Chapter 4. Air

Very Short Q&A:

Q1: All the living being on the earth depends on the atmosphere for the survival.(T/F)

Ans: True

Q2: Oxygen is the most plentiful gas in the air. (T/F)

Ans: False

Q3: Green plants use …… to make their food.

Ans: Carbon dioxide

Q4: Which among the following sphere suitable for flying aeroplanes.

Ans: Stratosphere

Q5: In……meteorites burn up in this layer on entering from the space.

Ans: Mesosphere

Q6: In thermosphere temperature rises very rapidly with increasing height. (T/F)

Ans: True

Q7: Which among the following is not a part of atmosphere?

a. Troposphere
b. Stratosphere
c. Mesosphere
d. Hydrosphere

Ans: Hydrosphere

Q8: The amount of …… decreases from the equator towards the pole.

Ans: Temperature

Q9: The air pressure is highest at sea level and decreased with height. (T/F)

Ans: True

Q10: Those wind which blow only during a particular period of the day or year in a small area is called…….

Ans: Seasonal winds

Q11: Exosphere is the uppermost layer of the earth.(T/F)

Ans: True

Q12: In which of the following layer of atmosphere almost all the weather phenomena occurs.

a. Troposphere
b. Stratosphere
c. Mesosphere
d. Exosphere

Ans: Troposphere

Q13: The degree of hotness and coldness of of the air is known as…….

Ans: Temperature

Q14: ……released in the atmosphere creates a green house effects.

Ans: Carbon dioxide

Q15: When air is heated it expands, become lighter and goes up. (T/F)

Ans: True

Q16: Climate is hour to hour ,day to day condition of atmosphere .(T/F)

Ans: False

Short Q&A:

Q1: Explain the term dynamic environment.

Ans: The physical and biological elements in the environment are dynamic in nature .changes take place slowly and suddenly in the nature of landforms. The circulation air and water brings about changes in the climatic conditions in different seasons.

Q2: Atmosphere plays a dynamic role how?

Ans: Among the four major elements of environment, the atmosphere is most dynamic as changes take place in it not only from one season to another but also over shorter periods of few hours.

Q3: What is air circulation?

Ans: When air is heated it becomes lighter and goes up. Cold air is denser and heavy that is why it tends to sink down. When hot air rises, cold air from surrounding area rushes there to fill the gap. This is how air circulation takes place.

Q4: Name the different layers of atmosphere ?

Ans: The different layer of atmosphere are-troposphere, stratosphere, mesosphere, thermosphere, exosphere.

Q5: Which layer makes weather phenomena possible?

Ans: Troposphere layer makes weather phenomena possible.

Q6: Which layer makes radio communication possible?

Ans: Ionosphere layer makes radio communication possible.

Q7: Which layer protects us from meteors and obsolete satellite from outer space?

Ans: The ionosphere or the thermosphere protects us from meteors and obsolete satellite from outer space.

Q8: Define insolation .

Ans: Insolation is the incoming solar energy intercepted by the earth. The amount of insolation decreases from the equator towards poles.

Q9: Name the instrument which measures temperature?

Ans: Temperature is measured with the help of thermometer .Outdoor temperature is measured with the help of mercury thermometer.

Q10: What do you mean by maximum and minimum temperature?

Ans: Maximum temperature is the highest temperature of the day recorded about 2.00 pm.

Q11: Define low and high pressure.

Ans: In areas where temperature is high the air gets heated and rises. This creates a low pressure area.In the area having low temperature the air is cold. It is therefore heavy. Heavy air sinks and creates a high pressure.

Q12: What is meteorology?

Ans: The scientific study of weather is called meteorology.

Q13: Which layer is free from water vapour and dust particle?

Ans: The stratosphere is free from water vapour and dust particle.

Q14: Define wind.

Ans: Moving air is called wind. Wind always blows from high pressure to low pressure.

Q15: What is moisture?

Ans: This term refers to degree of moisture present in the air .There is a definite limit to the quantity of moisture that can be held by the air at a specific temperature.

Q16: Define dew point?

Ans: The temperature at which the air becomes fully saturated is known as dew point.

Q17: What do you mean by absolute humidity?

Ans: The total amount of water vapour that is contained in the air at a given temperature is known as absolute humidity.

Q18: Define the term relative humidity.

Ans: The ratio between actual amount of water vapour present in the air at a given temperature and the maximum amount of water vapour that the atmosphere can retain at that temperature is known as relative humidity.

Q19: What is importance of rainfall?

Ans: Rainfall is very important for the survival of plants and animals. It brings fresh water to the earth's surface. If rainfall is less the it may cause drought on the other hand if it is more floods will takes place.

Long Q&A:

Q1: Describe the composition of atmosphere.

Ans: The atmosphere consists of mixture of gases having a relatively uniform composition in the lower layer. An average sample of pure dry air consist of nitrogen(78 %),oxygen (21%) and argon(0.9 %),other gases such as carbon dioxide, hydrogen helium and ozone are present in minute quantities. The lower layer of atmosphere also contains water vapour in variable quantities.