

INDIAN SCHOOL AL WADI AL KABIR
Pre Mid-Term Examination (2023-24)

Class:VIII
Date:30-05-2023

Sub: MATHEMATICS
Set - I

Max Marks: 30
Time: 1 hour

## Instructions:

Section A: Multiple Choice Questions (Q. 1 to Q.6)
Section B: Source based questions (Q. 7 to Q.11)
Section C: Long Answer Questions (Q. 12 to Q.14)
Section D: Case study Questions (Q. 15 to Q.16).

Section A: Multiple Choice Question (Q.1 to Q.6) of 1 mark each

1. In a quadrilateral ,three angles are $80^{\circ}, 122^{\circ}$ and $95^{\circ}$, then the measure of fourth angle is
A
$83^{0}$
B $163^{0}$
C
$63^{0}$
D $85^{0}$
2. The value of $\left(\frac{3}{5}\right)^{-3}$

| $\mathbf{A}$ | $\frac{9}{15}$ |
| :---: | :---: |


| B | $\frac{27}{125}$ |
| :---: | :---: |$\frac{9}{11}=\frac{9}{11}+\frac{-3}{8}$

3. The property use in $\frac{-3}{8}+\frac{9}{11}=\frac{9}{11}+\frac{-3}{8}$

| A | Commutativity | B | Distributivity | C | Associativity | D | Identity |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

4. The polygon with no portion of diagonals lie in the exterior of the polygon
A $\quad$ Regular polygon
B $\quad$ Irregular polygon
C|l|l|
D $\quad$ Convex polygon
5. The multiplicative inverse of $\left(\frac{8}{11}\right)^{-5}$
A $\quad\left(\frac{8}{11}\right)^{5}$
B

| $\mathbf{C}$ | $\left(\frac{-8}{11}\right)^{-5}$ | $\mathbf{D}$ | $\left(\frac{-8}{11}\right)^{5}$ |
| :--- | :--- | :--- | :--- |

6. Simplify : $\frac{-3}{2} \times \frac{5}{7}+\frac{-3}{2} \times \frac{2}{7}$

|  | A | $\frac{-15}{14}$ | B | $\frac{-3}{2}$ | C | $\frac{-1}{14}$ | D | $\frac{-3}{7}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Section B: Source based questions (Q. 7 to Q.11)of 1 mark each During the free lesson, Neha, Riya and Mridula decided to play a game on numbers. Neha write few numbers on paper slips. Based on this information answer the following questions |  |  |  |  |  |  | SCIENTIFIC NOTATION BINGO |
| 7. | If Neha wrote 0.0000587 on paper slip. The standard form of 0.0000587 is |  |  |  |  |  |  |  |
|  | A | $5.87 \times 10^{4}$ | B | $5.87 \times 10^{-4}$ | C | $5.87 \times 10^{-5}$ | D | $5.87 \times 10^{5}$ |
| 8. | If $256500000=2.565 \times 10^{k}$, the value of $k$ is |  |  |  |  |  |  |  |
|  | A | 7 | B | 8 | C | -8 | D | 5 |
| 9. | $0.000612=\mathrm{m} \times 10^{-4}$. The value of m is |  |  |  |  |  |  |  |
|  | A | 612 | B | 61.2 | C | 6.12 | D | 0.612 |
| 10. | The usual form of $9.3 \times 10^{-3}$ |  |  |  |  |  |  |  |
|  | A | 0.0093 | B | 0.00093 | C | 93000 | D | 9.300 |
| 11. | Which of the following is standard form is correct for 385600 ? |  |  |  |  |  |  |  |
|  | A | $38.560 \times 10^{3}$ | B | $3.8560 \times 10^{3}$ | C | $38.560 \times 10^{5}$ | D | $3.856 \times 10^{5}$ |
| Section C : Long Answer Questions (Q12 to Q.14) |  |  |  |  |  |  |  |  |
| 12. | In given quadrilateral ,find the values of $x$ and $y$.(2 marks) |  |  |  |  |  |  |  |

13. 

Represent the rational numbers $\frac{-5}{8}, \frac{-2}{8}, 0$ and $\frac{7}{8}$ on the number line. ( 3 marks)
14.

Find six rational numbers between $\frac{2}{7}$ and $\frac{3}{8} \quad$ ( 4 marks)

Section D: Case study (Q. 15 \& Q.16) of 5 marks each
15. Case Study-1: Teacher shows three articles of different lengths in the class room. The difficulty is that the lengths are in exponential form. The length of articles are as follows. Observe the table and answer the following( The measures are in cm)

| Geometry box | Chalk box | Water bottle |
| :---: | :---: | :---: |
| $\left(\frac{1}{2}\right)^{-2}+\left(\frac{1}{3}\right)^{-2}+\left(\frac{1}{5}\right)^{-1}$ | $\left[3^{6} \div 3^{4}\right]+3^{0}$ | $\frac{3^{4} \times 7^{3}}{7^{2} \times 3^{3}}$ |

(I)Find the length of Geometry box by evaluating the exponential form given(2 marks)
(II) Find the length of chalk box by laws of exponents.(2 marks)
(III) Simplify : $\quad \frac{3^{4} \times 7^{3}}{7^{2} \times 3^{3}}(1$ mark $)$
16. Case Study-2: Swati has interest in wearing trendy black metal ornaments. She bought a pentagon shaped pendant necklace as shown. Based on the information answer the following questions
(I) Find the sum of interior angles of the pentagon.(2 marks)
(II) How many diagonals pentagon has? (2 marks)
(III) Name the pentagon if it has equal sides and equal angles(1 mark)

