

AIR QUALITY MONITORING @ 40 FEET HEIGHT – Report Date: 4.10.2021

(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								PM _{2.5}		PM ₁₀							
		Today Oct4-Oct 3	Yesterday Oct 3-Oct 2	Today Oct4-Oct 3	Yesterday Oct 3-Oct 2	RH %	WS m/s	WD	T °C	SR W/m ²	RF mm	Today Oct4-Oct 3	Yesterday Oct 3-Oct 2	Today Oct4-Oct 3	Yesterday Oct 3-Oct 2	RH %	WS m/s	WD	T °C	SR W/m ²	RF mm
4 / 97	12:00 noon – 12:00 noon	42 G	50 G	26 G	23 G	67	2.9	wsW	33	130	0	55 M	68 M	31 G	27 G	62	1.9	ENE	NA	175	0
3 / 34	12:00 noon – 12:00 noon	59 M	68 M	20 G	23 G	69	2.8	wsW	32	118	0										
Science Faculty	12:00 noon – 12:00 noon	57 M	66 M	20 G	24 G	71	1.9	W	32	118	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: 4.10.2021

(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 _{2.5} [µg/m ³]		PM ₁₀ [µg/m ³]		PM _{2.5} [µg/m ³]		PM ₁₀ [µg/m ³]	
		Today Oct 4 – Oct 3	Yesterday Oct 3 – Oct 2	Today Oct 4 – Oct 3	Yesterday Oct 3 – Oct 2	Today Oct 4 – Oct 3	Yesterday Oct 3 – Oct 2	Today Oct 4 – Oct 3	Yesterday Oct 3 – Oct 2
4/97	12:00-12:00 noon	✓+10	12	✓+28	25				
3/34	12:00-12:00 noon	✓+16↑	20	✓+22	25	+14↑	20	+34↓	29
Science Faculty	12:00-12:00 noon	✓+15↑	19	✓+22↑	26				

Remarks of GH Today:

Received – Monday, 04 October 2021, 1:09 PM

Monday, 04 October 2021, 3:58 PM

Concentration Within WHO, 2021 Limits

Concentration Beyond WHO, 2021 Limits