Assignment 6

The due date for submitting this assignment has passed.

1) An air parcel is said to be saturated if its relative humidity (RH) is
   - less than 95
   - equal to 100
   - greater than 95
   - equal to 70
   No, the answer is incorrect.
   Correct Answer: less than 95

2) Which of the following phenomena is not helpful in convection of air?
   - vertical updraft
   - convergence at the surface
   - barometric lifting
   - surface heating
   No, the answer is incorrect.
   Correct Answer: surface heating

3) The size of the condensation nucleus is
   - 0.005 micron
   - 0.01 micron
   - 0.02 micron
   - 0.03 micron
   No, the answer is incorrect.
   Correct Answer: 0.01 micron

4) In the backstructure of clouds, the term altitude is added to indicate the ________ of a cloud.
   - height
   - pressure
   - density
   - angle
   No, the answer is incorrect.
   Correct Answer: height

5) An air parcel of unaturated air is raised to a certain height, when the actual temperature lapse rate is less than the dry adiabatic lapse rate, the air parcel is considered
   - unstable
   - neutral
   - cool
   - warm
   No, the answer is incorrect.
   Correct Answer: unstable

6) Calculate the ratio of the wet adiabatic lapse rate and dry adiabatic lapse rate is nearly
   - 0.4
   - 0.6
   - 0.8
   - 0.9
   No, the answer is incorrect.
   Correct Answer: 0.8

7) Which of the following clouds cannot cause heavy rain?
   - Cirrus
   - Stratus
   - Cumulus
   - Cumulonimbus
   No, the answer is incorrect.
   Correct Answer: Cirrus

8) The condensed air parcel cools more slowly because of __________ in the parcel.
   - internal energy increased
   - moist heat released
   - pressure increased
   - temperature increased
   No, the answer is incorrect.
   Correct Answer: internal energy increased

9) The internal energy of a wet air parcel
   - remains zero
   - decreases
   - increases
   - becomes half
   No, the answer is incorrect.
   Correct Answer: decreases

10) Calculate the ratio of the wet adiabatic lapse rate and dry adiabatic lapse rate is nearly
    - 0.4
    - 0.6
    - 0.8
    - 0.9
    No, the answer is incorrect.
    Correct Answer: 0.8

11) The rising air parcel can form cloud.
    - Before saturation
    - After saturation
    - At saturation
    - At 90% RH
    No, the answer is incorrect.
    Correct Answer: After saturation