NOVA SCOTIA ADVANCED BIOLOGY 11 · UNIT D · 25 QUESTIONS

Interactions among Living Things — 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 **A mark recapture study marks 40 animals and later recaptures 60 animals of which 10 were marked. Using the simple Lincoln index, the estimate is**

ANSWER _____

Understand It with Pulse | Flag a mistake

2 **An advanced field study measures 10000 units of producer energy. At 10 percent transfer, the primary consumer level holds, in units**

ANSWER _____

Understand It with Pulse | Flag a mistake

3 **A bioindicator species signals ecosystem health because it is**

- A abundant everywhere
- B a top predator only
- C invisible
- D sensitive to change

Understand It with Pulse | Flag a mistake

4 **A food web is more stable than a single food chain because it has**

- A alternative food sources
- B fewer species, with only one or two kinds of organism in the whole web
- C one producer
- D no decomposers

Understand It with Pulse | Flag a mistake

5 **A forest plot holds 90 trees and 30 are removed. The trees remaining are**

ANSWER _____

Understand It with Pulse | Flag a mistake

6 **A K selected species typically has**

A. many offspring and no care, with parents leaving the young to fend for themselves

B. rapid growth always

C. short life only

D. few offspring and much parental care

Understand It with Pulse | Flag a mistake

7 **A mark recapture study estimates population size using the proportion of**

A marked animals recaptured

B animals born, counting every birth in the population over the whole study

C animals eaten

D animals migrating

Understand It with Pulse | Flag a mistake

8 **A mutualism between a bee and a flower benefits the bee with food and the flower with**

A water

B pollination

C soil

D shade

Understand It with Pulse | Flag a mistake

9 **A pond holds 3000 units of producer energy and 10 percent passes on. The herbivore energy, in units, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

10 **A population of 400 falls by 50. The population remaining is**

ANSWER _____

Understand It with Pulse | Flag a mistake

11 **A population of 200 grows by 25 percent in one season. The increase is**

ANSWER _____

Understand It with Pulse | Flag a mistake

12 **A population pyramid with a wide base shows a population that is**

A shrinking

B growing

C stable

D extinct

Understand It with Pulse | Flag a mistake

13 **A quadrat is used to sample organisms that are**

A sessile or slow moving

B fast flying

C underground only

D in deep water only

Understand It with Pulse | Flag a mistake

14 **A survivorship curve that drops steeply early in life is typical of species producing**

- A few offspring with much care
- B no offspring
- C many offspring with little care
- D clones only

Understand It with Pulse | Flag a mistake

15 **A transect is a line along which samples are taken to study**

- A a single point, with no change at all along the line from one end to the other
- B animal speed
- C change across a gradient
- D soil colour only

Understand It with Pulse | Flag a mistake

16 **A trophic cascade happens when a change at one level affects**

A other levels in the food web

B only producers, with no effect at all on consumers or on the rest of the web

C only soil

D only climate

Understand It with Pulse | Flag a mistake

17 **Acid rain can harm aquatic ecosystems by lowering water**

A temperature

B oxygen only

C pH

D salt content

Understand It with Pulse | Flag a mistake

18 **An ecological footprint estimates the land needed to support a**

A single plant, with its roots and leaves and nothing else counted at all

B river

C person or population lifestyle

D season

Understand It with Pulse | Flag a mistake

19 **An r selected species typically has**

A slow reproduction and long life

B no reproduction

C large body size only

D rapid reproduction and short life

Understand It with Pulse | Flag a mistake

20 **Character displacement is divergence in traits where species**

A never meet

B are extinct

C are identical

D overlap in range

Understand It with Pulse | Flag a mistake

21 **Climate change can shift species ranges mainly toward**

A warmer regions

B cities

C cooler regions

D oceans only

Understand It with Pulse | Flag a mistake

22 **A mark recapture study marks 30 animals and later recaptures 90 animals of which 10 were marked. Using the simple Lincoln index, the estimate is**

ANSWER _____

Understand It with Pulse | Flag a mistake

23 **An advanced field study measures 20000 units of producer energy. At 10 percent transfer, the primary consumer level holds, in units**

ANSWER _____

Understand It with Pulse | Flag a mistake

24 **A mark recapture study marks 50 animals and later recaptures 100 animals of which 10 were marked. Using the simple Lincoln index, the estimate is**

ANSWER _____

Understand It with Pulse | Flag a mistake

25 **An advanced field study measures 5000 units of producer energy. At 10 percent transfer, the primary consumer level holds, in units**

ANSWER _____

Understand It with Pulse | Flag a mistake

ANSWER KEY

1.	240	**10.**	350	**19.**	D
2.	1000	**11.**	50	**20.**	D
3.	D	**12.**	B	**21.**	C
4.	A	**13.**	A	**22.**	270
5.	60	**14.**	C	**23.**	2000
6.	D	**15.**	C	**24.**	500
7.	A	**16.**	A	**25.**	500
8.	B	**17.**	C		
9.	300	**18.**	C		

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