mm	PM _{2.5}		PM ₁₀		RH %	WS m/s	WD	T °C	SR W/m ²	RF mm
		Today Oct 1-Sep 309	Yesterday Sep 30-Sep 29	Today Oct 1-Sep 309	Yesterday Sep 30-Sep 29							Today Oct 1-Sep 309	Yesterday Sep 30-Sep 29	Today Oct 1-Sep 309	Yesterday Sep 30-Sep 29						
4 / 97	12:00 noon – 12:00 noon	42 G	61 M	21 G	30 G	71	2.3	ESE	31	134	0	78 M	80 M	44 G	44 G	65	1.3	SW	NA	185	0
3 / 34	12:00 noon – 12:00 noon	61 M	72 M	20 G	26 G	71	2.3	ESE	31	108	0										
Science Faculty	12:00 noon – 12:00 noon	63 M	72 M	23 G	27 G	73	1.9	S	31	134	0										

Good- G

Moderate- M

Unhealthy for Sensitive Groups -US

Unhealthy- UH

Very Unhealthy - VUH

Hazardous - H

NOTE: 1 A continuous 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}