

Climate Questions for CDS Exams

Climate Quiz 1

Direction : Study the following question carefully and choose the right answer.

1. Which layer of the atmosphere extends from the Earth's surface upto 6-8 miles and experiences decrease in temperature in constant rate?

A. Stratosphere B. Troposphere C. Mesophere D. Thermosphere

E. None of these

2. Sea breeze is formed during

A. Day time B. Night time C. Both D. Seasonal

3. The eastward continuation of the Brazil current is called:

A. South Atlantic drift B. Counter equatorial drift C. West Atlantic drift

D. North Atlantic drift

4. Rain bearing clouds look black because

- A. All light is scattered by them
- B. The large number of water droplets in them absorb all the sunlight
- C. They reflect the sunlight back into the atmosphere
- D. There is a lot of dust condensed on the water vapour in such clouds

5. Which one among the following statements regarding Chinook winds is not correct?

A. These are local winds

B. They descend along the Eastern slopes of the rocky mountain in mid-latitudes

C. They bring lots of rain with them

D. They benefit agriculture

6. The following questions consist of two statements, Statement I and Statement II.

Statement I Tsunami is small in Open Ocean yet may be over 30 m high when it reaches a coastline.

Statement II Tsunamis have long wavelength and they travel across the open ocean at high speed. As they approach shore, the wavelength decreases and the wave height increases.

A. Both the statements are individually true and Statement II is the correct explanation of Statement I

B. Both the statements are individually true but Statement II is not the correct explanation of Statement I

C. Statement I is true, but Statement II is false

D. Statement I is false, but Statement II is true

7. Which among the following phenomenun can occur when very warm and humid air is rising over a mass of a very cold air?

1. Calm weather 2. Snowfall 3. Storms and cyclonic storms

4. Intense rain and hail

Select the correct answer using the codes given below

A. 1 and 2 B. 2 and 3 C. 3 and 4 D. 1 and 4

8. The planetary winds that blow from the sub-tropical high pressure belts to the equator are known as

A. Westerlies B. Doldrums C. Polar winds D. Trade winds

9. Nearly 30% of the solar radiations return back to the space without contributing anything to the Earth's surface temperature. This amount of radiation is known as

A. Black body B. Tropopause C. Earth's albedo D. Mesopause

10. Which of the followin gases in the eatmosphere is/are responsible for acid rains?

1. Oxides of sulphur 2. Oxides of nitrogen 3. Oxides of carbon

Select the correct answer using the codes given below

A. 1 and 2 B. 1 and 3 C. Only 2 D. 1, 2 and 3

Correct Answers:

ſ	1	2	3	4	5	6	7	8	9	10
	В	А	А	А	D	А	D	D	С	А

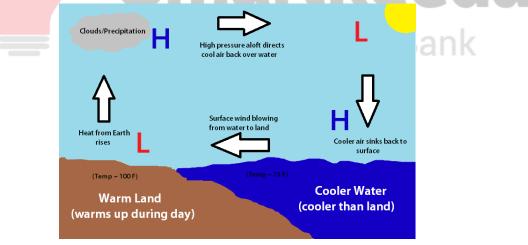
Explanations:

1.

Troposphere is the layer of the atmosphere that extends from the Earth's surface upto 6-8 miles and experiences decrease in temperature in constant rate.

2.

A Sea Breeze also called Onshore Breeze is a gentle wind that develops over bodies of water near land due to differences in air pressure created by their different heat capacity. It is a common occurrence along coasts during the morning as solar radiation heats the land more quickly than the water.

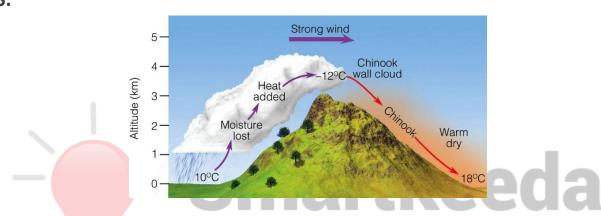


3.

The eastward continuation of the Brazil Current is called the South Atlantic Drift. It is also known as the West Wind Drift because it forms at 400 South latitude due to the impact of the Westerlies. The eastward movement is due to the Earth's rotation.

4.

The colour of any object depends on its ability to reflect selected wavelengths of light. Consequently, if the object does not reflect any colour, it appears black. The tiny droplets of water in rain clouds scatter the white light of the Sun. Red is scattered first, and violet the last. Thus, we do not see the rays of the Sun and this results in a dark effect. A normal clouds have no water, the light is not scattered and thus look white



Chinook winds, are the local winds, commonly refers to Foehn winds in the interior West of North America, where the Canadian praries and Great plains meet various mountain ranges. The influence on agriculture by Chinook winds are

1. Loss of soil moisture.

2. Summer Chinooks can damage small plants.

3. Abrupt temperature changes can cause pneumonia, septicemia and shipping fever in cattle.

6.

Tsunami: A long, high sea wave caused by an earthquake or other disturbance.

7.

Calm weather and intense rain and hail phenomena can occur when very warm and humid air is rising over a mass of a very cold air.

5.

8.

Blowing from the sub-tropical highs or horse latitudes toward the low pressure of the ITCZ (Inter-Tropical Convergence zone) are the trade winds.

9.

Albedo is the fraction of solar energy reflected from the Earth back into space. It is measure of the reflectivity of the Earth's surface.

10.

Acid rain is caused by emissions of sulphur dioxide and nitrogen oxide, which react with the water molecules in the atmosphere to produce acids.



