School Level Examination
SLE 2022

## MATHEMATICS

Subject Code: | 2 | 0 | 1 |
| :--- | :--- | :--- |

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 $\mathbf{4 0}$ MULTIPLE CHOICE QUESTIONS.
Use the information provided to choose the BEST answer among the four possible options. On your ANSWER SHEET fill in the circle that matches your answer.
> Marks are NOT deducted for incorrect answers.
> 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.

## Section A (Logical Reasoning)

(This section contains 8 multiple choice questions. Each question has four choices (A), (B), (C) and (D), out of which only ONE is correct.)

1. What comes next?

(A)

|  |  |  |  | X |
| :--- | :--- | :--- | :--- | :--- |
|  |  |  | X |  |
|  |  | X |  |  |
|  | X |  |  |  |
| X |  |  |  |  |

(B)

(C)

| X |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
|  | X |  |  |  |
|  |  | X |  |  |
|  |  |  | X |  |
|  |  |  |  | X |

(D)

|  |  | $X$ |  |
| :--- | :--- | :--- | :--- |
|  | $X$ |  |  |
|  |  | $X$ |  |
|  |  | $X$ |  |
|  |  | $X$ |  |

2. Replace the question mark with the correct number.

(A) 48
(B) 60
(C) 68
(D) 78
3. Find the missing number.

(A) 7
(B) 12
(C) 14
(D) 21
4. If in a language ROSE is coded as SEOR, then how would STAR be coded in that language?
(A) ARST
(B) TARS
(C) ARTS
(D) RATS
5. Select the figure which has the given figure embedded in it.

(A)

(B)

(C)

(D)

6. Find the missing number.

(A) 42
(B) 62
(C) 82
(D) 92
7. What comes next?

(A)

(B)

(C)

(D)
$\bigcirc 0$
8. If 'light' is called 'morning', 'morning' is called 'dark', 'dark' is called 'night', 'night' is called 'sunshine' and 'sunshine' is called 'dusk', then when do we sleep?
(A) Night
(B) Dark
(C) Sunshine
(D) Dusk

## Section B (Subject Specific)

(This section contains 25 multiple choice questions. Each question has four choices (A), (B), (C) and (D), out of which only ONE is correct.)

The average marks of 30 students of class 6 in 5 different subjects are given in the table shown below. Study the same and answer the questions 9 and 10.

| Subject | Hindi | English | Math | Science | Computer |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Average Marks | 44 | 41 | 47 | 46 | 42 |

9. In which subject did the students score highest average marks?
(A) Science
(B) Math
(C) Hindi
(D) English
10. The class average in all the given five subjects is $\qquad$ .
(A) 42
(B) 43
(C) 44
(D) 46
11. The predecessor of 1 in whole number is $\qquad$ .
(A) 0
(B) 2
(C) -1
(D) Does not have a predecessor
12. Which one is not defined?
(A) $6 \div 2$
(B) $0 \div 6$
(C) $6 \div 0$
(D) $6 \div 6$
13. If $X$ and $Y$ are co-primes, then their LCM is $\qquad$ .
(A) $X Y$
(B) $X+Y$
(C) $\mathrm{X} / \mathrm{Y}$
(D) 1
14. If the pattern series $\frac{1}{3}, \frac{2}{6}, \frac{3}{9}, \frac{4}{12}$ $\qquad$ is continued, then the next fraction is:
(A) $\frac{2}{3}$
(B) $\frac{3}{8}$
(C) $\frac{5}{15}$
(D) $\frac{5}{25}$
15. The value of $\frac{3}{25}$ is $\qquad$ .
(A) 1.2
(B) 0.12
(C) 0.012
(D) None of these
16. A tetrahedron is a pyramid whose base is a $\qquad$ .
(A) triangle
(B) square
(C) quadrilateral
(D) rectangle
17. If the side of a square is doubled, its perimeter becomes $\qquad$ .
(A) 2 times
(B) 4 times
(C) 3 times
(D) 6 times
18. Equivalent ratio of $5: 7$ is $\qquad$ .
(A) 40:56
(B) $7: 5$
(C) $25: 45$
(D) None of these
19. Which of the following represents the given statement, 9 taken away from the sum of $x$ and $y$ ?
(A) $(x+y)-9$
(B) $9-(x+y)$
(C) $\frac{x+y}{9}$
(D) $\frac{9}{x+y}$
20. In a room there are $y$ rows of chairs and each row contains $2 x$ chairs. The total number of chairs in the room is $\qquad$ -.
(A) $\frac{2 x}{y}$
(B) $\frac{2 y}{x}$
(C) $2 x y$
(D) $\frac{2}{x y}$
21. Which one of the following shows the maximum increase in temperature?
(A) $0^{\circ} \mathrm{C}$ to $1^{\circ} \mathrm{C}$
(B) $-4^{\circ} \mathrm{C}$ to $8^{\circ} \mathrm{C}$
(C) $-15^{\circ} \mathrm{C}$ to $-8^{\circ} \mathrm{C}$
(D) $-7^{\circ} \mathrm{C}$ to $0^{\circ} \mathrm{C}$
22. How many line segments are there in the adjoining figure?

(A) 2
(B) 3
(C) 5
(D) 6
23. Find the value of $A$ from the figure given below:

(A) $15^{\circ}$
(B) $115^{\circ}$
(C) $90^{\circ}$
(D) $117^{\circ}$
24. What must be added to $y^{2}$ to get 1 ?
(A) $1+y^{2}$
(B) $-1-y^{2}$
(C) $1-y^{2}$
(D) $y^{2}-1$
25. The difference between the place values of 3 and 7 in $6,380,942$ and $5,147,289$ is $\qquad$ .
(A) 293,000
(B) 273,000
(C) 27,300
(D) 29,300

## GRADE <br> 6

26. Two brands of chocolates are available in packs of 24 and 15 respectively. If Vinod needs to buy an equal number of chocolates of both kinds, then the least number of boxes of each kind that Vinod needs to buy is $\qquad$ _.
(A) 5 of first type, 8 of second type
(B) 4 of first type, 9 of second type
(C) 6 of first type, 9 of second type
(D) 10 of first type, 16 of second type
27. Supplementary angle of $108.5^{\circ}$ is $\qquad$ .
(A) $70.5^{\circ}$
(B) $71^{\circ}$
(C) $71.5^{\circ}$
(D) $72.5^{\circ}$
28. $(-52)-(-13)$ equals $\qquad$ -.
(A) -65
(B) 65
(C) 39
(D) -39
29. $\frac{2}{3}$ of 4 dozens equals $\qquad$ .
(A) 28
(B) 30
(C) 32
(D) 34
30. The dimensions of walking track in a park are given in the adjoining figure. Sunidhi walks 2.6 km daily. How many rounds does she walk daily around the walking track?

(A) 4
(B) 6
(C) 8
(D) 10
31. If $6(2 a+1)+8=14$, then ' $a$ ' equals $\qquad$ .
(A) $\frac{1}{2}$
(B) $-\frac{1}{2}$
(C) 1
(D) 0
32. The ratio of lemon and water to be mixed to prepare lemonade is $7: 200 \mathrm{in} \mathrm{ml}$. A lemon contains approximately 14 ml of juice. How much water is needed to prepare lemonade with the same recipe using 7 such lemons?
(A) 1.8 L
(B) 2.0 L
(C) 2.6 L
(D) 2.8 L
33. The expression $\left(x^{2}-y^{2}+2 x y+1\right)-\left(x^{2}+y^{2}+4 x y-5\right)$ simplifies to $\qquad$ .
(A) $2 x y^{2}-2 x y+6$
(B) $-2 y^{2}-2 x y-6$
(C) $2 y^{2}+2 x y+6$
(D) $-2 y^{2}-2 x y+6$

## Section C (Competency Based)

(This section contains 7 multiple choice questions. Each question has four choices (A), (B), (C) and (D), out of which TWO are correct.)
34. Which of the following alphabet has a vertical line of symmetry?
(A) A
(B) C
(C) Q
(D) T
35. Vidya eats one full bar of chocolate. Then she divides another one into 5 equal parts and eats 3 of those parts. The total fraction of chocolates she has eaten up is $\qquad$ .
(A) $1 \frac{3}{5}$
(B) $1 \frac{5}{3}$
(C) $\frac{8}{5}$
(D) $\frac{8}{10}$
36. A line has $\qquad$ .
(A) Indefinite length
(B) Definite length
(C) No endpoints
(D) Two endpoints
37. The dimensions of a rectangular field are 34 m and 18 m . Which of the following is true?
(A) Its perimeter is 52 m .
(B) Cost of fencing at the rate of ₹ 5 per meter is ₹ 520 .
(C) Its area is $600 \mathrm{~m}^{2}$ rounded off to the nearest 100 .
(D) Its area is $620 \mathrm{~m}^{2}$ rounded off to the nearest 10 .
38. One integer is smaller than the other by 8 . If one number is -15 , then the other number is
$\qquad$ .
(A) -23
(B) -7
(C) 7
(D) 23
39. Which of the following pairs are composite?
(A) 59, 61
(B) 63,65
(C) 55,57
(D) 71,73
40. Which of the following sets of angles can form a triangle in a plane?
(A) $70^{\circ}, 90^{\circ}, 40^{\circ}$
(B) $35^{\circ}, 45^{\circ}, 100^{\circ}$
(C) $65^{\circ}, 85^{\circ}, 40^{\circ}$
(D) $65^{\circ}, 80^{\circ}, 35^{\circ}$


