## SECTION A: NUMERICAL REASONING

1. Which number should stand for the question mark in the number pattern below?

$$
8,17,35,71,143, ?
$$

A) 289
B) 287
C) 286
D) 145
E) 144
2. In the picture below, what is the result of the operation on the right, according to the ones on the left?

A) 27
B) 33
C) 35
D) 45
E) 90
3. Which of the following is the largest five digit even number with different digits?
A) 99998
B) 99996
C) 99876
D) 98764
E) 98746
4. The arithmetic mean of five natural numbers is 7 . When one more natural number is added to these numbers, the arithmetic mean become 8. In this case, what is the number added afterwards?
A) 13
B) 12
C) 11
D) 10
E) 9
5. How much smaller is the covered number than 561 according to the following multiplication operation?

A) 50
B) 49
C) 48
D) 46
E) 40
6. $20 \%$ of a number is found. Afterwards $15 \%$ is found. At the end the result is 18 . What is the number at the beginning?
A) 620
B) 600
C) 540
D) 120
E) 90
7. The number of oranges in a box is $\mathbf{5}$ more than twice the number of apples. If the total number of apples and oranges in the box is 47, what is the number of oranges?
A) 14
B) 19
C) 28
D) 33
E) 42
8. Which of the following cannot be the product of two natural numbers, each of which has two digits?
A) 180
B) 864
C) 924
D) 9801
E) 9898
9. Fatma's age 4 years ago was 7 years older than Ahmet's age 5 years later. If the sum of their present ages is 40 , how old is Ahmet today?
A) 12
B) 17
C) 23
D) 24
E) 28
10. Ayşe has solved $\frac{8}{12}$ of the questions in a test. Ayşe has 8 more questions to solve to finish the test. How many questions are there in total in this test?
A) 24
B) 22
C) 20
D) 18
E) 50

## SECTION B: VERBAL REASONING

11. PARSON is to SONPAR as CARSON is to ...
A) RACNOS
B) SONRAC
C) NOSRAC
D) RACSON
E) SONCAR
12. According to a secret code, TARLOS $=24$, KARACA $=33$. What is the code for SUMATRA?
A) 16
B) 25
C) 34
D) 43
E) 52
13. Four of the following are the members of a group. Which one is not a member of this group?
A) Table
B) Chair
C) Armchair
D) Coffee table
E) Chandelier
14. ALP is to BMR as KALP is to ...
A) LBNR
B) $L B M R$
C) RMBL
D) NRBL
E) PALK
15. Four of the following are the members of a group. Which one is not a member of this group?
A) Wrestle
B) Taekwondo
C) Football
D) Judo
E) Boxing
16. If you rearrange all the letters of PNOLEATE you would have the name of a/an.
A) City
B) Country
C) Animal
D) Tool
E) Food
17. According to a secret code KOLBUS=SUBLOK and SAKARO=ORAKAS. What is the code for CARASEK?
A) SEKARAC
B) KESARAC
C) CARSEKA
D) AKESRAC
E) ASEKRAC
18. Here are some words translated from an artificial language.
sekiteru = empty room
arlusatu $=$ high hill
actiteru = empty cup
Which of the following words would mean "red cup"?
A) actiteru
B) peruacti
C) satuacti
D) actiperu
E) arluteru

## Instructions for Question 19:

In following question, two statements are given followed by two conclusions numbered as I. and II. You have to take the given statements to be true even if they seem to be a variant of commonly known facts. Read the conclusions and then decide which of the given conclusions logically follows the two given statements, disregarding commonly known facts.
19. Statements: Some schools are crowded. Crowded schools are outside the city.

## Conclusions:

I. All schools are outside the city.
II. Schools outside the city are crowded.
A) Only conclusion I follows.
B) Only conclusion II follows.
C) Either I or II follows.
D) Neither I nor II follows.
E) Both I and II follow.

## Instructions for Question 20:

The following question has an underlined word followed by five answer choices. You will choose the word that is the necessary part of the underlined word.
20. Pencil
A) Student
B) Ink
C) Book
D) Notebook
E) School

## SECTION C: VISUAL-SPATIAL REASONING

21. The planar shape seen in the squared form on the right was cut into pieces along the dashed lines. Which of the following is not one of these pieces?



1


2


3


4


5
A) 1 .
B) 2 .
C) 3 .
D) 4 .
E) 5 .
22. How many surfaces does the open top box on the right have?

A) 12
B) 10
C) 8
D) 6
E) 5
23. The following planar figure is cut along one of the numbered dashed lines to obtain two congruent pieces. Which one is the dashed line?

A) 1 .
B) 2 .
C) 3 .
D) 4 .
E) 5 .
24. Which one of the following is a mirror image of the figure on the right?

A) 1 .
B) 2 .
C) 3 .
D) 4 .
E) 5 .
25. The pictures below show papers consisting of equal squares. Which or which of these papers does not/do not form cube/cubes when folded?

1

2

3

4

5
A) Only 1.
B) Only 2 .
C) 1 . and 2 .
D) 2 . and 5 .
E) 3. and 4 .
26. The plane figure which is formed by identical squares is folded to form a cube. Which face is the opposite of the face numbered "4"?

A) 1
B) 2
C) 3
D) 5
E) 6
27. Which one of the following is not one of the rotated forms of the three-dimensional figure on the
 right?


1


2


3


4

5
28. The structure on the right is formed using equal cubes. What is the minimum number of equal cubes needed to turn the structure into a large
 cube?
A) 10
B) 9
C) 8
D) 7
E) 6
29. Which one of the following five figures is different than the other four?

1

2

3

4

5
A) 1 .
B) 2 .
C) 3 .
D) 4 .
E) 5 .
30. The pictures below show the reflections of some shapes in water. Which of these reflections is wrong?

A) 1 .
B) 2 .
C) 3 .
D) 4 .
E) 5 .

\section*{| VERBAL, NUMERICAL and | BOOKLET |
| :---: | :---: |
| VISUAL-SPATIAL TEST | PDOU |
| PD |  |}

## ANSWER KEY

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

