

AIR QUALITY MONITORING @ 40 FEET HEIGHT – Report Date: 30.09.2021
(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								PM _{2.5}		PM ₁₀							
		Today Sep 30- Sep 29	Yesterday Sep 29- Sep 28	Today Sep 30- Sep 29	Yesterday Sep 29- Sep 28	RH %	WS m/s	WD	T °C	SR W/ m ²	RF mm	Today Sep 30- Sep 29	Yesterday Sep 29- Sep 28	Today Sep 30- Sep 29	Yesterday Sep 29- Sep 28	RH %	WS m/s	WD	T °C	SR W/m ²	RF mm
4 / 97	12:00 noon – 12:00 noon	61 M	55 M	30 G	25 G	74	3.1	E	31	127	0	80 M	72 M	44 G	35 G	69	2.2	WSW	NA	177	0
3 / 34	12:00 noon – 12:00 noon	72 M	63 M	26 G	21 G	75	3.1	E	31	116	0										
Science Faculty	12:00 noon – 12:00 noon	72 M	61 M	27 G	23 G	77	3.4	ESE	31	131	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}

AIR QUALITY MONITORING @ 40 FEET HEIGHT – Report Date: 30.09.2021

(Based on WHO 2021 Guidelines)

Permissible Limits:(WHO, 2021) (24h Mean) : PM₁₀ = 45; PM_{2.5} = 15, all units are in µg/m³

Sampling Site and Height	Duration of Sampling	DAYALBAGH@ 40 feet				SANJAY PLACE @ 40 feet			
		PM ₁₀ [µg/m ³]		PM _{2.5} [µg/m ³]		PM ₁₀ [µg/m ³]		PM _{2.5} [µg/m ³] @ 40 feet	
		Today Sep 30- Sep 29	Yesterday Sep 29- Sep 28	Today Sep 30- Sep 29	Yesterday Sep 29- Sep 28	Today Sep 30- Sep 29	Yesterday Sep 29- Sep 28	Today Sep 30- Sep 29	Yesterday Sep 29- Sep 28
4/97	12:00-12:00 noon	✓+32↓	27	✓+17	14	+48↓	38	+26↓	22
3/34	12:00-12:00 noon	✓+28↓	23	✓+22↓	18				
Science Faculty	12:00-12:00 noon	✓+29↓	22↑	✓+22↓	17				

Concentration Within WHO, 2021 Limits

Concentration Beyond WHO, 2021 Limits