

VERBAL REASONING

Complete the sentences by choosing the best option, from the given lettered choices (A to D) below each.

1. A herd of elephants _____ ready to attack the lion.

- A. been
- B. being
- C. had
- D. was

2. Our business wouldn't have failed if we _____ properly.

- A. had planned
- B. have planned
- C. planned
- D. were planning

Four lettered pairs (A to D) follow a related pair of words given in the question. Select the lettered pair that best expresses a relationship similar to that expressed in the original pair in capital letters.

3. THICK: THIN::

- A. close: shut
- B. small: tiny
- C. wide: broad
- D. young: old

4. SHEEP: BARN::

- A. bee: hive
- B. cat: kitten
- C. dog: pack
- D. snake: hiss

Each of the following questions consists of a sentence with all or part of the sentence underlined. Following the requirements of standard written English, select (A) if the

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original is best; otherwise choose the best phrase from the options.

5. She asked me if I had enjoyed.

- A. I had enjoyed
- B. did i have enjoyed
- C. have i had enjoyed
- D. that i had enjoyed

Choose the lettered word or phrase that is **MOST NEARLY OPPOSITE** in meaning to the word in capital letters.

6. When something **RECEDES**, it is not moving _____.

- A. backward
- B. downward
- C. forward
- D. upward

7. A person who is **FALTERING** is not _____.

- A. accurate
- B. biased
- C. confident
- D. dangerous

Choose the lettered word or phrase that is **MOST NEARLY SIMILAR** in meaning to the word in capital letters.

8. When a bird **SOARS** it _____.

- A. bites
- B. lays eggs
- C. makes a nest
- D. rises

9. A **WEARY** person feels _____.

- A. annoyed
- B. hungry
- C. tired
- D. worried

Question 10 is based on the following paragraph.

If you go back far enough, everything lived in the sea. At various points in evolutionary history, enterprising individuals within many different animal groups moved out onto the land, sometimes even to the most parched deserts, taking their own private seawater with them in blood and cellular fluids. In addition to the reptiles, birds,

mammals and insects which we see all around us, other groups that have succeeded out of water include scorpions, snails, crustaceans such as woodlice and land crabs, millipedes and centipedes, spiders and various worms. And we mustn't forget the plants, without whose prior invasion of the land none of the other migrations could have happened.

Moving from water to land involved a major re-decision on the part of every aspect of life, including breathing and reproduction. Nevertheless, a good number of thoroughgoing land animals later turned around, abandoned their hard-earned terrestrial re-tooling, and returned to the water again. Seals have only gone part way back. They show us what the intermediates might have been like, on the way to extreme cases such as whales and dugongs. Whales (including the small whales called dolphins) and dugongs, with their close cousins the manatees, ceased to be land creatures altogether and reverted to the full marine habits of their remote ancestors. They don't even come ashore to breed. They do, however, breathe air, having never developed anything equivalent to the gills of their earlier marine incarnation. Turtles went back to the sea a very long time ago and like all vertebrate returnees to the water, they breathe air. However, they are in one respect, less fully given back to the water than whales or dugongs, for turtles still lay their eggs on beaches.

There is evidence that all modern turtles are descended from a terrestrial ancestor which lived before most of the dinosaurs. There are two key fossils of turtles dating from early dinosaur times, which appear to be close to the ancestry of all modern turtles and tortoise. Both these fossils were land-dry tortoise. They come from the era before our turtles returned to the water.

One might think, therefore, that modern land tortoises have probably stayed on land ever since those early terrestrial times, as most mammals did after a few of them went back to the sea. But apparently not. If we draw out the family tree of all modern turtles and tortoise, nearly all the branches are aquatic. Today's land tortoise constitutes a single branch, deeply nested among branches constituting of aquatic turtles. This suggests that modern land tortoise have not stayed on land continuously. Rather their ancestors were among those who went back to the water, and they only re-emerged back onto the land in relatively more recent times.

10. The groups of animals who migrated from sea to live on land

- _____.
- A. completely perished
 - B. helped one other
 - C. increased in number
 - D. were adventurous

ANALYTICAL REASONING

Questions 11-16

A certain kind of traditional cloth is woven from as many as seven colors of yarn: blue, green, orange, purple, red, white, and yellow. Each piece is woven with a background of exactly one color; and either a human figure or a bird figure, or both, are woven into each piece. The following additional restrictions apply to the use of colors: Each figure must include at least three colors.

The color used for the background of a piece cannot be used in any figures on that piece.

Any two figures on a single piece can have at most two colors in common.

Neither blue nor purple can be used in bird figures.

If green is used in a figure, both white and yellow must be used in that figure.

11. For a piece with a red background and only a human figure, which of the following could be a complete and accurate list of the colors that are used in the figure?
 - A. Blue and purple
 - B. Blue, purple, green, and orange
 - C. Blue, red, and yellow
 - D. Orange, white, and yellow

12. For a piece with a white background and a bird figure only, which of the following must be the colors used in the figure?
 - A. Blue, green, and orange
 - B. Green, orange, and yellow
 - C. Orange, red, and yellow
 - D. Red, white, and yellow

13. For a piece with two figures that have exactly one color in common, that color could be any of the following EXCEPT:
 - A. Blue
 - B. Orange
 - C. Red
 - D. Yellow

14. For a piece with both a human figure and a bird figure if the background is orange and the human figure includes green, then the bird figure must be which of the following colors?
 - A. Blue, purple, and orange

- B. Green, white, and yellow
- C. Orange, red, and yellow
- D. Red, white, and yellow

15. A piece with two figures must be woven of yarn of at least how many colors?

- A. 3
- B. 5
- C. 6
- D. 7

16. For a piece with two figures that have no colors in common, the background cannot be which of the following colors?

- A. Blue
- B. Purple
- C. Red
- D. White

A population study based on a "micro-data sample" a sample just large enough to allow reasonably accurate projections, found that in 1984 there had been a dramatic reversal of a twenty-year tendency toward migration of United States residents older than sixty to small towns and rural regions, both within and across state boundaries. This finding turns out to have been in error. The problem was that people who had moved to the United States from abroad were accidentally counted as part of interstate migration that year.

17. Which of the following can be inferred from the passage above?

- A. In 1984 fewer United States residents over the age of sixty changed residence than in any of the twenty years prior to 1984
- B. In 1984 the majority of people coming to the United States from abroad were over the age of sixty
- C. People over the age of sixty who in 1984 came to the United States from abroad did not settle predominantly in small towns and rural regions
- D. The micro-data sample for 1984 that was used in the demographic study cited was too small to allow any meaningful projections

Over several months' new residents of a housing development complained to their town council about unpleasant barnyard odors from a nearby farm. The council concluded that, because the residents were not used to rural life, they had mistakenly identified as a barnyard odor the smell of the town's new leaf-composting pile, located on a site adjacent to the farm.

18. Which of the following, if true, would most seriously weaken the town council's conclusion?

- A. No one else in the town had complained of ' unpleasant odors from the farm
- B. Some of the new residents had moved to this town in order to lead a more rural life
- C. The farm was selected as the location for the leaf-composting pile before the housing development was built
- D. The new residents' complaints started before the establishment of the town's leaf-composting pile

Questions 19-20

Seven office files, File 1, File 2, File 3, File 4, File 5, File 6 and File 7 are placed one above the other in a particular way.

File 5 is placed exactly above File 7.

File 3 is fourth from the bottom and File 2 is fifth from the top.

There are two files in between File 7 and File 4.

File 6 is at the bottom.

19. Which of the following file is/are between File 7 and File 6?

- A. File 3
- B. File 3 and File 2
- C. File 3 and File 4
- D. File 3, File 2 and File 4

20. Which three files are kept above File 2?

- A. File 3, File 7 and File 5
- B. File 6, File 4 and File 3
- C. File 6, File 4 and File 5
- D. File 6, File 4 and File 7

QUANTITATIVE REASONING

21. The sum of three altitudes of a triangle is _____.
- A. equal to the sum of three sides
 - B. half the sum of sides
 - C. less than the sum of sides
 - D. two times the sum of sides
22. If $f(x) = x^2 + 1$ then range of f will be _____.
- A. integers
 - B. non-negative integers
 - C. positive integers
 - D. real numbers
23. Find the number of terms of the series $1/27, 1/9, 1/3, \dots, 729$.
- A. 10
 - B. 11
 - C. 12
 - D. 13
24. Five years ago, the average age of A, B and C was 25 years and that of B and C 10 years ago was 20 years. A's present age is _____.
- A. 30 years
 - B. 35 years
 - C. 40 years
 - D. 45 years
25. If the origin gets shifted to $(2, 2)$, then what will be the new coordinates of the point $(4, -2)$?
- A. $(-2, 4)$
 - B. $(-2, -4)$
 - C. $(2, 4)$
 - D. $(6, 0)$
26. Which of the following is an even function?
- A. x^{-8}
 - B. x^3
 - C. x^{73}
 - D. x^{-33}
27. The domain of the function $y = 1/(4 - x^2)^{1/2}$ is _____.
- A. $[-2, 2]$
 - B. $(-2, 2)$
 - C. $(3, -3)$

D. [3, -3]

28. The least value of n for which the sum of the series $5 + 10 + 15 \dots n$ term is not less than 765 is _____.

- A. 16
- B. 17
- C. 18
- D. 20

29. The degree of $x^3 + x^2y^3 - 7z$ is _____.

- A. 2
- B. 3
- C. 5
- D. 7

30. If sum of roots of the equation $3x^2 - (5k - 2)x + 8 = 0$ is equal to product of roots. The value of k is _____.

- A. -2
- B. 0
- C. 2
- D. 3

ANSWER KEY

1	D	7	C	13	A	19	D	25	B
2	A	8	D	14	C	20	A	26	A
3	D	9	C	15	B	21	C	27	B
4	A	10	D	16	D	22	C	28	B
5	A	11	D	17	C	23	A	29	C
6	C	12	C	18	D	24	A	30	A