

BSC1222: Basics of Environmental Sciences

Climatology

Week 1: Atmosphere and weather

Quiz for Week 1

Instruction: Read carefully the question and select the right answer, each question carries one mark and the quiz is out of 17 points and the pass marks is 70%.

1. What the lithosphere

- a) A layer of gasses that surrounds the planet Earth
- b) The layer of water that surrounds the Earth,
- c) Solid material outer layer of the Earth, and
- d) The layer of ice that surrounds the Earth is an example of layers.

Answers:c

2. What is the actual shape of the planet Earth?

- a) Square,
- b) Vivex, and spherical
- c) Rectangular are the two types of shapes.
- d) Elliptical

Answer:d

What exactly is the biosphere, then?

- a) The layer of water that surrounds the Earth.
- b) The layer of rocks that surround the Earth
- c) The zone on Earth where life may be found; and

d) The layer of gasses that surround the Earth

Answer:c

4. Some layers encircle the Earth

a) The layer of gasses surrounding the Earth.

b) The layer of liquid surrounding the Earth.

c) The layer of solid surrounding the Earth.

d) The layer of ice surrounding the Earth.

Answer:a

5. Why is it vital to consider the spheres of the Earth? There are three reasons why they are significant.

a) They are not important.

b) They are only relevant for scientists; and

c) Understanding them assists in providing solutions to environmental problems and anticipating natural catastrophes.

d) They are irrelevant to humans and the activities they engage in

Answer:c

6. Which layer of the atmosphere is located in the closest proximity to the surface of the Earth?

a. Thermosphere,

b. Troposphere,

c. Mesosphere, and

d. Stratosphere are the four layers of the atmosphere.

Answer:b

7. The ozone layer is located in which layer of the atmosphere?

a. Troposphere,

b. Stratosphere,

c. Mesosphere, and

d. Thermosphere are the five layers of the atmosphere.

Answer:b

8. Which kind of gas contains the greatest proportion of the Earth's atmosphere in terms of volume?

a) Nitrogen

b) Oxygen (O₂)

c) The gas carbon dioxide

d) Argon

Answer: a

09. When it comes to disaster preparation, why is it so important to have accurate weather forecasts?

- a) There is no correlation between the weather and the occurrence of natural disasters.
- b) Weather predictions are a useful tool for predicting and preparing for natural catastrophes such as hurricanes and floods.
- c) The weather has no bearing on the occurrence of natural catastrophes.
- d) Plans for disaster preparation do not take into account weather predictions.

Answer: b

10. How does the weather influence agricultural practices?

- a) The crops are unaffected by it in any way.
- b) The development of some crops is contingent upon the presence of certain aspects of the weather.
- c) When it comes to planting, farmers do not depend on predicted weather conditions.
- d) The weather conditions do not have any impact on the yields of crops.

Answer: b

11. In the processes of respiration and combustion, which gas is absolutely necessary?

- a) Nitrogen
- b) Oxygen
- c) Methane,
- d) Carbon dioxide
- e) Carbon monoxide

Answer: b

12. Within the context of the greenhouse effect, which gas is the most important contributor to the regulation of the climate of the Earth?

- a) Nitrogen
- b) Oxygen
- c) The gas carbon dioxide
- d) Argon

Answer: c

13. What kind of impact do geological features like mountains have on the weather in the area?

- a) They have no influence whatsoever on the weather.

- b) This do not causes variances in temperature and precipitation on each side of the mountain range.
- c) Mountains inhibit the movement of air masses, which results in variations in temperature and precipitation on each side of the mountain range.
- d)The only places where topography affects the weather are coastal areas.
- e) Mountains contribute to the acceleration of global warming.

Answer: c

14. Among the natural factors that affect the weather, which one is the most important?

- a) Urbanization
- b) Solar radiation
- c) Industrial pollution
- d) Deforestation e) Industrial pollution

Answer: b

15. Which of the following are the most important variables that affect the weather?

- a) Only human activities;
- b) Only natural processes; and
- c) Both human actions and natural processes.
- d) The weather is always completely unpredictable

Answer: c

16. How do meteorologists make forecasts about the weather?

- a) By tossing a coin.
- b) By evaluating data from weather devices and computer models.
- c) By using a combination of the two.
- d) Consult with astrologers.

Answer: b

17. If warm, moist air rises swiftly, resulting in the creation of towering clouds and maybe thunderstorms, what is the name of the meteorological phenomena that takes place?

- a) tornado;
- b) blizzard
- c) Hurricane
- d) Convection

Answer: d