

AIR QUALITY MONITORING @ 40 FEET HEIGHT – Report Date: 27.09.2021

(BASED ON US-EPA AQI STANDARDS)

Permissible Limits (24h Mean) : PM₁₀ = 100; PM_{2.5} = 60 (NAAQS, India), 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 Sep 27- Sep 26	Yesterday Sep 26- Sep 25	Today Sep 27- Sep 26	Yesterday Sep 26- Sep 25							Today Sep 27- Sep 26	Yesterday Sep 26- Sep 25	Today Sep 27- Sep 26	Yesterday Sep 26- Sep 25										
4 / 97	12:00 noon – 12:00 noon	78 S	87 S	41 G	45 G	83	2.9	E	29	120	01	80 S	76 S	38 G	45 G	76	1.1	SW	NA	170	2.4				
3 / 34	12:00 noon – 12:00 noon	78 S	80 S	34 G	37 G	84	3.0	E	29	110	01														
Science Faculty	12:00 noon – 12:00 noon	78 S	80 S	34 G	40 G	84	2.4	SW	29	118	01														

Good- G

Satisfactory - S

Moderate- M

Poor- P

Very Poor- VP

Severe - Sv

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: 27.09.2021

(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 27- Sep 26	Yesterday Sep 26- Sep 25	Today Sep 27- Sep 26	Yesterday Sep 26- Sep 25	Today Sep 27- Sep 26	Yesterday Sep 26- Sep 25	Today Sep 27- Sep 26	Yesterday Sep 26- Sep 25
4/97	12:00-12:00 noon	✓+44↑	49	✓+25	29	+41↑	49	+26	24
3/34	12:00-12:00 noon	✓+37↑	40	✓+25	26			+26	24
Science Faculty	12:00-12:00 noon	✓+37↑	43	✓+25	26			+26	24

Concentration Within WHO, 2021 Limits

Concentration Beyond WHO, 2021 Limits