

ENTRANCE EXAM SAMPLE QUESTIONS

English

DIRECTIONS: *In the following questions, you are to determine the relationship between the first pair of capitalized words and then decide which of the answer choices shares a similar relationship with the third capitalized word.*

1. **OCCULT : OVERT :: SECRET :**
a. abstract c. outward
b. science d. concealed

2. **OLFACTORY : NOSE :: TACTILE :**
a. tacit c. bloody
b. sensation d. finger

3. **ABIDE : DEPART :: STAY :**
a. over c. home
b. play d. leave

4. **NECKLACE : ADORNMENT :: MEDAL :**
a. jewel c. bravery
b. metal d. decoration

5. **PROCLIVITY : INCLINATION :: BARBAROUS :**
a. refined c. uncouth
b. typical d. volatile

DIRECTIONS: *In each of the sentences below, one word is in italics. Following each sentence are four words or phrases. For each sentence, select the word or phrase that best corresponds in meaning to the italicized word.*

6. The soldiers retreated to a position of *comparative* safety.
a. objective c. relative
b. subjective d. scientific

7. He smiled *wryly*.
a. deceptively c. nastily
b. ironically d. delightfully

8. His *ineptitude* cost him his job.
a. inaccuracy c. inefficiency
b. tardiness d. poor attitude

9. He used the *allotted* study time to complete his assignments.
a. authorized c. agreed
b. designated d. alerted

10. A *simulated* rescue mission was conducted by the forest rangers.

- a. Pretended
- b. Superficial
- c. stimulated
- d. simultaneous

DIRECTIONS: For each of the following test items, select the word that has the same or almost the same meaning as the word printed in capital letters.

11. PERSONABLE

- a. intimate
- b. cheerful
- c. attractive
- d. superficial

12. FORBEARANCE

- a. Indulge
- b. Pliancy
- c. politeness
- d. impatience

13. UNETHICAL

- a. Vulgar
- b. Feasible
- c. pompous
- d. unscrupulous

Life Sciences

1. Which of the following is a cranial bone?
 - a. ethmoid bone
 - b. maxilla
 - c. nasal bone
 - d. mandible

2. The vitamin that helps clotting of the blood is
 - a. C
 - b. D
 - c. E
 - d. K

3. Which of the following blood components is responsible for the formation of blood clotting to stem the loss of blood during an injury?
 - a. neutrophils
 - b. lymphocytes
 - c. monocytes
 - d. platelets

4. The airways is _____ to the food tube, or esophagus.
 - a. anterior
 - b. posterior
 - c. proximal
 - d. distal

5. The fundamental principle expressed by the Einstein Equation, $E = mc^2$, on mass-energy equivalency is that
 - a. small mass = much energy
 - b. small mass = little energy
 - c. little energy = great mass
 - d. all the above

6. The cell that is responsible for maintaining bone matrix once it has formed is
 - a. osteoclasts
 - b. osteoblasts
 - c. osteocytes
 - d. fibroblasts

7. An atom is neutral if the number of its electrons is equal to its
 - a. number of protons
 - c. atomic weight

- b. number of nucleons
d. none of the above
8. The barrier between a cell and its environment is the
a. nucleus
b. cytoplasm
c. nuclear envelope
d. plasma membrane
9. Which tissue forms coverings, linings, and glands?
a. adipose
b. connective
c. epithelial
d. muscular
10. Which of the following is NOT an accessory organ of digestion?
a. the appendix
b. the gall bladder
c. the liver
d. the pancreas
11. The pharynx
a. extends from the internal nares to the esophagus.
b. is composed of smooth muscle.
c. is lined with a serous membrane.
d. serves the respiratory, but not the digestive, system.
12. The sites of exchange between the blood and the tissues are the
a. arteries
b. capillaries
c. arterioles
d. venules
13. A Papanicolaou smear
a. is recommended for all men as part of an annual exam.
b. is a treatment for some forms of cancer.
c. cannot detect changes that may be associated with cancer.
d. examines non-keratinized stratified squamous epithelium.
14. A neutron is heavier than an electron. The ratio of their masses is approximately
a. 10:1
b. 1000:1
c. 1400:1
d. 1800:1
15. The mass number (A) of an atom is equal to the sum of the
a. neutrons
b. protons
c. nucleons
d. atomic masses minus the total binding energy

Mathematics

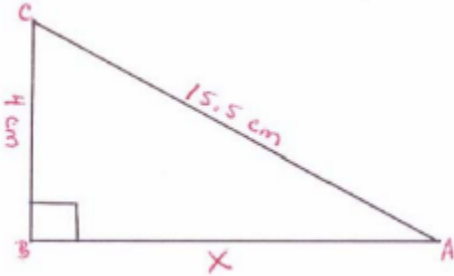
1. $20 + 8 \times 10 + 10 \div 2 =$
a. 145
b. 65
c. 285
d. 105
2. When eight times a number is increased by 12, the result is 140. What is the number?
a. 13.6
b. 16
c. 44
d. 35
3. What percent of 15 is 8?
a. 53%
c. 7%

- b. 120%
- d. 23%

4. $28 + 5(2 \times 6) - (9 + 3) =$

- a. 390
- b. 34
- c. 76
- d. 82

5. In the following triangle, what is the length of the side marked "x" to the nearest cm?



- a. 11 cm
- b. 14 cm
- c. 15 cm
- d. 16 cm

6. $\frac{1}{8} + \frac{1}{4} + 1\frac{1}{2} =$

- a. $1\frac{3}{8}$
- b. $1\frac{7}{8}$
- c. $\frac{3}{14}$
- d. 1.75

7. Solve for x:

$$\frac{2x+5}{5} - \frac{x}{5} = 0$$

- a. $x = -5$
- b. $x = -1$
- c. $x = 5$
- d. $x = 1$

8. A crew of electrician can wire 6 houses in 144 hours. How many hours will it take them to wire 9 houses?

- a. 144 hrs
- b. 216 hrs
- c. 375 hrs
- d. None of the above

9. Which of the following statements about logarithmic functions is true?

- a. natural logarithms have a base of 10
- b. common logarithms have a base of 10
- c. all logarithmic functions have a base of 10
- d. none of the above

10. Calculate $\text{Log} [(20)(8)]$.

- a. $\text{Log} (28)$
- b. $\text{Log} (160)$
- c. $\text{Log} (20) - \text{Log} (8)$
- d. 2.204

Complete the following conversions:

11. 230 cm = _____ meters

- a. 23 m
- b. 2.3 m
- c. 0.23 m
- d. 230 m

12. 3.45 km = _____ cm

- a. 34,500 cm
- b. 3,450 cm
- c. 345 cm
- d. 345,000 cm

13. 0.179 Kg = _____ g
a. 179 g b. 1.79 g c. 17.9 g d. 1,790 g

14. 87° Fahrenheit = _____ °C
a. 16.3 b. 66.1 c. 30.6 d. 43.2

15. 40 °C = _____ ° Fahrenheit
a. 129.6 b. 104 c. 72 d. 98.6