Radhasoami Dayal Ki Daya Radhasoami Sahai

` AIR QUALITY MONITORING @ 40 FEET HEIGHT – Report Date: 24.12.2021
(BASED ON US-EPA AQI STANDARDS AND THE DAYALBAGH AQI COLOUR CODE)

Permissible Limits (24 Hour Mean) : PM_{10} = 150; $PM_{2.5}$ = 35, all units are in $\mu g/m^3$

Site Location	Sampling Time (24 hrs)	DAYALBAGH (TIME WEIGHTED AVERAGE DATA)										SANJAY PLACE (ARITHMETIC MEAN DATA)										
		AQI				Meteorological Parameters @ Dayalbagh Today / Yesterday						AQI				Meteorological Parameters @ Sanjay Place Today / Yesterday					
		$PM_{2.5}$		PM_{10}		RH %	WS m/s	WD	T °C	SR W/m²	RF mm	$PM_{2.5}$		PM_{10}		RH %	WS m/s	WD	T °C	SR W/m²	RF mm
		Today Dec 24 – Dec 23	Yesterday Dec 23 – Dec 22	Today Dec 24 – Dec 23	Yesterday Dec 23 – Dec 22							Today Dec 24 – Dec 23	Yesterday Dec 23 – Dec 22	Today Dec 24 – Dec 23	Yesterday Dec 23 – Dec 22						
4 / 97	09:00 am – 09:00am	160 UH	160 UH	105 US	114 US	68 ---- 65	1.6 ---- 0.9	ESE ---- SSW	16 ---- 15	41 ---- 50	0 ---- 0										
3 / 34	09:00 am – 09:00am	163 UH	198 UH	106 US	106 US	69 ---- 68	1.6 ---- 0.9	ESE ---- SSW	16 ---- 15	45 ---- 59	0 ---- 0	185 UH	195 UH	166 UH	162 UH	62 ---- 50	1.1 ---- 0.7	W ---- W	13 ---- 13	83 ---- 105	0 ---- 0
Science Faculty	09:00 am – 09:00 am	163 UH	222 VUH	103 US	99 M	72 ---- 71	1.7 ---- 2.0	SW ---- NNE	16 ---- 14	37 ---- 46	0 ---- 0										

Views of AQI Research Group: Dayalbagh AQI at all three locations is better than Sanjay Place despite higher RH at Dayalbagh. There is improvement in Dayalbagh readings over yesterday on account of change in wind direction and more dispersal of ambient pollution because of higher wind speed.

Remarks of Revered Chairman-ACE:

day, 24 December 2021, 12:50 PM

ember 2021,

Good -G	Moderate- M	Sensitive Groups- US	Unhealthy for All-UH	Very Unhealthy for All-VUH	Hazardous for All- H	Hazardous for All-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 (PM2.5), Clow=Concentration Breakpoint ≤C, Chigh=Concentration Breakpoint ≥C, Ilow=Index Break point corresponding to Clow, Ihigh=Index Breakpoint corresponding to Chigh