

AIR QUALITY MONITORING @ 40 FEET HEIGHT – Report Date: 18.09.2021

Permissible Limits: PM<sub>10</sub> = 100; PM<sub>2.5</sub> = 60, all units are in µg/m<sup>3</sup>

Site Location	Sampling Time (24 hrs)	DAYALBAGH (TIME WEIGHTED AVERAGE DATA)								SANJAY PLACE (ARITHMETIC MEAN DATA)							
		AQI On The Basis of PM <sub>2.5</sub> Concentration		Meteorological Parameters @ Dayalbagh						AQI On The Basis of PM <sub>2.5</sub> Concentration		Meteorological Parameters @ Sanjay Place					
		Today Sep 18- Sep 17	Yesterday Sep 17- Sep 16	RH %	WS m/s	WD	T °C	SR W/ m <sup>2</sup>	RF mm	Today Sep 18- Sep 17	Yesterday Sep 17- Sep 16	RH %	WS m/s	WD	T °C	SR W/m <sup>2</sup>	RF mm
4 / 97	12:00 noon – 12:00 noon	57 Satisfactory	33 Good	89	4.6	NE	26	57	6	57 Satisfactory	13 Good	82	2.6	SE	NA	79	13
3 / 34	12:00 noon – 12:00 noon	53 Satisfactory	17 Good	90	4.6	NE	26	54	6								
Science Faculty	12:00 noon – 12:00 noon	NA	17 Good	NA	NA	NA	NA	NA	6								

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<sub>2.5</sub> 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<sub>2.5</sub>), C<sub>low</sub>=Concentration Breakpoint ≤C, C<sub>high</sub>=Concentration Breakpoint ≥C, I<sub>low</sub>=Index Break point corresponding to C<sub>low</sub>, I<sub>high</sub>=Index Breakpoint corresponding to C<sub>high</sub>

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