

Radhasoami Dayal Ki Daya Radhasoami Sahai

AIR QUALITY MONITORING @ 40 FEET HEIGHT – Report Date: 13.12.2021 (BASED ON US-EPA AQI STANDARDS AND THE DAYALBAGH AQI COLOUR CODE)

Permissible Limits (24 Hour Mean) : PM₁₀ = 150; PM_{2.5} = 35, 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		Today ----- Yesterday						PM _{2.5}		PM ₁₀		Today ----- Yesterday					
		Today Dec 13 – Dec 12	Yesterday Dec 12 – Dec 11	Today Dec 13 – Dec 12	Yesterday Dec 12 – Dec 11	RH %	WS m/s	WD	T °C	SR W/m ²	RF mm	Today Dec 13 – Dec 12	Yesterday Dec 12 – Dec 11	Today Dec 13 – Dec 12	Yesterday Dec 12 – Dec 11	RH %	WS m/s	WD	T °C	SR W/m ²	RF mm
4 / 97	09:00 am – 09:00am	151 UH	158 UH	104 US	110 US	66 --- 63	0.9 --- 1.1	ESE --- SW	16 --- 17	50 --- 53	0 --- 0	170 UH	158 UH	107 US	89 M	62 --- 56	0.6 --- 0.9	SSE --- E	13 --- 14	105 --- 115	0 --- 0
3 / 34	09:00 am – 09:00am	154 UH	153 UH	119 US	108 US	70 --- 67	0.9 --- 1.1	ESE --- SSW	16 --- 16	56 --- 55	0 --- 0										
Science Faculty	09:00 am – 09:00 am	156 UH	156 UH	118 US	115 US	73 --- 70	2.4 --- 2.7	NE --- NE	15 --- 16	43 --- 48	0 --- 0										

Views of AQI Group: The Dayalbagh AQI for PM_{2.5} is better than Sanjay Place with marginal difference in PM_{10.0}. As Remarked by Most Revered Chairman-ACE yesterday that Solar Radiation is the fundamental meteorological parameter affecting all other met parameters, therefore, Dept. of Chemistry, FoS, DEI (Deemed to be University) has undertaken to investigate the cause for significant difference between Dayalbagh and Sanjay Place readings of solar radiation.

Remarks of Revered Chairman-ACE:

Monday, 13 December 2021, 11:29 AM

December 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 (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}