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- C) MRI
- D) Sonography
- E) Radiography

- 8) The study of the structure and function of cells is called \_\_\_\_\_. A) cytology
- B) gross anatomy
  - C) exploratory physiology
  - D) comparative physiology
  - E) radiology

- 9) Ultrastructure refers to the detailed structure to the level of the \_\_\_\_\_.
- A) molecule
  - B) cell
  - C) organelle
  - D) tissue
  - E) organ

10) The study of how hormones function is called\_\_\_\_\_.

- A) neuroanatomy
- B) neurophysiology
- C) endocrinology
- D) histology
- E) pathophysiology

11) The study of mechanism of disease is called\_\_\_\_\_.

- A) neuroanatomy
- B) neurophysiology
- C) endocrinology
- D) histology
- E) pathophysiology

12) The terms *physics*, *physiology*, and *physician* come from a term\_\_\_\_\_proposed to distinguish natural causes from supernatural causes.

- A) Hippocrates
- B) Plato
- C) Schwann
- D) Aristotle
- E) Avicenna

13) Who was a physician to the Roman gladiators, learned by dissection of animals, and saw science as a method of discovery?

- A) Hippocrates
- B) Plato
- C) Schwann
- D) Aristotle
- E) Galen

14) Cells were first named by microscopist Robert Hooke.  true

false

15) All functions of the body can be interpreted as the effects of cellular activity.  true

false

- 16) Known as "the father of modern anatomy," \_\_\_\_\_ was the first to publish accurate drawings of the body.
- A) Vesalius
  - B) Maimonides
  - C) Harvey
  - D) Aristotle
  - E) van Leeuwenhoek
- 17) The most influential medical textbook of the ancient era was written by \_\_\_\_\_.
- A) Hippocrates
  - B) Aristotle
  - C) Galen
  - D) Vesalius
  - E) Avicenna
- 18) Who established a code of ethics for physicians and is considered the "father of medicine"?
- A) Aristotle
  - B) Hippocrates
  - C) Galen
  - D) Vesalius
  - E) Hooke
- 19) The *hypothetico-deductive method* is common in physiology, whereas the *inductive method* is common in anatomy.
- true
  - false



- 20) What is the process of using numerous observations to develop general principles and predictions about a specific subject called?
- A) Experimental design
  - B) The deductive method
  - C) The inductive method
  - D) A hypothesis
  - E) Statistical testing
- 21) Most people think that ulcers are caused by psychological stress. It was discovered that an acid-resistant bacterium, *Helicobacter pylori*, lives in the lining of the stomach. If these bacteria cause ulcers, then treatment with an antibiotic should reduce ulcers. This line of investigation is an example of\_\_\_\_\_.
- A) hypothetical reasoning
  - B) hypothetico-deductive reasoning
  - C) the inductive method
  - D) experimental design
  - E) statistical analysis
- 22) The use of controls and statistical testing are two aspects of experimental design that help to ensure\_\_\_\_\_.
- A) an adequate sample size
  - B) objective and reliable results
  - C) experimental bias
  - D) psychosomatic effects
  - E) treatment groups
- 23) Which process submits a scientist's ideas to the critical judgment of other specialists in the field before the research is funded or published?
- A) Adjudication
  - B) Statistical testing
  - C) Falsification
  - D) Peer review
  - E) Hypothetico-deductive testing
- 24) A new drug apparently increases short-term memory. Students were divided randomly into two groups at the beginning of the semester. One group was given the memory pill once a day for the semester, and the other group was given a same-looking pill, but it was just sugar. The sugar pill is termed a(n)\_\_\_\_\_.

- A) controlled pill
- B) placebo
- C) treatment pill
- D) variable
- E) effective dose

25) Two groups of people were tested to determine whether garlic lowers blood cholesterol levels. One group was given 800 mg of garlic powder daily for four months and exhibited an average 12% reduction in the blood cholesterol. The other group was not given any garlic and after four months averaged a 3% reduction in cholesterol. The group that was not given the garlic was the \_\_\_\_\_ group.

- A) peer
- B) test
- C) treatment
- D) control
- E) double-blind

26) An individual scientific fact has more information than a theory.  true  false

27) An educated speculation or a possible answer to a question is called a(n) \_\_\_\_\_. A) scientific method

- B) theory
- C) law
- D) hypothesis
- E) fact

28) Which of the following would contain the greatest amount of information that scientists consider to be true to the best of their knowledge?

- A) A fact
- B) A law of nature
- C) A hypothesis
- D) An equation
- E) A theory

- 29) Evolutionary (Darwinian) medicine traces some of our diseases to our evolutionary past.  true  
 false
- 30) If a species of animal evolves over generations to grow a large fan-blade like growth on its back to catch the wind and cool its body, this would be an example of responding to\_\_\_\_\_.
- A) selection pressure
  - B) adaptation
  - C) natural selection
  - D) climate change
  - E) positive feedback
- 31) The terms *development* and *evolution* have the same meaning in physiology.  true  
 false
- 32) What is a change in the genetic composition of a population over time called?
- A) Mutation
  - B) Natural selection
  - C) Selection pressure
  - D) Evolution
  - E) Adaptation
- 33) The constant appearance of new strains of influenza virus is an example of\_\_\_\_\_.
- A) a model
  - B) evolution
  - C) selection pressure
  - D) survivorship
  - E) success
- 34) What is the principal theory of how evolution works?
- A) Natural pressure
  - B) Selective pressure
  - C) Darwinian pressure
  - D) Natural adaptation
  - E) Natural selection
- 35) Stereoscopic vision provides\_\_\_\_\_.