## VERBAL REASONING

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

1. If you had told me about your problem, I $\qquad$ able to help you.
A. might had
B. might have
C. might have been
D. must having been
2. The office boy asked where he was $\qquad$ the chairs.
A. have put
B. put
C. putted
D. to put

Four lettered pairs (A to $D$ ) follow a related pair of words given in the question. Select thetettered pair that best expresses a relationship similarto that expressed in the original pair in capital letters
3. MALINGER: WORK::
A. accuse: crime
B. escape: leak
C. guess: answer
D. hide:discover
4. CARTOGRAPHER: MAPS::

A architect: blueprints
bibliographer: poetry curator: artworks surveyor: instruments

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. The Lions, a strong offensive team, compete against the Cowboys, they play tough defense.
A. Cowboys, they play
B. Cowboys; playing
C. Cowboys, who play
D. Cowboys; for playing

Choose the lettered word or phrase that is MOSTREARLY OPPOSITE in meaning to the word in capital letters.
6. BLAND
A. Colorless
B. Hard
C. Tasty
D. Thick
7. DENOUNCE
A. Fight
B. Gather
C. Rally
D. Support

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


Famished
C. Tired
D. Worried
9. TREADED
A. Embroidered
B. Walked
C. Washed
D. Writing

## Question 10 is based on the following paragraph.

The heart is responsible for moving blood to all of the body's tissues through a 60,000-mile network of vessels. The pumping of the heart relies on an intricate system of muscle (myocardium), valves, coronary vessels, the conduction (electrical) system, arteries and veins, and the sac around the heart (pericardium).

The human heart is divided into four chambers, the walls of which are made of the myocardium, the muscle that contracts rhythmically under the stimulation of electrical currents. The myocardium is composed of individual muscle cells called myocytes, which work together to contract and relax the heart chambers in the corfect sequence to pump blood to the lungs and the body. The heart is able to pump blood in a coordinated manner because of the arrangement of the cells and the electrical messages that pass easily between the cells. This cardiovascular pump operates by squeezing bood out of its chambers (contraction) and then expanding to allow blood in (relaxation). The action is similar to squeezing Mrater out of a soft plastic bottle while holding it under water and then releasing the grasp so that water is sucked back into the bottie as it re-expands. The right side of the heart, which is composed of the right atrium and right ventricle, is responsible for pulmonary circulation. That is, it pumps blood through the lungs, where it'receives oxygen and rids itself of carbon dioxide. The left side of the heart, composed of the left atrium and left ventricle, reteikes the newly oxygenated blood and pumps it through the body where it delivers oxygen and picks up carbon dioxide (waste). Blogd must circle from the right side of the heart and through the lungstefore being delivered to the left side and throughout the body
"Used blood" returnstothe right side of the heart via two large veins-the superiorvena cava (from the head and arms) and the inferior vena caya (from the legs and abdomen). Blood from the right heart is dark bluish red because it is deoxygenated or lacks oxygen. The blood from the left heart is oxygenated, and therefore is bright red. Blood rom the left heart is delivered to the body through the aorta, the largest blood vessel in the body.
Because the heart never rests while it supplies blood to the rest of the-body, it actually works harder than any other muscle in the body and needs a much richer blood supply than other muscles. Although the heart makes up less than $1 \%$ of a person's body weight, it requires $4 \%-5 \%$ of its blood.
10. The paragraph is primarily concerned with $\qquad$ .
A. contraction and relaxation of the heart
B. pulmonary circulation
C. the cardiovascular system
D. the structure and function of the heart

## ANALYTICAL REASONING

For some women the cost of giving birth can be an unexpectedly large burden. The average normal birth now costs Rs 3,200 and a birth with complications can cost thousands of dollars more. Of women in the primary childbearing age range of eighteen to twenty-four, who account for about 40 percent of all births in this country annually, more than $\mathbf{2 5}$ percent have no health-care insurance to pay maternity costs.
11. If the statements above are true, which of the following mustalso be true?
A. Each year, about 60 percent of all births in thiscountry are to women who are younger than eighteen older than twenty-four
B. Each year, about 75 percent of all birthsin this country are to women who have health-carecoverage of maternity costs
C. For an average birth, health-care Tinstrance pays about 75 percent of Rs 3,200
D. In this country, about 75 percent of the women who do not have health-care coverage of maternity costs are younger than eighteen or older than twenty-four

## Questions 12-15

On a tax form, a taxpayer isfilfing in numbers on eleven lines $F, G, H$, I, $K, L, M, Q, R, V$, and $Z$ agcaraling to the following instructions and no others:

Line F must be derived from lines $\mathbf{G}, \mathrm{H}$, and $\mathbf{V}$ as $\mathbf{G}$ plus $\mathbf{H}$ minus V.
Line $L$ must be derived from lines $I$ and $K$ as $I$ plus K.
Line $Q$ must be derived from lines Land $M$ as $L$ minus $M$. Line $R$ mustrbe derived from lines $Q$ and $F$ as $Q$ minus $F$. Line $V$ must béderived from line $L$ as five percent of $L$. Line $\mathbf{Z}$ must be derived from line $R$ as half of $R$.
12. Weannot be derived unless which of the following is known?
A. $\mathbf{G}$
B. H
C. I
D. $\quad \mathbf{M}$
13. F cannot be derived unless which of the following is known?
A. $K$
B. $\quad \mathbf{Q}$
C. $\quad \mathbf{R}$
D. $\mathbf{Z}$
14. It is necessary for the taxpayer to know H before the taxpayer can derive $\qquad$ -
A. L
B. $\quad M$
C. $\quad \mathbf{Q}$
D. $\quad \mathbf{R}$
15. If the taxpayer knows $I, H, K$, and $M$ but not $G$. which of the following is a pair of lines that the taxpayer can derive?
A. $F$ and $V$
B. $L$ and $Q$
C. $\quad R$ and $V$
D. $\quad R$ and $Z$

Scientists warn of a global warming, a "greenhouse effect" resulting from increased atmospheric pollutants, including carbon dioxide from the burning of wood, coal, and oil. A coal-indastry spokesperson says that the effect need not cause concern in the near future if, as some scientists believe, the Earth faces anothe ice age within the next thousand years, since each calamity could cancel out the other.
16. Which of the following, if true, casts the most serious doubt on the conclusion of the spokesperson?
A. Much of the carbondioxide currently being produced comes not from, coar but from the burning of trees cleared from rarge areas of tropical rain forest
B. Trees absorbsome of the carbon dioxide in the lower atmosphere and produce oxygen, which is not a pollutant
C. The disastrous results of the greenhouse effect have begunto occur and will probably intensify within the next fitty years
D. There is a generally cyclical pattern in the recurrence of ice ages on Earth

An oligarchy is a government run by a small, conservative faction. Often, oligarchies consist of families such as the Royal family in Saudi Arabia. Like the Royal family in Saudi Arabia, no one person in an oligarchy has the power to make a particular investment. Therefore, risky investments are never made by oligarchies.
17. The conclusion of the argument is valid if which one of the following is assumed?
A. Not all oligarchies are run by families
B. Only individuals make risky investments
C. Only liberal governments make risky investments
D. The Royal family in Saudi Arabia has never made a risky investment

## Questions 18-20

A set designer will select colors for six sets that will be used for six consecutive scenes of a ballet, with each scene having a single set. The artistic director has selected eight paint colors: gold, mauven olive, pink, silver, tan, white, and yellow and has asked the designer to use those colors according to the following specifications:

No color can be chosen for more than one set. Sets in scenes 1 and 4 win be pain ted partly one color and partly another cofor; sets in the other, four scenes will each be painted a single colop If gold is chosen for the set in any scene, silver must also be chosen for the set in that scene. Pink and olive are never used in the same scene as each other. Tan is chosen for the set in the scene immediately following the scene for which white is chosen and neither of these colors is used in the same scene as any other color.
18. If yellow is chosen for scene $\mathbf{2}$ and silver is one of the colors chosen for scene 4, which of the following must be one of the colors chosen for scene 1 ?
A. Gold
B. Mauve
C. Olive
D. White
19. If olive is chosen for scene 5, which of the following must be true?
A. Ggla is chosen for scene 1
B. Mauve is chosen for scene 4

Tan is chosen for scene 3
Yellow is chosen for scene 4
20. If white is chosen for scene 5, which of the following can be true?
A. Gold is chosen for scene 2
B. Mauve is chosen for scene 6
C. Olive is chosen for scene 2 , and yellow is chosen for scene 3
D. Pink is chosen for scene 6

## QUANTITATIVE REASONING

21. The H.C.F of two numbers is 11 , and their L.C.M is 616. If one of the numbers is 88 , find the other.
A. 77
B. 87
C. 97
D. 99
22. The area of an equilateral triangle is $900 \sqrt{ } 3 \mathrm{sqm}$. Its perimeter is
$\qquad$ .
A. 120 m
B. 135 m
C. 150 m
D. 180 m
23. Find the distance between the points $(5,2)$ and $(0,0)$.
A. $\sqrt{21}$
B. $\sqrt{26}$
C. $\sqrt{ } 28$
D. $\sqrt{2} 29$
24. What is the probability of getting a sum 9 from two throws of a dice?
A. $1 / 12$
B. $1 / 9$
C. $1 / 6$
D. $1 / 2$
25. $22-[(28-13)+\{(32-8) \div(5+1)\}]=$ $\qquad$ -.
A.

D. $\quad 03$
$\frac{(0.08)^{3}+(0.011)^{3}}{(0.08)^{2}-0.08 \times 0.011+(0.011)^{2}}=$ $\qquad$ -
A. 0.067
B. 0.077
C. 0.087
D. 0.091
26. If $x^{2}+y^{2}+z^{2}=115$ and $x y+y z+z x=27$, then the value of $x+y+z$ will be $\qquad$ -.
A. $\pm 13$
B. $\pm 15$
C. $\pm 17$
D. $\pm 19$
27. If $x-\frac{1}{x}=\sqrt{21}$ then the value of $\left(x^{2}+\frac{1}{x^{2}}\right)$ will be $\qquad$ .
A. 18
B. 20
C. 21
D. 23
28. The sum of 3 numbers is 98. If the ratio between first and second be 2:3 and that of between second and third be 5:8, then the second number is $\qquad$ _.
A. 20
B. 30
C. 48
D. 58
29. The average salary of 20 worker in ar office is Rs. 1900 per month. If the manager's salary is aषded, the average becomes Rs. 2000 per month. The managerr's salary is $\qquad$ _.
A. Rs. 2400
B. Rs. 2520
C. Rs. 4560
D. Rs. 4000

Answer key

| 1 | C | 7 | D | 13 | A | 19 | C | 25 | C |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 2 | D | $\mathbf{8}$ | $\mathbf{C}$ | C | 14 | D | 20 | C | 26 |
| 3 | D | S | B | 15 | B | 21 | A | 27 | A |
| 4 | A | 10 | D | 16 | C | 22 | D | 28 | D |
| 5 | C | 11 | A | 17 | B | 23 | D | 29 | B |
| 6 | $C$ | 12 | C | 18 | B | 24 | B | 30 | D |

