

Cadet College Swat
Entrance Test for Class VIII
Paper-Mathematics & Science

Time: One Hour

Marks: 100

Section A

Q1. Fill in the Blanks.

(12)

- i. If $A=\{2,3,4,5,6\}$ and $B=\{5,6,7,8\}$ then $A - B =$ _____.
- ii. The additive inverse of $\frac{3}{7}$ is _____.
- iii. The square root of 81 is _____.
- iv. $a \times a \times a \times a \times a$ can be written in exponential form as _____.
- v. 169 is the perfect square of _____.
- vi. 20% of 500 is _____.
- vii. The cube of 3 is _____.
- viii. If $x = 3$, $x + \frac{1}{x} =$ _____.
- ix. $2 \times 2 \div 2 + 2 =$ _____.
- x. The approximate value of π is _____.
- xi. Symbol of Sodium is _____.
- xii. Speed of light in vacuum is _____.

Section B

Q2. Attempt any SIX questions.

(6x10=60)

1. Find the square root of 3481 by division method.
2. A jet fighter is flying at 594 m/s. Find its speed in km/h.
3. $(4^3)^2 \div (4^2)^3$
4. Solve, $\frac{3x-2}{2x+1} = \frac{4}{5}$
5. Use prime factorization to find $\sqrt{\frac{196}{100}}$
6. The circumference of a circle is 176cm. Find its area?
7. Factorize, $x^4 - y^4$
8. Find the circumference of the circle whose diameter is 6 Cm.

Section-C

Q3. Attempt any FOUR questions.

(04x07=28)

1. What are insulators?
2. Describe the function of Aorta.
3. Write the names of various parts of flower
4. What is food web?
5. Write down distribution of sub atomic particles in the atom of Carbon.