

Ecology Test Answer Key – 59 total points

Key

Short Answer (23 points)

1. Alpine; Arctic (2 pts)
2. The resemblance of an unpalatable species by an edible species to deceive predators. (1 pt)
3. A species that is still alive and reproducing. (1 pt)
4. Living or once living organisms. (1 pt)
5. -50 c (1 pt)
6. Permafrost (1 pt)
7. 6-10 inches (15-25 cm) (1 pt)
8. Treeless plain. (1 pt)
9. dwarf shrubs, moss, lichen, grasses (3 pts)
10. The area of the earth that lies between the polar regions and the tropics. (1 pt)
11. Tree lose their leaves at the end of each growing season / between 25 and 50- degrees latitude (1 pt)
12. Melting permafrost releases carbon which can alter carbon dioxide levels in the atmosphere. This in turn makes our atmosphere capture more light energy from the sun, further warming out atmosphere and planet. (2 pts)
13. Thin because they were scraped by glaciers and very acid because of decomposition of pine needles / soil also being leached . (1 pt)
14. to allow snow to slide more easily off branches (1 pt)
15. migrate south in winter (birds); go into hibernation during winter; store extra fat layers on their bodies for winter; change diets from season to season; grow extra fur on the bottom of their feet to tread on snow easier (lynx and snowshoe rabbit); change fur color and coat thickness from season to season; live under snow in winter in snow tunnels (lemmings, mice, shrews, voles); migrate south in winter (birds) (3 pts)
16. permafrost thaw and overgrazing (2 pts)

Multiple Choice (21 points)

1. A
2. C
3. C
4. A
5. D
6. A
7. D
8. A
9. B
10. A

11. D
12. B
13. C
14. E
15. A
16. D
17. A
18. B
19. C
20. D
21. C

Images & Graphs (15 points)

22. (8 points) From the base of the pyramid up: Producer/grasses; primary consumer/mouse; secondary consumer/snake; tertiary consumer/hawk
23. (2 points) Competition for resources limits the rabbit population; the rabbits have reached their carrying capacity.
24. (2 points) A is the predator, B is the prey. There needs to be more prey than predators.
25. (3 points) Light green: Boreal forest; Orange: deciduous forest; Dark green: rainforest.