

Class: VIII

Pre-Mid-Term Revision Paper (2024-25)
Sub: MATHEMATICS
Max Marks: 30
Time: 1 hour

## Instructions:

Section A: Multiple Choice Questions (Q. 1 to Q.8)
Section B: Source based questions (Q. 9 to Q.12)
Section C: Long Answer Questions (Q. 13 to Q .16 )
Section D: 4 Marks questions \& Case study (Q. 17 to Q.18).
Section A: Multiple Choice Question (Q. 1 to Q.8) of 1 mark each

1. The angle sum of a convex polygon with number of sides 14 is:

| A | $900^{\circ}$ | B | $1080^{\circ}$ | C | $2160^{\circ}$ | D | $4140^{\circ}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

2. The rational number that does not have a reciprocal is

| A | 0 | $\mathbf{B}$ | -1 | $\mathbf{C}$ | 1 | $\mathbf{D}$ | 10 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

3. The additive inverse of $2 \frac{3}{11} \times \frac{4}{5}$ is

|  | A | $\frac{20}{11}$ | B | $\frac{-20}{11}$ | C | $\frac{11}{20}$ | D | $\frac{-11}{20}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 4. | Find the value of $x$ in the given figure. |  |  |  |  |  |  |  |
|  | A | $80^{\circ}$ | B | $90^{\circ}$ | C | $100^{\circ}$ | D | $120^{\circ}$ |

5. If the three angles of a quadrilateral are $60^{\circ}, 95^{\circ}$ and $105^{\circ}$, then what is the measure of its fourth angle?

| A | $80^{\circ}$ |
| :--- | :--- |

B $\quad 90^{\circ}$
C $100^{\circ}$
D $110^{\circ}$
6. Multiplicative inverse of $2^{-3}$ is

| A | $2^{3}$ | $\mathbf{B}$ | $2^{-3}$ | $\mathbf{C}$ | $3^{2}$ | $\mathbf{D}$ | $3^{-2}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

7. Name the property used in $\frac{4}{5} \times\left(\frac{-2}{7} \times \frac{-3}{11}\right)=\left(\frac{4}{5} \times \frac{-2}{7}\right) \times \frac{-3}{11}$

| A | Commutativity | B | Associativity | C | Distributivity | D | Multiplicative <br> identity |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

8. Which of the following is the standard form of 0.00001275 ?

| A | $1.275 \times 10^{-5}$ | B | $1.275 \times 10^{5}$ | C | $127.5 \times 10^{-7}$ | D | $127.5 \times 10$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

Section B: Source based questions (Q. 9 to Q.12) of 1 mark each
9. At a brainstorming session for revision of Exponents and powers, teacher asked the students to write some questions on a paper slip. Based on this information, answer the following questions:
The value of $\left(7^{0}+9^{0}\right) \times\left(2^{0}+5^{0}\right)$ is:

| A | 1 | B | 2 | C | 3 | D | 4 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

10. The value $\left(4^{-1} \times 3^{-1}\right) \div 6^{-1}$ is:

| A | 2 | B | $\frac{1}{2}$ | C | 4 | D | $\frac{1}{4}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

11. The usual form of $3.218 \times 10^{-3}$ is

| A | 3218000 | B | 3218 | C | 0.003218 | D | 0.0003218 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

12. If $418900000=4.189 \times 10^{m}$, the value of $m$ is:

| A | 8 | B | 5 | C | -8 | D | -5 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Section C: Long Answer Questions (Q13 to Q.16)
13. Evaluate: $\left[\left(\frac{1}{5}\right)^{-2}+\left(\frac{1}{3}\right)^{-2}\right] \div\left(\frac{1}{2}\right)^{-2}$
14. Find the value of $x, y, z$ and $w$. Also, find the value of $x+y+z+w$

15. Solve using distributive property: $\frac{4}{7} \times\left(\frac{-2}{3}\right)-\frac{4}{7} \times \frac{1}{2}$
16. Simplify by laws of exponents: $\frac{8^{-1} \times 5^{5} \times m^{-4}}{125 \times 2^{-5} \times m^{-8}}$

Section D: Long Answer Question of 4 marks \& Case study (Q. 17 \& Q.18)
17. Insert three rational numbers between $\frac{-4}{5}$ and $\frac{-5}{6}$
18. Case Study: A night owl is a person who tends to or prefers to be active late at night and into the early morning, and who sleeps and wakes up later than what is considered normal. Some individuals find that they are more alert and productive during the night. They may feel more creative, focused, or motivated during these hours, making it an ideal time for them to study.


On Ravi's 16th birthday, his uncle gifted him a clock, as shown in the figure. Based on the above information, answer the following questions:
i) Identify the polygon.
ii) Find the measure of each interior angle of a regular pentagon. Also find the measure of the exterior angle.
iii) Find the number of diagonals in an octagon.

| ANSWERS |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Q. 1 | C | Q. 2 | A | Q. 3 | B | Q. 4 | D |
| Q. 5 | C | Q. 6 | A | Q. 7 | B | Q. 8 | A |
| Q. 9 | D | Q. 10 | B | Q. 11 | C | Q. 12 | A |
| Q. 13 | $\frac{17}{2}$ | Q. 14 | $\begin{aligned} & z=120^{\circ}, y=110^{\circ} \\ & x=65^{\circ}, w=65^{\circ} \\ & x+y+z+w=360^{\circ} \end{aligned}$ | Q. 15 | $\frac{-2}{3}$ | Q. 16 | $100 \mathrm{~m}^{4}$ |
| Q. 17 | Any three rational no.s | Q. 18 | i)Pentagon | Q. 18 | ii) $108^{\circ}, 72^{\circ}$ | Q. 18 | 5 |

