ORANGE GLOBAL OLYMPIAD

# Reasoning & Aptitude

# Grade 6

**National Level Examination**

**NLE 2025**

**Subject Code:** | 7 | 0 | 1 |

**Total Questions:** 40 **Total Marks:** 40 **Time:** 1 hour

## DO NOT OPEN THIS BOOKLET UNTIL INSTRUCTED TO DO SO

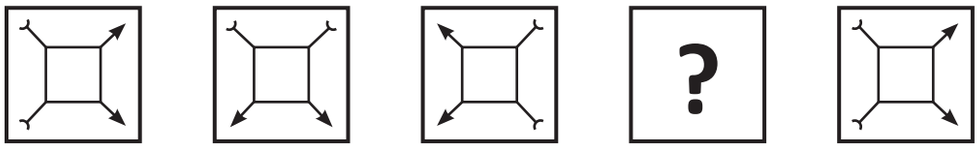
- All questions are compulsory.
- Read the instructions on the **ANSWER SHEET** and fill in your **NAME**, **CLASS** and **OTHER INFORMATION**.
- To mark your choice of answer by darkening the circles in the **ANSWER SHEET**, use a **BLUE/BLACK BALL PEN** only.
- You **MUST** record your answers on the **ANSWER SHEET** only.
- There are **40 MULTIPLE CHOICE QUESTIONS**. Use the information provided to choose the **BEST** possible answer among the four options. On your **ANSWER SHEET** fill in the circle that matches your answer.
- $\frac{1}{2}$ **MARK** will be deducted for every **WRONG ANSWER**.
- Return the **ANSWER SHEET** to the invigilator at the end of the examination.
- You are **NOT** allowed to use a calculator. You may use a ruler and spare paper for rough work.

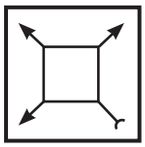
GRADE
6

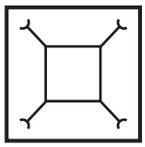
**This question paper contains a total of 40 questions divided into three sections—A, B and C. Read the instructions carefully before attempting these questions.**

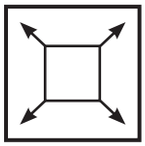
## Section A (Logical Reasoning)

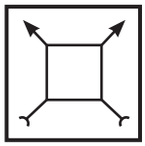
1. Find the figure that would replace the question mark '?' to continue the series:




(A) 

(B) 

(C) 

(D) 

2. Find the missing number in the empty box.

| | | |
|---|---|---|
| 2 | 3 | 9 |
| 7 | 6 | 2 |
| 16 | 11 | 12 |
| 25 | 20 | ? |

(A) 21 (B) 42

(C) 23 (D) 32

3. Find the next number in the series:

4, 16, 49, 169, 256, 169, ?

(A) 64 (B) 196

(C) 256 (D) 225

4. If the letters of the word 'DEPARTMENT' are arranged in an alphabetical order from left to right, then how many letters will remain at the same position?

(A) One (B) Two

(C) Three (D) None

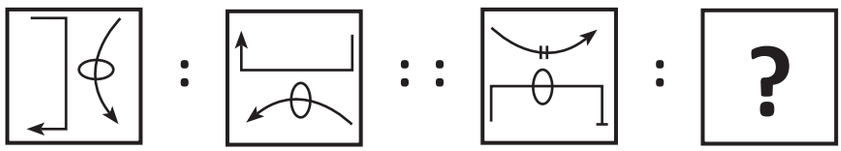
5. Find the missing number in the given analogy.

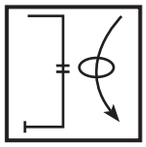
36 : 936 :: 49 : ?

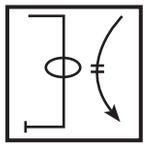
(A) 245 (B) 361

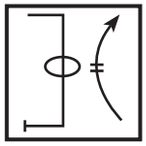
(C) 1681 (D) 486

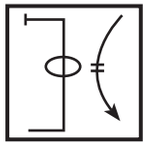
6. Identify the relation and find the missing figure.



(A) 

(B) 

(C) 

(D) 

7. How many meaningful words of three letters can be formed by using the second, seventh and tenth letters of the word RESOLUTION, using each letter only once?

(A) None (B) One

(C) Two (D) Three

8. There are five persons viz. A, B, C, D and E. Each of them has a different height. D is shorter than B but taller than A. A is the third shortest. E is taller than C. How many persons are taller than C?

(A) 3 (B) 4

(C) 2 (D) 1

9. All the consonants starting from B are given values in terms of multiples of 3 such as B = 3, C = 6, and so on. Whereas all the vowels are given double the value of their preceding vowel and the value of A is 10. What is the value of MATHEMATICS? (Example: the value of AB is 10 + 3 =13)

(A) 299 (B) 300

(C) 305 (D) 320

10. Find the value of X?

| | | | |
|---|---|---|---|
| 3 | 1 | 9 | 12 |
| 9 | 1 | 81 | 144 |
| 27 | 1 | 729 | X |

(A) 1000 (B) 1728

(C) 1868 (D) 2128

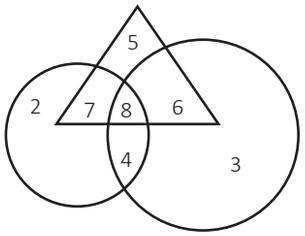
11. In each column, both the numbers are related to each other in some way. Find the missing number.

| | | | |
|---|---|---|---|
| 16 | 27 | 38 | 125 |
| 61 | 72 | 83 | ? |

(A) 150 (B) 170

(C) 185 (D) 200

12. In the given Venn diagram, the larger circle represents students who play hockey, the smaller circle represents students who play badminton, and the triangle represents students who play carrom. Which number represents students who play only hockey and carrom?




(A) 7 (B) 8

(C) 5 (D) 6

13. In a certain code language, POPULARISE is written as ESIRALUPOP. If EQUATION is written in the same code, then which letter will be in the 6th place when counted from the left end?

(A) A (B) U

(C) T (D) Q

14. Find the missing number in the series:

3, 4, 10, ? , 136, 685

(A) 27 (B) 33

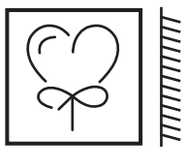
(C) 39 (D) 48

15. P and Q are brothers, whereas R and S are sisters. If the son of P is the brother of S, then Q is related to R as:

(A) Son (B) Brother

(C) Uncle (D) Father

16. Select the correct mirror image of fig. (X).



**(X)**

(A) 

(B) 

(C) 

(D) 

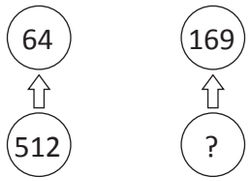
17. If 7 is added after each vowel in the following series, then which of the following will be 12th element from the right end?

R T E A 5 K A Q U 4 E D A 5 P 6 W U

(A) 7 (B) 4

(C) E (D) U

18. Find the missing number.




(A) 2197 (B) 1331

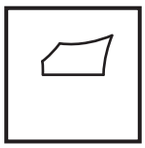
(C) 2744 (D) 1728

19. Out of the four figures (A), (B), (C), and (D) given in the options, three are similar in a certain way. However, one figure is not like the other four. Find the odd one out.

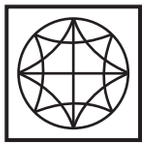
(A)  (B) 

(C)  (D) 

20. Select the option in which fig. (X) is embedded/hidden.



**(X)**

(A)  (B) 

(C)  (D) 

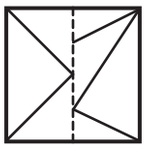
21. Each alphabet represents a distinct digit, and the leftmost digit in each number cannot be zero. The value of C is:

| | | | | |
|---|---|---|---|---|
| | C | L | A | Y |
| + | | | | N |
| | | Y | A | L |
| R | E | A | C | T |

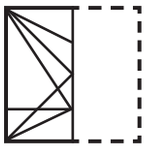
(A) 6 (B) 7

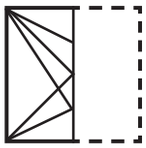
(C) 8 (D) 9

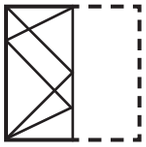
22. Select the option that shows the correct pattern formed when the sheet in fig. (X) is folded along the dotted line.



(X)

(A) 

(B) 

(C) 

(D) 

23. If orange is called blue, blue is called red, red is called yellow, yellow is called green, green is called black, black is called violet, and violet is called orange, what would be the colour of blood?

(A) Red (B) Green

(C) Black (D) Yellow

24. As BREEZE is to CYCLONE, so DRIZZLE is to

(A) Earthquake (B) Storm

(C) Flood (D) Downpour

25. In a certain language HOCKEY is coded as NGJBXD. Then how is TENNIS coded?

(A) DSMMRH (B) DMSMRH

(C) DMMSRH (D) MSMSHR

26. In a row of 15 boys, when Harsh was shifted three places towards right, he became 8th from the right end. What was his earlier position from the left end of the row?

(A) 14th (B) 5th

(C) 6th (D) 12th

## Section B (Quantitative Aptitude)

27. Find the missing number in the given analogy.

36 : 18 :: 46 : ?

(A) 16 (B) 20

(C) 28 (D) 32

28. In a class, 38% of students like chess. If N is equal to the total students in the class and M = 45, then

(A) N > M (B) N < M

(C) N = M

(D) Relationship between N and M cannot be determined

29. Find the odd one out.

(A) 4 (B) 54

(C) 128 (D) 512

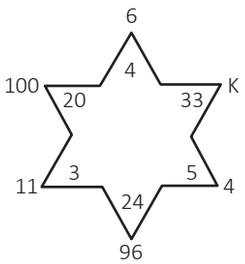
30. Suppose I, II, III, and IV are 4 clocks. Find the time that clock IV should show.

| CLOCK | I | II | III | IV |
|---|---|---|---|---|
| TIME | 1:34 | 2:03 | 2:32 | ? |

(A) 2:59 (B) 3:01

(C) 3:03 (D) 3:07

31. Observe the pattern and find the value of K.




(A) 63

(B) 99

(C) 132

(D) 363

32. If + means ×, – means +, × means ÷, ÷ means –, then what is the value of 50 + 10 – 50 × 10 ÷ 225?

(A) 380 (B) 56

(C) 280 (D) –125

33. Each alphabet represents a distinct digit, and the leftmost digit in each number cannot be zero. Find the value of D.

AAB × AAB = CCDEDD

(A) 0 (B) 2

(C) 4 (D) 6

## Section C (Competency Enhancement)

34. A bag contains 5 red, 6 black, and 7 green balls. Find the maximum number of balls which must be drawn so that you have at least 1 ball of each colour.

(A) 12 (B) 14

(C) 15 (D) 16

35. Each alphabet represents a distinct digit. Find the maximum possible value of the number QR.

$$\begin{array}{cc} & 7 \\ + & P \\ \hline Q & R \end{array}$$

(A) 9 (B) 12

(C) 13 (D) 16

36. A person starts towards the west direction. Which of the following sequences of turns will lead him to face north?

(A) right, right, right
(B) left, left, right
(C) left, right, right
(D) left, right, left

37. A family has a man, his wife, their four sons, and their wives. The family of every son also has 3 sons and one daughter. Find out the total number of male members in the whole family.

(A) 4
(B) 8
(C) 12
(D) 17

38. One day Nilabh left home and cycled 10 km southwards, turned right and cycled 5 km, then turned right and cycled 10 km, and turned left and cycled 10 km. How many kilometres will he now have to cycle in a straight line to reach his home?

(A) 10 km
(B) 15 km
(C) 20 km
(D) 25 km

39. There are N people (numbered 1, 2, 3, 4, …, N) seated around a circular table, such that the person numbered 9 is exactly opposite to the person numbered 129. If N is an even number, find the value of N.

(A) 138
(B) 120
(C) 240
(D) 184

40. Find the number of days from 26th January 2021 to 23rd September 2021, inclusive of both days:

(A) 214
(B) 231
(C) 239
(D) 241