

AIR QUALITY MONITORING @ 40 FEET HEIGHT – Report Date: 16.08.2021

Permissible Limits: PM₁₀ = 100; PM_{2.5} = 60, all units are in µg/m³

Site Location	Sampling Time (24 hrs)	DAYALBAGH (TIME WEIGHTED AVERAGE DATA)								SANJAY PLACE (ARITHMETIC MEAN DATA)							
		AQI On The Basis of PM _{2.5} Concentration		Meteorological Parameters @ Dayalbagh						AQI On The Basis of PM _{2.5} Concentration		Meteorological Parameters @ Sanjay Place					
		Today Aug 16-Aug 15	Yesterday Aug 15-Aug 14	RH %	WS m/s	WD	T °C	SR W/m ²	RF mm	Today Aug 16-Aug 15	Yesterday Aug 15-Aug 14	RH %	WS m/s	WD	T °C	SR W/m ²	RF mm
4 / 97	12:00 noon – 12:00 noon	74 Satisfactory	74 Satisfactory	60	2.6	W	35	172	0	89 Satisfactory	127 Moderate	55	2.9	SE	30	167	0
3 / 34	12:00 noon – 12:00 noon	59 Satisfactory	61 Satisfactory	62	2.6	W	34	146	0								
Science Faculty	12:00 noon – 12:00 noon	59 Satisfactory	59 Satisfactory	62	3.3	WSW	34	161	0								

22 October 2021

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 (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}

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