Multiple Choice Questions

Which term refers to the height above the Earth's surface?

a) Adiabatic lapse rate

b) Above ground level (AGL)

c) Atmospheric boundary layer (ABL)

d) Altocumulus undulatus

What is the term for the process where ice crystals grow by collecting supercooled water droplets?

a) Aggregation

b) Accretion

c) Deposition

d) Sublimation

Which cloud type is characterized by a sheet-like appearance and belongs to the middle altitude range?

a) Cirrus

b) Altostratus

c) Stratus

d) Cumulonimbus

What does CAPE stand for in meteorology?

a) Convective Available Potential Energy

b) Cumulus Atmospheric Pressure Estimate

c) Cyclonic Airflow Pattern Evaluation

d) Cloud Altitude and Precipitation Extent

Which phenomenon describes the apparent deflection of moving objects due to Earth's rotation?

a) Coriolis effect

b) Bernoulli effect

c) Ekman transport

d) Geostrophic balance

Matching Questions

Match the term to its correct definition:

\_\_ Anabatic winds

\_\_ Advection fog

\_\_ Buoyancy

\_\_ Dewpoint temperature

\_\_ Clear-air turbulence (CAT)

Definitions:

a) Fog formed when warm, moist air moves over a cooler surface.

b) Turbulence occurring in cloud-free regions, often due to wind shear.

c) The temperature at which air becomes saturated with moisture, leading to dew formation.

d) Upward-moving winds typically found on mountain slopes during daytime heating.

e) The force that causes less dense air parcels to rise relative to denser surroundings.

True/False Questions

The term 'cirrocumulus' refers to high-altitude, small, rounded white puffs often appearing in long rows.

'Cumulonimbus' clouds are typically associated with fair weather and are characterized by their flat, layered appearance.

'Altocumulus undulatus' clouds are a type of billow cloud characterized by wavy patterns in the middle altitude range.

The 'Armstrong limit' refers to the altitude above which water boils at the normal human body temperature of 37°C.

'Anticyclone' refers to a weather system characterized by low atmospheric pressure at its center, leading to stormy conditions.

Fill-in-the-Blank Questions

The \_\_\_\_\_\_\_\_\_\_ is the rate at which atmospheric temperature decreases with increasing altitude in conditions of thermal equilibrium.

\_\_\_\_\_\_\_\_\_\_ clouds are lens-shaped clouds that typically form over mountain peaks due to orographic lifting.

The \_\_\_\_\_\_\_\_\_\_ scale is used to estimate wind speeds based on observed sea conditions or land features.

\_\_\_\_\_\_\_\_\_\_ is the process by which ice crystals grow larger by colliding and sticking together.

The \_\_\_\_\_\_\_\_\_\_ effect describes the deflection of moving air due to Earth's rotation, influencing wind patterns.

Answers

Multiple Choice:

b) Above ground level (AGL)

b) Accretion

b) Altostratus

a) Convective Available Potential Energy

a) Coriolis effect

Matching:

d) Anabatic winds

a) Advection fog

e) Buoyancy

c) Dewpoint temperature

b) Clear-air turbulence (CAT)

True/False:

True

False

True

True

False

Fill-in-the-Blank:

adiabatic lapse rate

Lenticular

Beaufort wind force

Aggregation

Coriolis