MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

1) You would most likely expect a rain shadow on the:
   A) west side of the Coast Range in California.
   B) west side of the Andes.
   C) west side of the Sierra Nevada Mountains.
   D) east side of the Cascade Mountains in the Pacific Northwest.

2) Stratocumulus clouds are considered:
   A) high clouds.
   B) clouds with extensive vertical development.
   C) middle clouds.
   D) low clouds.

3) High clouds:
   A) are composed of ice crystals.
   B) have a typical ceiling around 4500 meters.
   C) have a fairly large water content.
   D) include altostratus clouds.

4) Absolutely stable air:
   A) needs a push to rise, but will continue rising once it starts moving.
   B) has a wet adiabatic lapse rate that is greater than the environmental lapse rate.
   C) will have a positive buoyancy.
   D) is typically warmer than its surroundings.

5) Conditionally unstable air:
   A) moves through an environmental lapse rate that is between the dry adiabatic lapse rate and the wet adiabatic lapse rate.
   B) always has a negative buoyance.
   C) contains a mixture of absolutely stable air and absolutely unstable air.
   D) rarely provides precipitation.

6) This is not a form of low cloud:
   A) nimbostratus.
   B) stratocumulus.
   C) stratus.
   D) nimbostratus.

7) The lapse rate of the atmosphere as measured by a radiosonde is called the ________ lapse rate.
   A) moist adiabatic
   B) stable
   C) environmental
   D) autoconvective
   E) dry adiabatic

8) The lower atmosphere is most likely to have the steepest environmental lapse rate at this time:
   A) mid-day.
   B) sunrise.
   C) midnight.
   D) sunset.

9) Inversions:
   A) are characterized by an increase in temperature with altitude.
   B) are typically unstable.
   C) increase the positive buoyancy of most air masses that enter them.
   D) have no significant effect on fog formation.

10) This type of air will keep rising after an initial upward push:
    A) statically stable air.
    B) air that is colder and denser than surrounding air.
    C) statically neutral air.
    D) statically unstable air.

11) If air becomes progressively warmer and more buoyant than the surrounding air, it is said to be:
    A) absolutely unstable.
    B) absolutely stable.
    C) conditionally unstable.
    D) neutral.
12) When the environmental lapse rate exceeds both the dry adiabatic lapse rate and the wet adiabatic lapse rate of a parcel of air, that air parcel contains:
   A) air that cannot reach the lifting condensation level.
   B) conditionally unstable air.
   C) absolutely unstable air.
   D) absolutely stable air.

13) Clouds that are high and are always composed entirely of ice crystals are:
   A) thunderheads.
   B) cirrus.
   C) alto.
   D) nimbus.
   E) stratus.

14) Frontal lifting:
   A) leads to increased pressure on the warm front.
   B) is not related to temperature differences between air masses.
   C) is most pronounced when a cold front meets a cold front.
   D) can act in a way that is analogous to orographic lifting.

15) This is not one of the three processes for saturating air with water vapor:
   A) adding water vapor to the air.
   B) lowering the temperature to the dew point.
   C) mixing cold air with warm, moist air.
   D) increasing the carbon dioxide content of air.
MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

1) D
2) D
3) A
4) B
5) A
6) A
7) C
8) A
9) A
10) D
11) A
12) C
13) B
14) D
15) D