

## **ATMOSPHERE – CLASS NOTES**

### **1. Meaning of Atmosphere**

The atmosphere is a thick envelope of gases surrounding the Earth, held by gravity. It extends up to about 10,000 km and is essential for life, climate, and weather.

### **2. Composition of the Atmosphere**

Nitrogen – 78.08%

Oxygen – 20.95%

Argon – 0.93%

Carbon Dioxide – 0.04%

Other gases – Trace

### **3. Structure / Layers of the Atmosphere**

Troposphere – Weather phenomena occur here.

Stratosphere – Contains ozone layer.

Mesosphere – Coldest layer, meteors burn here.

Thermosphere – Very high temperature, ionosphere present.

Exosphere – Outermost layer.

### **4. Importance of Atmosphere**

Provides oxygen, regulates temperature, protects from harmful radiation, and supports weather and climate.

### **5. Weather vs Climate**

Weather: Day-to-day condition of atmosphere.

Climate: Long-term average of weather.

### **6. Greenhouse Effect**

Greenhouse gases trap heat and keep Earth warm; excess causes global warming.

### **7. One-Line Points**

Weather occurs in the troposphere.

Ozone layer lies in the stratosphere.

Ionosphere helps radio communication.

### **8. Important Questions**

Define atmosphere.

Name the layers of atmosphere.

Why is ozone important?