YUKON LIFE SCIENCES 11 (MLFSC11) · FINAL EXAM · 50 QUESTIONS

Final Exam — Practice Test

This practice test was made by AI and there may be mistakes. If a question or answer looks wrong, use the Flag a mistake button to let Brett know so he can fix it.

1 **Which process lets a cell obtain usable energy from food**

- A protein folding
- B water uptake
- C energy processing
- D cell division

Understand It with Pulse | Flag a mistake

2 **Natural selection acts most directly on the**

- A phenotype of an individual
- B age of a species
- C fossil record
- D climate of a region

Understand It with Pulse | Flag a mistake

3 **Modern classification groups organisms mainly by**

A evolutionary relationships

B habitat alone

C body size alone

D colour alone

Understand It with Pulse | Flag a mistake

4 **A waxy cuticle on a desert leaf mainly**

A protects roots from frost

B increases photosynthesis at night

C reduces water loss by evaporation

D absorbs water from air

Understand It with Pulse | Flag a mistake

5 **Which statement best describes the cell theory**

A all living things are made of one or more cells

B only animals are made of cells

C cells form only from nonliving matter

D viruses are made of many cells

Understand It with Pulse | Flag a mistake

6 **In a dry year, finches with larger beaks crack hard seeds better. These finches are more likely to**

A survive and reproduce

B change their genes at will

C move to a new continent

D stop eating seeds

Understand It with Pulse | Flag a mistake

7 **In a scientific name, the first word names the**

A kingdom

B genus

C species

D family

Understand It with Pulse | Flag a mistake

8 **Phloem tissue in a plant mainly transports**

A pollen to flowers

B sugars from leaves

C water from roots

D minerals from soil

Understand It with Pulse | Flag a mistake

9 **Which organelle is the main site of cellular respiration**

A Golgi apparatus

B chloroplast

C ribosome

D mitochondrion

Understand It with Pulse | Flag a mistake

10 **Migration by geese each autumn is an example of a**

A structural adaptation

B vestigial structure

C analogous structure

D behavioural adaptation

Understand It with Pulse | Flag a mistake

11 **Viruses are not classed as living things mainly because they**

- A cannot reproduce without a host cell
- B have no genetic material
- C never change over time
- D are too small to see

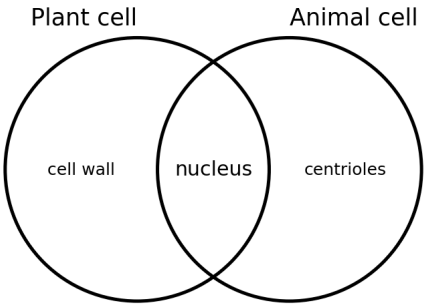
Understand It with Pulse | Flag a mistake

12 **Fish gills are suited for life in water because they**

- A have a large surface area for gas exchange
- B store food for winter
- C pump blood to fins
- D filter salt from blood

Understand It with Pulse | Flag a mistake

13 **The diagram compares a plant cell and an animal cell. The feature found in both cells is the**



A centriole

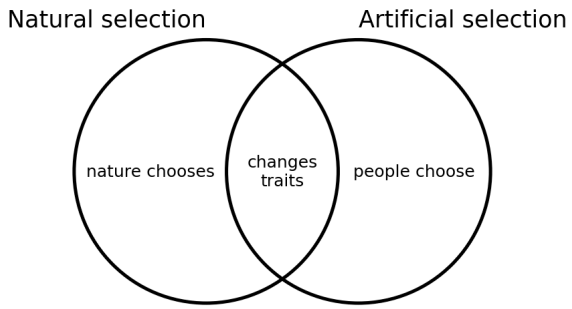
B large central vacuole

C nucleus

D cell wall

Understand It with Pulse | Flag a mistake

14 **The diagram compares natural selection and artificial selection. The feature shared by both is that they**



A act only on wild animals

B require genetic engineering

C change trait frequencies over generations

D are directed only by farmers

Understand It with Pulse | Flag a mistake

15 **A bacterium differs from a protist mainly because the bacterium has**

- A no cell membrane
- B no DNA
- C a large central vacuole
- D no membrane-bound nucleus

Understand It with Pulse | Flag a mistake

16 **Which of the following is an abiotic factor**

- A predator
- B competitor
- C parasite
- D temperature

Understand It with Pulse | Flag a mistake

17 **The nucleus of a eukaryotic cell is best described as the**

A organelle that digests waste

B site of protein assembly

C structure that holds most of the DNA

D fluid that fills the cell

Understand It with Pulse | Flag a mistake

18 **Two groups of frogs breed in different months. This is an example of**

A genetic drift

B reproductive isolation

C artificial selection

D fossil formation

Understand It with Pulse | Flag a mistake

19 **The cell walls of fungi contain**

A cellulose

B silica

C keratin

D chitin

Understand It with Pulse | Flag a mistake

20 **In a food chain, a producer is an organism that**

A eats only other animals

B breaks down dead matter

C lives as a parasite

D makes its own food from sunlight

Understand It with Pulse | Flag a mistake

21 **Which organism is made of prokaryotic cells**

A bacterium

B mushroom

C oak tree

D house cat

Understand It with Pulse | Flag a mistake

22 **The wing of a bat and the wing of an insect have similar jobs but different origins. They are**

A analogous structures

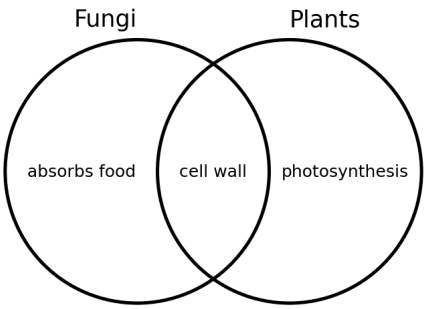
B homologous structures

C vestigial structures

D fossil structures

Understand It with Pulse | Flag a mistake

23 **The diagram compares fungi and plants. The feature found only in plants is**



A a nucleus

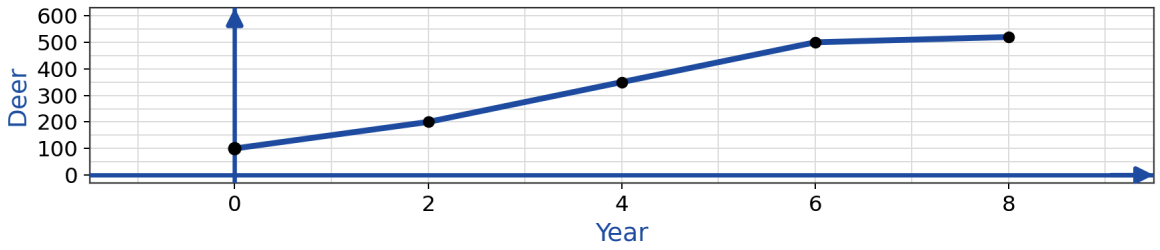
B multicellular body

C photosynthesis

D a cell wall

Understand It with Pulse | Flag a mistake

24 **The graph shows a deer population over eight years. In year 6, the population is**



- **A** 300
- **B** 400
- **C** 500
- **D** 600

Understand It with Pulse | Flag a mistake

25 **RNA differs from DNA because RNA usually is**

- **A** single-stranded and uses uracil
- **B** double-stranded and uses thymine
- **C** made of amino acids
- **D** found only in viruses

Understand It with Pulse | Flag a mistake

26 **Similar embryos in different vertebrates are evidence for**

A common ancestry

B artificial selection

C extinction

D geographic isolation

Understand It with Pulse | Flag a mistake

27 **A cladogram shows relationships by grouping organisms that share**

A the same diet

B derived traits

C the same habitat

D the same size

Understand It with Pulse | Flag a mistake

28 **Webbed feet help a duck swim because they**

A reduce body weight

B increase surface area for pushing water

C keep feet dry

D store food for winter

Understand It with Pulse | Flag a mistake

29 **Cellular respiration in most cells uses glucose and oxygen to make**

A glucose, oxygen, and light

B protein, starch, and sunlight

C nitrogen, water, and chlorophyll

D carbon dioxide, water, and energy

Understand It with Pulse | Flag a mistake

30 **When a small group colonizes a new island, allele frequencies may change by chance. This is called**

A artificial selection

B convergent evolution

C photosynthesis

D genetic drift

Understand It with Pulse | Flag a mistake

31 **The most specific taxonomic rank is the**

A species

B genus

C family

D domain

Understand It with Pulse | Flag a mistake

32 **A water lily has broad floating leaves. This structure helps it**

- A capture light at the water surface
- B reduce water loss in a desert
- C store water in a stem
- D resist freezing in soil

Understand It with Pulse | Flag a mistake

33 **A single-celled organism that makes its own food from sunlight is**

- A a parasite
- B an autotroph
- C a heterotroph
- D a decomposer

Understand It with Pulse | Flag a mistake

34 **Variation within a population is caused mainly by**

A learned habits

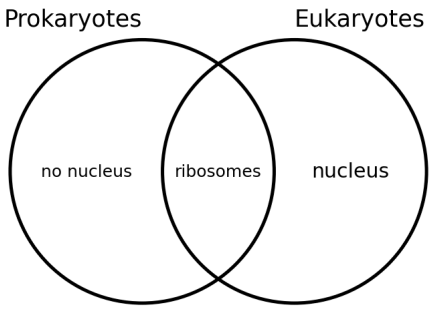
B mutation and sexual reproduction

C identical diets

D same habitat

Understand It with Pulse | Flag a mistake

35 **The diagram compares prokaryotes and eukaryotes. The feature found only in eukaryotes is a**



A cell membrane

B DNA

C ribosome

D membrane-bound nucleus

Understand It with Pulse | Flag a mistake

36 **A thick coat of fur in winter is an adaptation for**

A dry climates

B aquatic life

C night hunting

D cold climates

Understand It with Pulse | Flag a mistake

37 **Which pair lists two structures found in plant cells but not in most animal cells**

A cell wall and chloroplast

B nucleus and ribosome

C membrane and cytoplasm

D Golgi body and vacuole

Understand It with Pulse | Flag a mistake

38 **Convergent evolution is shown when unrelated species evolve**

A similar traits in similar environments

B identical DNA sequences

C the same common ancestor

D no traits in common

Understand It with Pulse | Flag a mistake

39 **Yeasts belong to the kingdom**

A Animalia

B Protista

C Fungi

D Plantae

Understand It with Pulse | Flag a mistake

40 **Abiotic factors such as rainfall affect plants by**

A pollinating their flowers

B competing for light

C changing water available for growth

D eating their leaves

Understand It with Pulse | Flag a mistake

41 **The energy released by cellular respiration is stored mainly as**

A DNA

B starch

C cellulose

D ATP

Understand It with Pulse | Flag a mistake

42 **Biogeography supports evolution because species on nearby islands**

A are always identical

B never share ancestors

C cannot adapt at all

D are often related but distinct

Understand It with Pulse | Flag a mistake

43 **Sponges are animals even though they do not move as adults because they**

A have cell walls

B form spores

C are multicellular and eat food

D photosynthesize

Understand It with Pulse | Flag a mistake

44 **Countercurrent heat exchange in a bird leg helps the bird**

A fly faster

B digest food faster

C keep heat in its body core

D cool its core in summer

Understand It with Pulse | Flag a mistake

45 **Which feature is shared by all cells, prokaryotic and eukaryotic**

A a chloroplast

B a cell wall

C a cell membrane

D a nucleus

Understand It with Pulse | Flag a mistake

46 **Directional selection favours individuals at**

A only the average

B no end at all

C one end of a trait range

D both ends equally

Understand It with Pulse | Flag a mistake

47 **Bacteria that cause disease are called**

A pollinators

B pathogens

C decomposers

D producers

Understand It with Pulse | Flag a mistake

48 **Protecting many different habitats helps biodiversity because it**

- A makes climates identical
- B supports many different species
- C removes all predators
- D stops all competition

Understand It with Pulse | Flag a mistake

49 **Transfer RNA during protein synthesis brings**

- A water across the membrane
- B amino acids to the ribosome
- C DNA out of the nucleus
- D glucose into the mitochondrion

Understand It with Pulse | Flag a mistake

50 **Common characteristics evolving over time can be seen when**

A allele frequencies stay fixed

B related species share similar structures

C unrelated species share no DNA

D fossils show no change

Understand It with Pulse | Flag a mistake

ANSWER KEY

1. C
2. A
3. A
4. C
5. A
6. A
7. B
8. B
9. D
10. D
11. A
12. A
13. C
14. C
15. D
16. D
17. C
18. B
19. D
20. D
21. A
22. A
23. C
24. C
25. A
26. A
27. B
28. B
29. D
30. D
31. A
32. A
33. B
34. B
35. D
36. D
37. A
38. A
39. C
40. C
41. D
42. D
43. C
44. C
45. C
46. C
47. B
48. B
49. B
50. B

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