

Question 1

In a random sample,

- A) certain participants have a greater chance of selection, although selections are independent.
- B) certain participants have a greater chance of selection, and the selections are dependent.
- C) every member of population has equal chance of selection, although selections are dependent.
- D) every member of population has equal chance of selection, and the selections are independent.

Answer: <https://biology-forums.com/index.php?topic=261799>

Question 2

The more a researcher knows about an area of interest,

- A) the less refined the research question will be.
- B) the more likely it is that high-constraint research methods will be employed.
- C) the more likely it is that low-constraint research methods will be employed.
- D) the more he or she can afford to ask less refined questions.

Answer: <https://biology-forums.com/index.php?topic=260614>

Question 3

Translational research

- A) has been the reigning research model for nearly 69 decades.
- B) has been supplanted by basic research in recent years.
- C) is a fairly new model for researchers.
- D) prevents application of research findings to real-world problems.

Answer: <https://biology-forums.com/index.php?topic=260604>

Question 4

A normal curve is

- A) positively skewed.
- B) negatively skewed.
- C) symmetric.
- D) bimodal.

Answer: <https://biology-forums.com/index.php?topic=260948>

Question 5

What treatment is most likely to be evaluated with a single-subject experimental design?

- A) a medication
- B) teaching method
- C) psychological treatment
- D) All of the above

Answer: <https://biology-forums.com/index.php?topic=262276>

Question 6

Both Darwin and Wallace found that species

- A) show little or no change over time.
- B) occur randomly.
- C) do not occur randomly.
- D) change significantly from one generation to another.

Answer: <https://biology-forums.com/index.php?topic=261160>

Question 7

The lowest level of measurement is represented by the _____ scale.

- A) interval
- B) ordinal
- C) ratio
- D) nominal

Answer: <https://biology-forums.com/index.php?topic=260747>

Question 8

One limitation of both correlational and differential research is that

- A) it is difficult to make accurate observations in each approach.
- B) there are often problems in determining causation.
- C) statistical analyses is often difficult or impossible.
- D) the random assignment of participants produces potential confounding.

Answer: <https://biology-forums.com/index.php?topic=261479>

Question 9

In evaluating a nutritional breakfast program for children in poverty, randomly assigning children to breakfast/no-breakfast groups

- A) will create clear statistical problems.
- B) will create data that are uninterpretable.
- C) is an ethical problem.
- D) should always include a repeated measures component.

Answer: <https://biology-forums.com/index.php?topic=262544>

Question 10

In an experiment, the causal hypothesis

- A) cannot be confirmed or disconfirmed.
- B) is accepted before the null hypothesis is rejected.
- C) is accepted only if the null hypothesis is accepted.
- D) can be accepted only if the null hypothesis is rejected.

Answer: <https://biology-forums.com/index.php?topic=261559>

Question 11

Randomization in experiments is typically done using

- A) a coin.
- B) an abacus.
- C) numbers in a hat.
- D) random numbers.

Answer: <https://biology-forums.com/index.php?topic=261805>

Question 12

A 4 X 3 factorial design has _____ factors.

- A) 2
- B) 3
- C) 4
- D) 12

Answer: <https://biology-forums.com/index.php?topic=262310>

Question 13

The distinction between the average deviation and the variance is

- A) the average deviation is the square root of the variance.
- B) the average deviation is the average distance each score is from the mean, whereas the variance is the average squared distance each score is from the mean.
- C) the average deviation is the square of the variance.
- D) the variance is the square of the standard deviation, which is equal to .707 times the average deviation.

Answer: <https://biology-forums.com/index.php?topic=261015>

Question 14

If the p-value for an F-test is less than the alpha level chosen in the experimental design phase, you should

- A) reject the null hypothesis and conclude that there is a significant difference between groups.
- B) reject the null hypothesis and conclude that there is no significant difference between groups.
- C) accept the null hypothesis and conclude that there is a significant difference between groups.
- D) accept the null hypothesis and conclude that there is no significant difference between groups.

Answer: <https://biology-forums.com/index.php?topic=262059>

Question 15

Carefully controlling measurement conditions and developing reliable measurement instruments aids in minimizing

- A) extraneous variance.
- B) error variance.
- C) systematic effects.

D) experimental variance.

Answer: <https://biology-forums.com/index.php?topic=261983>

Question 16

The minimum number of groups required in differential research is

- A) one.
- B) three.
- C) two.
- D) four.

Answer: <https://biology-forums.com/index.php?topic=261449>

Question 17

Ideas constructed by researchers on the basis of observed events are called

- A) phantasms.
- B) observations.
- C) hypotheses.
- D) constructs.

Answer: <https://biology-forums.com/index.php?topic=260403>

Question 18

In experimentation, researchers

- A) use all possible controls in every study.
- B) use only control procedures that apply to that study.
- C) only use controls at the experimental levels.
- D) only use the control procedures that are easiest to implement.

Answer: <https://biology-forums.com/index.php?topic=261664>

Question 19

In matched-subjects designs,

- A) each participant is exposed to all levels of the dependent variable.
- B) each participant is exposed to one level of the dependent variable.
- C) each participant has a matched participant in each condition.
- D) each participant is exposed to all levels of the independent variable.

Answer: <https://biology-forums.com/index.php?topic=262171>

Question 20

Most parametric statistics are _____ violations of assumptions about population distributions.

- A) sensitive to
- B) ignorant of
- C) robust to
- D) redolent of

Answer: <https://biology-forums.com/index.php?topic=262670>