_____ _____
Student Name *Class*

The ways that plants are grown are related to needs, technology and the environment

Modifying crops to increase yield

1. When growers and scientists work together to get more useful parts per plant, they are trying to increase …
   A. yield
   B. stability
   C. resistance
   D. sustainability

2. An artificial plant environment is one in which all of the growing conditions can be controlled. The following is an example of an artificial environment …
   A. hydrofoil
   B. hydrogenerate
   C. hydroponic
   D. hydrolysis

3. In order to make an artificial environment work without soil, plants are grown in a …
   A. greenhouse
   B. nutrient solution
   C. terrarium
   D. organic garden

4. A canola crop that is grown without irrigation yields 1120 kg of seeds per hectare. With irrigation a canola crop yields approximately 10% more seeds per hectare. The yield per hectare is now …
   A. 1100
   B. 1160
   C. 1200
   D. 11200

5. Spreading manure over cropland is a technique growers use to improve the yield of different crops. This action adds this nutrient to the soil …
   A. salt
   B. calcium
   C. vegetation
   D. organic matter

New Plant Varieties are Developed by Selective Breeding

6. A group of organisms that all have similar traits and who's offspring can reproduce are called a …
   A. subgroup
   B. species
   C. selection
   D. variety

7. The special traits or characteristics that distinguish one organism from another is called a …
   A. subgroup
   B. species
   C. selection
   D. variety

8. A plant that is selected because it is more resistant to disease is an example of …
   A. personal preference
   B. selective preference
   C. personal breeding
   D. selective breeding

9. Scientists can now change plants by going inside the plants cells and modifying some of its genetic material. This process is part of a science called …
   - **A. biology**
   - **B. genealogy**
   - **C. microbiology**
   - **D. biotechnology**

10. A very small section of a plant cell's nucleus is called a …
   - **A. trait**
   - **B. variety**
   - **C. gene**
   - **D. hybrid**

11. The process which combines genetic material from one organism into another organism, to make a new organism is called genetic …
   - **A. diversity**
   - **B. addition**
   - **C. engineering**
   - **D. recreation**

12. Canola is an oilseed crop that is valued for its …
   - **A. taste and colour**
   - **B. durability**
   - **C. resistance to predators**
   - **D. health benefits**

13. The breeding of super weeds may be happening with the Canola crop. This is suspected, because scientists believe the canola plant is cross-pollinating with …
   - **A. wild oats**
   - **B. wild mustard**
   - **C. rapeseed**
   - **D. barley**

Controlling Weeds and Pests

14. As a pest, fungi and bacteria cause ...
   - **A. loss of moisture**
   - **B. nutrients to become inactive**
   - **C. infection**
   - **D. plant loss due to consumption**

15. Dandelions are super weeds because they had no natural controls when they were introduced to North America from Europe. They were brought here to be used as a …
   - **A. flowering plant**
   - **B. salad vegetable**
   - **C. medicinal plant**
   - **D. edible wildflower**

16. Canola is popular with insects, fungus and weeds. One such pest is wild oats. This pest causes damage because it ...
   - **A. devours the canola plant**
   - **B. steals nutrients and moisture**
   - **C. causes infection in the canola seed**
   - **D. cuts off the flow of water to the canola stem**

17. If a non-native species is introduced to a certain area, without natural predators, it often becomes a pest. A plant that was originally used as a salad vegetable was …
   - **A. Canola**
   - **B. Mustard**
   - **C. Dandelion**
   - **D. Foxglove**

18. Organic food is food that has been grown without the use of chemical fertilizers and chemical pesticides. To provide the needed nutrients to grow the plants, they use ...
   A. manure and compost
   B. tillage and crop rotation
   C. mulching and companion planting
   D. clean equipment and good seeds

19. Biological control is one way to reduce the effect of pests on plants. To keep a pest's numbers under control, these biological controls would likely be used …
   A. invasive species
   B. natural predators
   C. exotic species
   D. non-native predators

20. Chemicals that are used as pesticides can wash off many plants and become poisonous in the soil. This is referred to as soil …
   A. resistance
   B. restriction
   C. regeneration
   D. residue

Consequences of Environmental Management

21. When we don't investigate all of the possible factors and outcomes for our actions in the environment, these might occur …
   A. bio-diversification
   B. bio-accumulation
   C. natural consequences
   D. unintended consequences

22. One of the effects of monoculture farming practices is that pests feeding on that crop have a large food supply. Monoculture is also a farming practice that actually lowers …
   A. cost of pesticides
   B. biodiversity
   C. crop yield
   D. natural predators

23. Forestry practice can disrupt some predator-prey relationships. Logging roads actually help predators find their prey, because the prey …
   A. are much slower
   B. cannot be seen as well
   C. have nowhere to hide
   D. don't worry about predators

24. Using good quality seeds, removing weeds before the seeds mature and planting a variety of crops, instead of a monoculture, will reduce the need for …
   A. chemical controls
   B. biological controls
   C. cleaning equipment
   D. crop rotation

25. Sustainable practices in the production of plants, such as crop rotation, have led to other benefits that were unintentional. One such benefit is …
   A. improving yield by 15%
   B. more resistant pests
   C. better chemical controls
   D. more greenhouse operations

ANSWER KEY

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