## Radhasoami Dayal Ki Daya Radhasoami Sahai

## AIR QUALITY MONITORING @ 40 FEET HEIGHT – Report Date: 31.07.2021

Permissible Limits:  $PM_{10} = 100$ ;  $PM_{2.5} = 60$ , all units are in  $\mu g/m^3$ 

| Site<br>Location   | Sampling<br>Time<br>(24 hrs)     | DAYALBAGH<br>(TIME WEIGHTED AVERAGE DATA)           |                    |  |           |     |         |            |          | SANJAY PLACE<br>(ARITHMETIC MEAN DATA)              |                    |   |           |     |         |            |          |
|--------------------|----------------------------------|---|--------------------|--|-----------|-----|---------|------------|----------|---|--------------------|---|-----------|-----|---------|------------|----------|
|                    |                                  | AQI On The Basis of PM <sub>2.5</sub> Concentration |                    | Meteorological Parameters @<br>Dayalbagh |           |     |         |            |          | AQI On The Basis of PM <sub>2.5</sub> Concentration |                    | Meteorological Parameters @<br>Sanjay Place |           |     |         |            |          |
|                    |                                  | Today<br>31-30                                      | Yesterday<br>30-29 | RH<br>%                                  | WS<br>m/s | WD  | T<br>°C | SR<br>W/m² | RF<br>mm | Today<br>31-30                                      | Yesterday<br>30-29 | RH<br>%                                     | WS<br>m/s | WD  | T<br>°C | SR<br>W/m² | RF<br>mm |
| 4 / 97             | 12:00 noon<br>-<br>12:00<br>noon | 70<br>Satisfactory                                  | 63<br>Satisfactory | 89                                       | 2.5       | SE  | 27      | 85         | 59       |   |                    |   |           |     |         |            |          |
| 3 / 34             | 12:00 noon<br>-<br>12:00<br>noon | 57<br>Satisfactory                                  | 53<br>Satisfactory | 90                                       | 2.5       | SE  | 27      | 77         | 59       | 33<br>Good  | 53<br>Satisfactory | 91  | 2.2       | SSW | 30      | 62         | 90.2     |
| Science<br>Faculty | 12:00 noon<br>-<br>12:00<br>noon | 57<br>Satisfactory                                  | 53<br>Satisfactory | 91                                       | 3.8       | WSW | 27      | 80         | 59       |   |                    |   |           |     |         |            |          |

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>25</sub> concentration readings are fed in USEPA online calculator for AQI calculation.

3 Formula for AQI calculation for a Pollutant -

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

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