### List of Figures

<table>
<thead>
<tr>
<th>Table No.</th>
<th>Name of Figure</th>
<th>Page No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Figure 3.01:</td>
<td>Map of Nashik City: Showing sample collection sites.</td>
<td>069</td>
</tr>
<tr>
<td>Figure 3.02:</td>
<td>High Volume Sampler APM 415</td>
<td>070</td>
</tr>
<tr>
<td>Figure 3.03:</td>
<td>Gaseous attachment APM 411</td>
<td>071</td>
</tr>
<tr>
<td>Figure 3.04:</td>
<td>System Configuration of gaseous extension with the HVS</td>
<td>072</td>
</tr>
<tr>
<td>Figure 3.05:</td>
<td>Helios UV-Visible Spectrophotometer single-beam spectrophotometer</td>
<td>072</td>
</tr>
<tr>
<td>Figure 3.06:</td>
<td>Weighing Balance: LIBOR AEG 2220, Shimadzu</td>
<td>073</td>
</tr>
<tr>
<td>Figure 3.07:</td>
<td>SO2 analysis: Sampling train diagram</td>
<td>075</td>
</tr>
<tr>
<td>Figure 3.08:</td>
<td>SO2 analysis flow chart flowchart</td>
<td>080</td>
</tr>
<tr>
<td>Figure 3.09:</td>
<td>NOx analysis principle flowchart</td>
<td>087</td>
</tr>
<tr>
<td>Figure 3.10:</td>
<td>NOx sampling train diagram</td>
<td>089</td>
</tr>
<tr>
<td>Figure 3.11:</td>
<td>High volume sampler construction diagram</td>
<td>094</td>
</tr>
<tr>
<td>Figure 3.12:</td>
<td>Flow chart of PM10 Sampling</td>
<td>101</td>
</tr>
<tr>
<td>Figure 4.01:</td>
<td>Concentration of criteria pollutants on air quality monitoring sites in January 2010</td>
<td>109</td>
</tr>
<tr>
<td>Figure 4.01:</td>
<td>Concentration of criteria pollutants on air quality monitoring sites in February 2010</td>
<td>111</td>
</tr>
<tr>
<td>Figure 4.03:</td>
<td>Concentration of criteria pollutants on air quality monitoring sites in March 2010</td>
<td>114</td>
</tr>
<tr>
<td>Figure 4.04:</td>
<td>Concentration of criteria pollutants on air quality monitoring sites in April 2010</td>
<td>117</td>
</tr>
<tr>
<td>Figure 4.05:</td>
<td>Concentration of criteria pollutants on air quality monitoring sites in May 2010</td>
<td>119</td>
</tr>
<tr>
<td>Figure 4.06:</td>
<td>Concentration of criteria pollutants on air quality monitoring sites in June 2010</td>
<td>122</td>
</tr>
<tr>
<td>Figure 4.07:</td>
<td>Concentration of criteria pollutants on air quality monitoring sites in July 2010</td>
<td>124</td>
</tr>
</tbody>
</table>
Figure 4.08: Concentration of criteria pollutants on air quality monitoring sites in August 2010

Figure 4.09: Concentration of criteria pollutants on air quality monitoring sites in September 2010

Figure 4.10: Concentration of criteria pollutants on air quality monitoring sites in October 2010

Figure 4.11: Concentration of criteria pollutants on air quality monitoring sites in November 2010

Figure 4.12: Concentration of criteria pollutants on air quality monitoring sites in December 2010

Figure 4.13: Concentration of criteria pollutant PM10 on S1-1-VIP air quality monitoring site against NAAQS in the year 2010

Figure 4.14: Concentration of criteria pollutant PM10 on S2-R-RTO air quality monitoring site against NAAQS in the year 2010

Figure 4.15: Concentration of criteria pollutant PM10 on S3-C-NMC air quality monitoring site against NAAQS in the year 2010

Figure 4.16: Concentrations of occurrence of of criteria pollutant PM10 against NAAQS on S1-1-VIP, S2-R-RTO and S3-C-NMC air quality monitoring site in the year 2010

Figure 4.17: Annual concentrations of criteria pollutant PM10 against NAAQS on S1-1-VIP, S2-R-RTO and S3-C-NMC air quality monitoring site in the year 2010

Figure 4.18: Monthly concentrations of criteria pollutant SO$_2$ against NAAQS on S1-1-VIP, S2-R-RTO and S3-C-NMC air quality monitoring site in the year 2010

Figure 4.19: Annual concentrations of criteria pollutant SO$_2$ against NAAQS on S1-1-VIP, S2-R-RTO and S3-C-NMC air quality monitoring site in the year 2010

Figure 4.20: Monthly concentrations of criteria pollutant NO$_x$ against NAAQS on S1-1-VIP, S2-R-RTO and S3-C-NMC air quality monitoring site in the year 2010

Figure 4.21: Annual concentrations of criteria pollutant NO$_x$ against NAAQS on S1-1-VIP, S2-R-RTO and S3-C-NMC air quality monitoring site in the year 2010

Figure 4.22: Annual Average concentration of criteria pollutants against NAAQS in the year 2010
Figure 4.23: Summery of Ambient air quality monitoring during the period of January 2010 to December 2010. 147

Figure 4.24: Concentration of criteria pollutants on air quality monitoring sites in January 2011 151

Figure 4.25: Concentration of criteria pollutants on air quality monitoring sites in February 2011 153

Figure 4.26: Concentration of criteria pollutants on air quality monitoring sites in March 2011 156

Figure 4.27: Concentration of criteria pollutants on air quality monitoring sites in April 2011 159

Figure 4.28: Concentration of criteria pollutants on air quality monitoring sites in May 2011 162

Figure 4.29: Concentration of criteria pollutants on air quality monitoring sites in June 2011 164

Figure 4.30: Concentration of criteria pollutants on air quality monitoring sites in July 2011 167

Figure 4.31: Concentration of criteria pollutants on air quality monitoring sites in August 2011 169

Figure 4.32: Concentration of criteria pollutants on air quality monitoring sites in September 2011 172

Figure 4.33: Concentration of criteria pollutants on air quality monitoring sites in October 2011 174

Figure 4.34: Concentration of criteria pollutants on air quality monitoring sites in November 2011 177

Figure 4.35: Concentration of criteria pollutants on air quality monitoring sites in December 2011 180

Figure 4.36: Concentration of criteria pollutant PM10 on S1-I-VIP air quality monitoring site against NAAQS in the year 2011 181

Figure 4.37: Concentration of criteria pollutant PM10 on S2-R-RTO air quality monitoring site against NAAQS in the year 2011 180

Figure 4.38: Concentration of criteria pollutant PM10 on S3-C-NMC air quality monitoring site against NAAQS in the year 2011 182
Figure 4.39: Concentrations of occurrence of criteria pollutant PM10 against NAAQS on S1-1-VIP, S2-R-RTO and S3-C-NMC air quality monitoring site in the year 2011

Figure 4.40: Annual concentrations of criteria pollutant PM10 against NAAQS on S1-1-VIP, S2-R-RTO and S3-C-NMC air quality monitoring site in the year 2011

Figure 4.41: Monthly concentrations of criteria pollutant SO2 against NAAQS on S1-1-VIP, S2-R-RTO and S3-C-NMC air quality monitoring site in the year 2011

Figure 4.42: Annual concentrations of criteria pollutant SO2 against NAAQS on S1-1-VIP, S2-R-RTO and S3-C-NMC air quality monitoring site in the year 2011

Figure 4.43: Monthly concentrations of criteria pollutant NOx against NAAQS on S1-1-VIP, S2-R-RTO and S3-C-NMC air quality monitoring site in the year 2011

Figure 4.44: Annual concentrations of criteria pollutant NOx against NAAQS on S1-1-VIP, S2-R-RTO and S3-C-NMC air quality monitoring site in the year 2011

Figure 4.45: Annual Average concentrations of criteria pollutants against NAAQS in the year 2011

Figure 4.46: Summery of Ambient air quality monitoring during the period of January 2011 to December 2011

Figure 4.47: Concentration of criteria pollutants on air quality monitoring sites in January 2012

Figure 4.48: Concentration of criteria pollutants on air quality monitoring sites in February 2012

Figure 4.49: Concentration of criteria pollutants on air quality monitoring sites in March 2012

Figure 4.50: Concentration of criteria pollutants on air quality monitoring sites in April 2012

Figure 4.51: Concentration of criteria pollutants on air quality monitoring sites in May 2012

Figure 4.52: Concentration of criteria pollutants on air quality monitoring sites in June 2012

Figure 4.53: Concentration of criteria pollutants on air quality monitoring sites in July 2012
Figure 4.54: Concentration of criteria pollutants on air quality monitoring sites in August 2012

Figure 4.55: Concentration of criteria pollutants on air quality monitoring sites in September 2012

Figure 4.56: Concentration of criteria pollutants on air quality monitoring sites in October 2012

Figure 4.57: Concentration of criteria pollutants on air quality monitoring sites in November 2012

Figure 4.58: Concentration of criteria pollutants on air quality monitoring sites in December 2012

Figure 4.59: Concentration of criteria pollutant PM10 on S1-l-VIP air quality monitoring site against NAAQS in the year 2012

Figure 4.60: Concentration of criteria pollutant PM10 on S2-R-RTO air quality monitoring site against NAAQS in the year 2012

Figure 4.61: Concentration of criteria pollutant PM10 on S3-C-NMC air quality monitoring site against NAAQS in the year 2012

Figure 4.62: Concentrations of occurrence of criteria pollutant PM10 against NAAQS on S1-l-VIP, S2-R-RTO and S3-C-NMC air quality monitoring site in the year 2012

Figure 4.63: Annual concentrations of criteria pollutant PM10 against NAAQS on S1-l-VIP, S2-R-RTO and S3-C-NMC air quality monitoring site in the year 2012

Figure 4.64: Monthly concentrations of criteria pollutant SO2 against NAAQS on S1-l-VIP, S2-R-RTO and S3-C-NMC air quality monitoring site in the year 2012

Figure 4.65: Annual concentrations of criteria pollutant SO2 against NAAQS on S1-l-VIP, S2-R-RTO and S3-C-NMC air quality monitoring site in the year 2012

Figure 4.66: Monthly concentrations of criteria pollutant NOx against NAAQS on S1-l-VIP, S2-R-RTO and S3-C-NMC air quality monitoring site in the year 2012.

Figure 4.67: Annual concentrations of criteria pollutant NOx against NAAQS on S1-l-VIP, S2-R-RTO and S3-C-NMC air quality monitoring site in the year 2012
Figure 4.68: Annual Average concentrations of criteria pollutants against NAAQS in the year 2012

Figure 4.69: Summery of Ambient air quality monitoring during the period of January 2012 to December 2012.

Figure 4.70: Comparison of study samples with NAAQS

Figure 4.71: Mean Plot shows year wise variation in all three chemicals for the S1-I-VIP site

Figure 4.72: Mean Plot shows year wise variation in all three chemicals for the S2-R-RTO site

Figure 4.73: Mean Plot shows year wise variation in all three chemicals for the S3-C-NMC site

Figure 4.74: Year wise variation in all three chemicals as compared to vehicles

Figure 4.75: Scatter diagram shows significant Positive correlation between SO\textsubscript{2} & NO\textsubscript{x} at the site S1-I-VIP for all three years

Figure 4.76. Scatter diagram shows significant Positive correlation between SO\textsubscript{2} & NO\textsubscript{x} at the site S2-R-RTO for all three years (2010-2012)

Figure 4.77: Scatter diagram shows significant Positive correlation between SO\textsubscript{2} & NO\textsubscript{x} at the site S3-C-NMC for all three years (2010-2012)