

VERBAL REASONING

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

1. "That is very kind _____ you", I thanked him.

- A. at
- B. for
- C. in
- D. of

2. After the drumbeat _____ the drummer called out to the people.

- A. cease
- B. ceased
- C. has ceased
- D. had ceased

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. GLOVES: HANDS::

- A. ears: band
- B. eyes: shortsightedness
- C. legs: walking
- D. socks: feet

4. LETTUCE: GREEN::

- A. brown: texture
- B. delicious: cake
- C. orange: peel
- D. strawberry: red

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

5. Your good gestures will highly appreciate.

- A. will highly appreciate
- B. will be highly appreciate
- C. will be high appreciative
- D. will be highly appreciated

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

6. ADORE

- A. Despite
- B. Gentle
- C. Hate
- D. Love

7. HARMONY

- A. Conflict
- B. Joy
- C. Solace
- D. Success

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

8. DILIGENTLY

- A. Carelessly
- B. Badly
- C. Happily
- D. Hard

9. PERISH

- A. Decay
- B. Growing
- C. Standing
- D. Working

Question 10 is based on the following paragraph.

In the event of rain, the picnic will not be postponed. It will be held as scheduled but will take place in the cafeteria. If you plan to attend the picnic, please send an e-mail to the clerk. You must let her know before Friday as the food order will be given to the caterers early Friday afternoon. A few people have expressed an interest in bringing a special dish from home to share. Again, please tell the clerk before Friday if you plan to do this.

10. What will happen if it rains?

- A. The cafeteria will be closed**
- B. The mail will not be delivered**
- C. The picnic will be held inside**
- D. The picnic will be rescheduled**

ANALYTICAL REASONING

In a study of more than 8,000 people using ten beaches on two of the Great Lakes, ecologists from the University of Toronto determined that the rate of respiratory and gastrointestinal illness among people who had been swimming was 69.6 per 1,000, whereas the respiratory and gastrointestinal illness rate among those who had not been swimming was only 29.5 per 1,000.

11. Which of the following conclusions can be most properly drawn from the data above?
- A. Illnesses of kinds other than respiratory and gastrointestinal are not likely to be associated with swimming in either of these lakes
 - B. People tend to underestimate the risks of swimming in these lakes
 - C. Respiratory and gastrointestinal illnesses occur at a higher rate as a result of swimming in either of these lakes than they do as a result of swimming in any other lake
 - D. The association between swimming in these lakes and respiratory and gastrointestinal illness is some evidence for a causal relationship between them

Most road repairs require more time and money than is budgeted, but last summer's night time repairs of Highway 93 and similar roads required no more time or money than had been budgeted. Therefore, making summer repairs to major roads at night would save both time and money.

12. Which of the following, if true, most strongly supports the conclusion drawn above?
- A. Road repair crews that work at night mark their work sites with bright flashing lights in addition to the orange cones they use during the daytime
 - B. Road workers who are willing to work at night have an easier time finding jobs, since most people would rather work in the daytime
 - C. The budget for the repairs to Highway 93 was generous enough to make it unlikely that it would be exceeded
 - D. The smaller number of cars on the roads at night and more comfortable nighttime temperatures allow road workers to work more quickly

The chief executive officer of one of the country's most successful steel manufacturing firms is amused at the publicity her management practices have attracted. She thinks managers get too much of the credit for upswings in their businesses. "A fickle public assumes too easily that managers are brilliant when demand is strong and idiotic

when it is weak," she asserts.

13. It can be inferred from the statement made by the chief executive officer that she believes which of the following?

- A. A successful manager should attempt to control public opinion**
- B. Her own management practices are likely to be of little value to other businesses**
- C. The level of demand for the products of manufacturing firms cannot be completely controlled by the managers of the firms**
- D. There are no managers who can justifiably be said to be brilliant**

For acrylic, a clear rigid plastic, to be cast, fairly complex molecules must be induced to link up, in a process called polymerization. Polymerization is exothermic; i.e., its net effect is that each time molecules link, a small quantity of heat is generated. In addition, the rate of linking speeds up as temperature increases.

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

- A. In the casting of thin sheets of acrylic, which lose heat quickly to the surrounding air, polymerization proceeds much faster than it does in the casting of thick pieces**
- B. The method used to trigger the process of polymerization is a sharp increase in the temperature of the surrounding air**
- C. Unless the heat that results from the linking of molecules is drawn off promptly, there will be a heat buildup at an accelerating rate as acrylic is cast**
- D. If air temperatures are kept steady when acrylic is cast, the rate at which the molecules link remains constant**

Questions 15-19

A chemical solution calls for six acids: Acid 1, Acid 2, Acid 3, Acid 4, Acid 5 and Acid 6 to be added one at a time into a flask. The acids must be added according to the following directions:

Acid 5 is added fourth.

Acid 2 is added immediately before the Acid 6 is added.

Acid 1 is added sometime before the Acid 5 is added and sometime before the Acid 4 is added.

Acid 3 is added sometime before the Acid 4 is added.

15. Which of the following is an acceptable order, from first to last, in which the acids could be added?

- A. Acid 1, Acid 2, Acid 6, Acid 5, Acid 3, Acid 4
- B. Acid 1, Acid 3, Acid 4, Acid 5, Acid 6, Acid 2
- C. Acid 1, Acid 4, Acid 3, Acid 5, Acid 2, Acid 6
- D. Acid 3, Acid 2, Acid 6, Acid 5, Acid 1, Acid 4

16. If Acid 3 is added fifth, which of the following must be true?

- A. Acid 1 is added first
- B. Acid 2 is added first
- C. Acid 4 is added sixth
- D. Acid 6 is added third

17. If Acid 6 is added sixth, which of the following can be true?

- A. Acid 1 is added third
- B. Acid 2 is added second
- C. Acid 3 is added fifth
- D. Acid 3 is added first

18. If Acid 1 is added third, which of the following must be true?

- A. Acid 3 is added first
- B. Acid 4 is added fifth
- C. Acid 6 is added second
- D. Acid 6 is added sixth

19. If Acid 2 is added sometime before the Acid 5 is added, which of the following must be true?

- A. Acid 1 is added first
- B. Acid 3 is added fifth
- C. Acid 3 is added third
- D. Acid 6 is added second

"Success in shorthand, like success in any other study, depends upon the interest the student takes in it. In writing shorthand, it is not sufficient to know how to write a word correctly; one must also be able to write it quickly."

20. The quotation best supports the statement that _____.

- A. if a student can write correctly, he can also write quickly**
- B. one must be able to read shorthand as well as to write it**
- C. proficiency in shorthand requires both speed and accuracy**
- D. shorthand requires much study**

SAMPLE PAPER-HAT-GENERAL-(PHD)

QUANTITATIVE REASONING

21. If the cost price of shirt is Rs. 550. Ahmed sold it at the loss of 18%. Find the sale price of the shirt.
- A. Rs. 400
 - B. Rs. 450
 - C. Rs. 451
 - D. Rs. 461
22. Find the smallest angle of a quadrilateral if the measure of its interior angles are in the ratio of 1:2:3:4.
- A. 18°
 - B. 36°
 - C. 54°
 - D. 72°
23. The point that divides the line segment joining (2, 4) and (-2, 2) in two equal parts is _____.
- A. (0, 1)
 - B. (0, 3)
 - C. (0, 6)
 - D. (2, 3)
24. Find the sum of odd divisors of 544.
- A. 18
 - B. 32
 - C. 61
 - D. 64
25. 30% of what number is 45?
- A. 50
 - B. 135
 - C. 150
 - D. 1350
26. If the average weight of 9 students is 45 kg. When the weight of the teacher is added then the average weight becomes 49 Kg. The weight of the teacher is _____.
- A. 04 Kg
 - B. 45 Kg
 - C. 85 Kg
 - D. 95 Kg

27. The standard deviation of the data 5, 5, 5, 5, 5, 5 is _____.

- A. 0
- B. 2.5
- C. 5
- D. 6

28. If $a + b = 5$ and $a - b = 3$ then values of $a^2 + b^2 =$ _____.

- A. 09
- B. 17
- C. 25
- D. 34

29. $\log \frac{x}{y} =$ _____.

- A. $x - y$
- B. $\log x + \log y$
- C. $\frac{\log x}{\log y}$
- D. $\log x - \log y$

30. 1.233233233... is a _____ number.

- A. integer
- B. irrational
- C. natural
- D. rational

ANSWER KEY

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