

27. Revision – Pedosphere and Atmosphere

Pedosphere

1. Define the term Pedology.
2. Define the pedosphere.
3. Give 2 examples of factors influencing soils.
4. Explain why are soils so important for the people.
5. Give 3 examples of chemical elements present within a soil.
6. What is a humus?
7. Separate soils according to the size of its particles.
8. What is the relation between humus and soil fertility?
9. Justify whether the following statement is correct: *“Soils are composed only of anorganic parts.”*
10. Justify whether the following statement is correct: *“Soil profiles create soil horizons.”*
11. What does C-horizon represent?
12. Justify whether the following statement is correct: *“Differences within pedosphere are influenced mainly by agriculture.”*
13. Define the term soil-forming processes.
14. What soil type can be found in/below, e.g.:
 - a. polar climate?
 - b. subtropical climate?
 - c. coniferous forests?
15. Draw and describe the formation of soils.
16. Draw and describe the change of soils with increasing altitude.
17. Tell what could be appropriate type of vegetation cover grown in areas with prevailing:
 - a. black earths
 - b. brown forest soils
 - c. ferralitic soils
18. Compare soil fertility between black earth and gleys and explain why. It could be also some other soil types needed to be compared at the BIG TEST! Don't forget...
19. Explain the difference between horizontal and vertical zonality of soils and give an example of it in the world.
20. Outline soil pattern in North America according to the horizontal zonality of soils.

Atmosphere

21. Explain why atmosphere is so needed for the people.
22. What is meteorology?
23. What is climatology?
24. Give 3 examples of chemical elements present within atmosphere.
25. Draw and describe the structure of the atmosphere.
26. Fill the gaps:

Altitude	Temperature
400 m asl.	22°C
700 m asl.	?
200 m asl.	?

27. Fill the gaps:

Weather component	Measuring units
Temperature	
	mbars
Wind speed	
	%

28. According to the synoptic map, label an area of low air pressure and high air pressure.

29. Is the following statement correct? (yes/no) Justify your answer:

“Weather is more stable compared to climate.”

30. Is the following statement correct? (yes/no) Justify your answer:

“Cold ocean currents contribute to damp climate.”

31. Is the following statement correct? (yes/no) Justify your answer:

“The further from the sea, the lower the temperature extremes.”

32. Give 2 examples of cold ocean currents and locate them on the map.

33. Give 2 examples of warm ocean currents and locate them on the map.

34. Why is Australian inland area so dry?

35. Write an example of area influenced by rain shadow effect and locate it on the map (besides Australia).

36. Give 2 examples of deserts in the world (except of Sahara).

37. Choose a climatic zone and write 1 vegetation cover that goes with it.

38. Give 2 factors which influence precipitation or climate in the world.

39. Is the following statement correct? (yes/no) Justify your answer:

“Much higher precipitation rates are in Alps in comparison with Danube lowland.”

40. Fill the gaps:

Region	Wind type
Northern hemisphere	
	SE trade winds
Temperate zone	
	Eastern winds

41. Fill the gaps according to the picture. Picture of global atmospheric circulation!

42. Explain the temperature inversion.

43. Describe weather conditions under cyclone/anticyclone.

44. Describe the difference between valley and mountain wind.

45. Is the following statement correct? (yes/no) Justify your answer:

“Coastal breeze blows in sea-coast direction.”

46. Is the following statement correct? (yes/no) Justify your answer:

“Summer monsoon brings heavy rain.”

47. Give 2 examples of countries the most vulnerable due to hurricanes (typhoons).

48. Write a difference between temperate continental climate and temperate maritime climate and match one country with such a climate.

49. Write 2 examples of countries with monsoonal climate and locate them on the blank map of the world.

50. On the blank map of the world locate 2 examples of countries with:

- Equatorial climate
- Subequatorial climate
- Tropical climate
- Subtropical climate
- Temperate climate
- Polar climate