## CLASS <br> 4 <br> MTP

1 MQ

## SOF INTERNATIONAL MATHEMATICS OLYMPIAD

## GUIDELINES FOR THE CANDIDATE

Total Questions : 35 | Time: 1 hr .

1. Please check your Name, Class and Section on the OMR sheet provided to you. In case, OMR sheet with your name is missing, please fill in information about yourself in the blank OMR sheet provided before start of exam.
2. Please fill in your Mobile Number clearly on the OMR Sheet and do not forget to sign it. We will share your marks / result and other information related to SOF exams on your mobile number.
3. The Question Paper comprises four sections:

Logical Reasoning (10 Questions), Mathematical Reasoning (10 Questions), Everyday Mathematics (10 Questions) and Achievers Section (5 Questions)

Each question in Achievers Section carries 2 marks, whereas all other questions carry one mark each.
4. All questions are compulsory. There is no negative marking. Use of calculator is not permitted.
5. There is only ONE correct answer. Choose only ONE option for an answer.
6. To mark your choice of answers by darkening the circles on the OMR Sheet, use HB Pencil or Blue / Black ball point pen only. E.g.
Q.16: Sonia had 80 sweets. She gave 15 sweets to Danish and 15 sweets to Megha. How many sweets are left with her?
A. 50
B. 30
C. 60
D. 40

As the correct answer is option A, you must darken the circle corresponding to option A on the OMR Sheet.
7. Rough work should be done in the blank space provided in the booklet.
8. Return the OMR Sheet to the invigilator at the end of the exam.
9. Please fill in your personal details in the space provided on this page before attempting the paper.

## Name:

$\qquad$
$\qquad$

1. Seema was facing the Hospital. She made a $\frac{5}{8}$ turn clockwise. Where would she be facing?

A. Home
B. School
C. Office
D. Fire Station
2. If yesterday was Wednesday, then what day of the week will it be on $7^{\text {th }}$ day from today?
A. Saturday
B. Sunday
C. Monday
D. Wednesday
3. Which of the following options will continue the given number pattern?

A. 576
B. 486
C. 840
D. 729
4. Select the correct mirror image of the given figure, if mirror is placed along MN .

A.

B.

C.

D.

5. In a certain code language, 'ROAD' is written as 'ADOR'. How will 'SWAN' be written in the same language?
A. NAWS
B. ASWN
C. WASN
D. ANWS
6. Which of the following options is exactly embedded in the given figure as one of its parts?

A.

B.

C.

D.

7. Which of the following options will complete the given figure pattern?

A.

B.

C.

D.

8. Select the combination of numbers so that letters are arranged accordingly to form a meaningful English word.

| $E$ | $O$ | $N$ | $S$ | $D$ | $C$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 1 | 2 | 3 | 4 | 5 | 6 |

A. $3,2,5,4,1,6$
B. $3,2,5,4,6,1$
C. $4,5,3,6,2,1$
D. $4,1,6,2,3,5$
9. Find the missing number, if a certain rule is followed either row-wise or column-wise.

| 48 | 91 | $?$ |
| :---: | :---: | :---: |
| 6 | 13 | 12 |
| 8 | 7 | 15 |

A. 160
B. 140
C. 180
D. 190
10. Which one of the following Venn diagrams best represents the relationship amongst, "Dogs, Cats and Rats" ?
A.

B.

C.

$\bigcirc 0$
D.


## MATHEMATICAL REASONING

11. Identify the number from the clues given below.

O I am a 4-digit number.
O I am an odd number.
O My thousands place digit is twice of my tens place digit.
O The difference between my units place digit and tens place digit is 2 .
A. 8497
B. 6835
C. 4867
D. 8369
12. In 73569, the difference between the place values of the digit at ten thousands place and the digit at hundreds place is $\qquad$ .
A. 2500
B. 67000
C. 70500
D. 69500
13. Which of the following is CORRECT?
A. $\frac{1}{8}<\frac{1}{13}$
B. $\frac{4}{23}>\frac{7}{23}$
C. $\frac{7}{9}>\frac{7}{9}$
D. $\frac{1}{100}<\frac{1}{2}$
14. The Hindu-Arabic numeral for the number DX is $\qquad$ .
A. 110
B. 210
C. 510
D. 410
15. Find the missing number.
A. 2
B. 3
C. 4
D. 5
584
$\begin{array}{r}\times \square 8 \\ \hline 4672\end{array}$
$\begin{array}{r}17520 \\ +22192 \\ \hline\end{array}$
16. $896 \times 4=3$ thousands 5 hundreds $\qquad$ tens and 4 ones.
A. 5
B. 8
C. 50
D. 80
17. What fraction of the given figure is shaded?

A. $\frac{4}{7}$
B. $\frac{5}{7}$
C. $\frac{3}{7}$
D. $\frac{6}{7}$
18. The expanded form of 42796 is $\qquad$ .
A. $40000+2000+70+96$
B. $40000+2000+700+96$
C. $40000+2000+700+90+6$
D. $42000+700+90+6$
19. Two beakers each containing some amount of water are shown. How many glasses of capacity 155 mL each can be filled completely from the total quantity of water shown?

P

Q
A. 46
B. 20
C. 45
D. 40
20. Arrange the following numbers in descending order. 18805, 15885, 18058, 18588, 18855
A. $18805,15885,18058,18855,18588$
B. $18588,18855,18805,18058,15885$
C. $18805,18855,18588,15885,18058$
D. $18855,18805,18588,18058,15885$

## EVERYDAY MATHEMATICS

21. A milk man supplies 50 L of milk everyday. On a particular day, the supply was 31 L 250 mL . The quantity of milk supplied on a particular day was $\qquad$ less than everyday supply.
A. 18 L 750 mL
B. 81 L 750 mL
C. 18 L 740 mL
D. 80 L 740 mL
22. A doll costs ₹ 428 more than a teddy bear. If the cost of the teddy bear is ₹ 1290 , then how much does the doll cost?
A. ₹ 1718
B. ₹ 1780
C. ₹ 1700
D. ₹ 1500
23. Sneha had 21 drawing books. She got two more from her aunt, 12 more on her birthday and bought 3 more with her pocket money. How many drawing books does she have now?
A. 38
B. 40
C. 36
D. 28
24. Dinesh has 5 boxes of sweets. Each box contains 182 sweets. He packs them equally into some bags. Each bag contains 7 sweets. How many bags does he use?
A. 130
B. 152
C. 147
D. 124
25. There are 2 boxes. The big box is 21 kg heavier than the small box. Their total weight is 1001 kg . Find the weight of the small box.
A. 490 kg
B. 290 kg
C. 400 kg
D. 980 kg
26. To boil the eggs hard, you must cook them on gas for 16 minutes. If Neeta puts the eggs to boil at 12:36 p.m., then at what time she must switch off the gas?
A. $12: 52$ p.m.
B. 1:12 p.m.
C. 1:00 p.m.
D. 1:24 p.m.
27. There are 54 balls which are kept into 6 bags such that the number of balls in each bag is same. How many balls are there in 2 such bags?
A. 9
B. 108
C. 18
D. 12
28. Sameer bought $3 \frac{5}{12} \mathrm{~kg}$ of wheat flour. He bought $\frac{1}{2} \mathrm{~kg}$ more quantity of wheat flour than Rohit. How much quantity of wheat flour did Rohit buy?
A. $2 \frac{11}{12} \mathrm{~kg}$
B. $8 \frac{5}{12} \mathrm{~kg}$
C. $1 \frac{1}{6} \mathrm{~kg}$
D. 9 kg
29. An orchard owner bought 458 apple trees. He decided to plant 15 trees in each row. How many full rows can be planted? How many trees would be left?
A. 30,9
B. 18,20
C. 8,12
D. 30,8
30. Riya and Richa had an equal number of marbles. Riya gave 35 marbles to Richa and lost 10 marbles. If Riya is left with 25 marbles, then find the total number of marbles Riya and Richa had initially.
A. 135
B. 176
C. 105
D. 140

## ACHIEVERS SECTION

31. Which is the heaviest bird?

A. $P$
B. Q
C. $R$
D. Can't be determined
32. If $X+Y+Z=\frac{3}{4}, X+Y=\frac{1}{3} \quad$ and $Z-X=\frac{1}{4}$, then what is the value of $X$ ?
A. $\frac{1}{12}$
B. $\frac{1}{6}$
C. $\frac{2}{13}$
D. $\frac{1}{8}$
33. Sanjay is thinking of a 5 -digit even number PQRST. P is 3 more than the smallest odd number. $Q$ is a common factor of 2 and $11 . R$ is the product of the first 2 digits of the number. The sum of $S$ and $T$ is 9 . $T$ is a multiple of 3 . What is the number Sanjay is thinking of?
A. 41436
B. 41463
C. 61636
D. 61663
34. How many candies must Kavita give to Rekha so that they will have the same number of candies?

A. 13
B. 25
C. 51
D. 104
35. The total perimeter of Square $X$ and Rectangle $Y$ is 120 cm . Find the value of $a$.

A. 17 cm
B. 25 cm
C. 15 cm
D. 20 cm
