**Discuss the following:** 

- 1. Thermal inversion?
- 2. Formation and breakdown of ozone shield (only by equation).
- 3. Effects of adrenocorticotropic hormone (ACTH) on human health.
- 4. Metals fume fever.
- 5. What are your suggestions for reduced indoor bioaerosols?
- 6. Air conditioning and nasal defense mechanisms.
- 7. Asthma.
- 8. What is the impact of future global warming?
- 9. How you can reduce light pollution.
- **10.**Role of hydrocarbon radicals (R) in ozone accumulation.
- 11. What are your suggestions to reduced indoor pollution?
- 12.Formation of peroxyacetyl nitrate (PAN).
- 13. Physical, chemical and biological effects of air pollutants on the human nose.
- 14.Susceptibility of an aquatic ecosystem to acid rain.
- 15.Disruption of the ecosystem by light pollution.
- 16.Major classes of air pollution-related diseases.
- 17. Cancer is an air pollutant disease.
- 18. Formation of peroxyacetyl nitrate (PAN).
- **19. Light pollution of ecosystems disruption.**
- 20. How you can combat indoor air pollution?
- 21. El-Nino.
- 22. Dust pollution and their sources.

23. What is the impact of acid rain on environment? How you can combat their effects?

24. Most important steps for combat global warming.

Fill the following blanks with correct word:

- 1. Major gases that caused asphyxiation to humans are ..... and
- 2. Fluoride are an air pollutant that attack.....as tissues target.
- 3. Dustfall can be calculated = .....
- 4. UVA wavelength ranged from ....., while UVB have wavelength range .....

7. Dust sources can be originated from, and
8. The result of equal values between crude birth and death rates is called
9. Most air contaminants that monitor by many countries for assessment AQI are and
<ul> <li>10. El-Nino Spanish word mean, while La Nina it mean</li> <li>11.Selenium and chlorinated hydrocabons are an air pollutant that attackas tissues target.</li> </ul>
<ul><li>12 and are two persons who interested in human population growth.</li><li>13.PCBs is abbreviation of</li></ul>
14.Population change= () – (). 15.Major gases that caused asphyxiation to humans are and
16.Some examples of synthetic organic chemicals related to VOCs are
17.Light glare can be classified into,
 19. Anthropogenic greenhouse gases in the atmosphere are, 
20.Air pollutant that attack human liver as a target are and
21.PAHs is abbreviation of 22.The most common air pollution diseases affecting human respiratory
system are
24. CH <sub>3</sub> C(O)OO + NO <sub>2</sub> → 25. CoHb formed as a result of combination between and
26.Complete combustion of C <sub>2</sub> H <sub>4</sub> produce, while incomplete combustion produce
27.Anthropogenic greenhouse gases in the atmosphere are, ,, ,, , and
<ul> <li>28.Thyroid gland is target for air contaminants such as</li></ul>
and are examples of secondary pollutant
31. $Cl + O_3 \longrightarrow \dots \dots$ 32. The functions of alveolar macrophages are $\dots \dots \dots$ and $\dots \dots$

- 33. .... terms refers to dust disease.
- 34..... and ..... are types of thermal inversion.
- 35. The most common air pollution diseases affecting human respiratory
- system are ...... , ...... and ...... .

36.RO<sub>2</sub>+NO  $\longrightarrow$  ...... , while 2NO+O<sub>2</sub> ...... .

- **38.**Painful loudness for human ear is ..... db while in library it reaches ..... db.
- **39.** ..... and ..... are the most poisons gases affected human health.

Illustrate one of the following by sketching

- 1. El- Nino, La- Nina and normal condition.
- 2. Airborne transmission indoor and the general governing flows of droplet dispersion nuclei.
- 3. Air pollution defense mechanisms in the human body.

**4.** Formation of ozone in troposphere and role of hydrocarbon radicals in ozone accumulation.

**Count only the following:** 

- 1. The EPA major types of air pollutants
- 2. The problems of overpopulation
- 3. The features covered by visual pollution.
- 4. Sources of dust pollution.
- 5. The problems of overpopulation
- 6. Control noise pollution.
- 7. Impacts of air pollution on man and environment.
- 8. Major EPA types of air pollutants.
- 9. Anthropogenic greenhouse gases in atmosphere.

**Define the following:** 

Overpopulation 2. Discomfort glare 3. ZPG 4. Air quality index
 Light clutter 6. Global cooling 7. Metal fume fever 8. Graffiti
 Ozone hole 10. Threshold shift of noise pollution 11. Dust 12. Silicosis.
 Bronchitis 14. Alveolar macrophage 15. Air quality index 16. Mist
 Black lung 18. Visual clutter 19. Secondary pollutants 20. Tagger

21. Malthus hypothesis
22. UVB
23. Visual pollution
24. Acid rain
25. Light pollution
26. Population size
27. Thermal inversion
28. Systematic toxins
29. Asthma
30. Secondary pollutant
31. PAN
32. Emphysema
33. Climate changes
34. Planetary albedo
35. Indoor pollutant
36. Thermal inversion

Write the differences between the following:

- 1. Climate changes and global warming.
- 2. Malthus and Marx's differing views on excess population growth.
- 3. El Nino and La Nina
- 4. Air quality and air quality index