

Radhasoami Dayal Ki Daya Radhasoami Sahai

AIR QUALITY MONITORING @ 40 FEET HEIGHT – Report Date: 25.09.2021

Permissible Limits (24h Mean) : PM₁₀ = 100; PM_{2.5} = 60 (NAAQS, India), all units are in µg/m³

PM₁₀ = 45; PM_{2.5} = 15 (WHO, 2021), 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 25- Sep 24	Yesterday Sep 24- Sep 23	Today Sep 25- Sep 24	Yesterday Sep 24- Sep 23	RH %	WS m/s	WD	T °C	SR W/ m ²	RF mm	Today Sep 25- Sep 24	Yesterday Sep 24- Sep 23	Today Sep 25- Sep 24	Yesterday Sep 24- Sep 23	RH %	WS m/s	WD	T °C	SR W/m ²	RF mm
4 / 97	12:00 noon – 12:00 noon	95 S	59 S	53 S	30 G	82	3.1	NE	29	109	0	91 S	80 S	56 S	52 S	74	2.2	SE	NA	155	0
3 / 34	12:00 noon – 12:00 noon	84 S	66 S	42 G	24 G	83	3.1	NE	29	103	0										
Science Faculty	12:00 noon – 12:00 noon	NA	NA	NA	NA	NA	NA	NA	NA	NA	0										

Sampling Site and Height	Duration of Sampling	DAYALBAGH@ 40 feet				SANTAY PLACE @ 40 feet			
		PM ₁₀ [µg/m³]		PM _{2.5} [µg/m³]		PM ₁₀ [µg/m³]		PM _{2.5} [µg/m³] @ 40 feet	
		Today Sep 25- Sep 24	Yesterday Sep 24- Sep 23	Today Sep 25- Sep 24	Yesterday Sep 24- Sep 23	Today Sep 25- Sep 24	Yesterday Sep 24- Sep 23	Today Sep 25- Sep 24	Yesterday Sep 24- Sep 23
4/97	12:00-12:00 noon	✓+59↓	32	✓+33↓	16	+65↓	58	+31↓	26
3/34	12:00-12:00 noon	✓+45↓	26	✓+28↓	19				
Science Faculty	12:00-12:00 noon	NA	NA	NA	NA				

Concentration Within WHO, 2021 Limits

Concentration Beyond WHO, 2021 Limits

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 -

where, I = Air Quality Index, C=Pollutant Concentration (PM2.5), 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}

$$I = \frac{I_{high} - I_{low}}{C_{high} - C_{low}} * (C - C_{low}) + I_{low}$$