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Canada

SAMPLE METEOROLOGY QUESTIONS FROM TRANSPORT CANADA

Relative humidity is the

1. amount of moisture present in the air.
2. weight of water present in the air.
3. amount of moisture present in the air compared to the amount the air could hold at that temperature and pressure.
4. temperature to which the air must be lowered to bring about saturation.

The cloud type usually associated with steady rain is

1. altostratus.
2. altocumulus.
3. stratocumulus.
4. nimbostratus.

Clouds form when moist warm air overruns cold air because the warm air

1. is cooled by the cold air underneath.
2. is cooled by the surrounding cold air aloft.
3. becomes unstable as a result of cooling from below.
4. cools as a result of expansion as it rises.

Advection fog forms when

1. moist air moves from a warm surface to a colder surface.
2. the cold ground cools the air in contact with it at night.
3. moist air is influenced by orographic effect.
4. moist cool air moves from a cold surface to a warm surface.

Radiation fog forms as a result of the

1. passage of cold air over a warm surface.
2. air becoming moist as it moves over the sea.
3. clouds becoming cold and heavy at night so that they settle to the ground.
4. ground becoming cold at night and cooling the air in contact with it.

In the northern hemisphere, the winds blow

1. clockwise around high and low pressure areas.
2. counter-clockwise around high and low pressure areas.
3. clockwise around a high pressure area and counter-clockwise around a low pressure area.
4. counter-clockwise around a high pressure area and clockwise around a low pressure area.

During a descent from 2,000 feet AGL to the surface, you will usually find that the wind

1. veers and increases.
2. backs and increases.
3. veers and decreases.
4. backs and decreases.

The diurnal change of surface wind velocity is such that during the day the surface wind will usually

1. veer and increase in speed.
2. veer and decrease in speed.
3. back and increase in speed.
4. back and decrease in speed.

In the standard atmosphere, the temperature at an altitude of 5,000 feet will be closest to

1. 0ºC.
2. 5ºC.
3. 8ºC.
4. 10ºC.

The conditions required for the formation of thunderstorms are

1. moist air, high temperature, and an inversion.
2. stratus cloud, high humidity and a lifting force.
3. unstable air, high humidity and a lifting force.
4. a mixing of two different air masses.

A condition when the air temperature aloft is higher than that of the lower atmosphere is generally referred to as

1. a low pressure area.
2. an inversion.
3. a reverse temperature condition.
4. an inverse convection condition.

Air masses that are being cooled from below are characterized by

1. strong winds, cumulus cloud, good visibility.
2. uniform temperature, good visibility.
3. continuous rain, freezing temperature.
4. fog, poor visibility and layer cloud.

A front is a

1. narrow zone of fog between a cyclone and an anticyclone.
2. line of thunderstorms.
3. narrow transition zone between two air masses.
4. mass of layer cloud which is very thick and which covers a wide area.

During the passage of a cold front

1. warm air is compressed as cold air rides over it.
2. temperature rises owing to increased pressure.
3. fog will always form from the interaction of warm and cold air.
4. warm air is lifted as colder air pushes under it.

The following sequence of clouds is observed at an airport: cirrus, altostratus, nimbostratus. The observer should expect

1. the passage of a cold front.
2. anticyclonic weather.
3. the passage of a warm front.
4. clearing skies and a decrease in temperature.

Cloud heights in Canadian Aerodrome Forecasts (TAF) are given in

1. feet AGL.
2. feet ASL.
3. metres AGL.
4. metres ASL.

Failure to adjust the altimeter when flying from an area of low pressure to an area of higher pressure will result in the altimeter indicating

1. too high.
2. too low.
3. the pressure altitude.
4. the true altitude.

A METAR describes the weather

1. expected at a station at a given time.
2. expected at a station over a 12 hour period.
3. observed at a station at the time of the report.
4. observed at a station during the previous day.