Science 10 Ecosystem Exam Review

You are responsible for the following vocabulary terms:

Abiotic	Omnivore	Secondary consumer
Biotic	Carnivore	Exotic species
Heterotroph	Herbivore	Ecotone
Decomposer	Habitat	Detritus
Consumer	Niche	Biodiversity
Autotroph	Organism	Symbiosis
Producer	Ecology	Commensalism
Population	Trophic level	Parasitism
Community	Food pyramid	mutualism
Ecosystem	Primary consumer	

Questions to answer:

1. For each of the following descriptions about animals state if it is
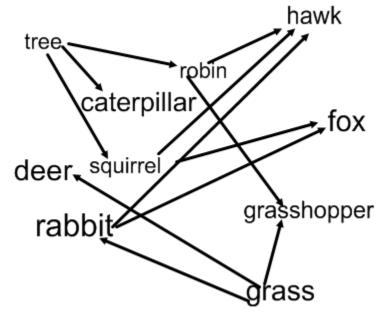   a. Endangered
   b. Extinct
   c. Extirpated
   d. Threatened
   e. Vulnerable

i. Dinosaurs are no longer found anywhere
ii. The grey fox is at risk because of low or declining numbers
iii. The grizzly bear is no longer found in Manitoba and Saskatchewan, but is still found in Alberta and BC
iv. The piping plover is likely to become endangered if factors that ensure its survival are not improved
v. The whopping crane is close to extinction in all parts of Canada or a significantly large location

2. Does this diagram below represent a food web, food chain or food pyramid?

b. Name one animal that fits each of these categories
   i. producer
   ii. Secondary consumer
   iii. Herbivore
   iv. Primary consumer

c. If the tree was removed from this diagram what other organisms would be effected and in what ways?

d. If there were an increase in the number of foxes, explain how would it affect the other organisms?

3. For each of the following descriptions describe if the relationship is mutualism (M), commensalism(C) or Parasitism (P).
   a. Wrasse fish feed on the parasites found on the black sea bass's body (usually in the mouth). Dental floss for fish—both species benefit
   b. Mistletoe extracts water and nutrients from the spruce tree to the detriment (ill effect) to the spruce.
   c. E. Coli is a bacteria that lives in the gut of humans. The human provides the ideal habitat for e coli reproduction and the e coli provides the extra vitamin K that we use.
   d. As bison walk through grass, insects become active and are seen and eaten by cowbirds. This relationship neither harms nor benefits the bison.
   e. Yucca flowers are pollinated by yucca moths. The moths lay their eggs in the flowers where the larvae hatch and eat some of the developing seeds. Both benefit

For each of the following fill in the blanks provided:

1. _____ describes the relationship among the many species living in an environment and the relationships among those organisms and the non-living components of the environment.
2. A _____ is a step-by-step sequence linking organisms that feed on each other.
3. _____ are animals that eat plants.
4. _____ are animals that feed on other animals.
5. _____ are animals that eat animals and plants.
6. The waste from plants and animals, including their dead remains is called _____.
7. A _____ is an organism that breaks down detritus to get nutrients for their own use.
8. If the population of frogs decreases, the number of insects would _____.
9. If the population of frogs decreases, the number of herons would _____.
10. An example of a producer would be: _____.
11. An example of a consumer would be: _____.
12. A _____ is the place where a species lives.
13. The frog is a good indicator animal because of its _____ and it lives in different _____.
14. When a species is no longer found anywhere: _____.
15. A species that is close to extinction in all parts of Canada or in a significantly large location: _____.
16. Any species that no longer exists in one part of Canada, but can be found in others: _____.
17. Any species that is likely to become endangered if factors that make it vulnerable are not reversed: _____.
18. Any species that is at risk because of low or declining numbers at the fringe of its range or in some restricted area: _____.
19. The number of species in an ecosystem is the _____.
20. An example of an extinct species is a _____.
21. The study of the interaction of living things with each other and the abiotic factors in the environment is called _____.
22. Factors in the ecosystem created by non-living agents are called _____.
23. Two abiotic factors would be: _____.
24. Factors in the ecosystem created by the presence and roles of other living things are called _____.
25. Two biotic factors would be: _____.
26. All of the members of a species living in the same ecosystem or habitat are called a _____.
27. The collection of all the populations of all the species in an ecosystem is called a _____.
28. The transition area between two ecosystems that includes members of the community of both ecosystems is called an _____.
29. A way of categorizing living things according to how they gain energy is called the _____.
30. An organism that uses energy and raw materials to make its own food is an _____.
31. An organism that is incapable of making its own food and must feed on other organism to get energy is called a _____.
32. A pictorial representation of the feeding relationship among organisms in an ecosystem _____.
33. In a food chain or food web, an organism relies on autotrophs directly for its source of energy is called a _____.
34. In a food chain or a food web, an organism that relies on primary consumers for its principal source of energy is called a _____.
35. Pyramids graphs come in three forms which are: _____.
36. The organism's place in the food web, its habitat, breeding area and the time of day that it is most active is called its _____.
37. A new species that is introduced to a new ecosystem is called an _____.
38. _____ is a mutually beneficial relationship between different organisms.
39. If one organism benefits and the other is unaffected the organisms are said to have a _____ relationship.
40. If both species benefit one of which may depend on each other these organisms have a _____ relationship.
41. _____ is a symbiotic relationship in which one species benefits and the other species is harmed.
42. The species that is harmed in a _____ relationship is called the _____.
43. The species that benefits in a _____ relationship is called the _____.