FOUNDATION BUILDER
SUBJECTIVE TEST

CLASS: VIII

TIME: 1 HOUR

MAX. MARKS: 30

Section A (2 marks each)

1. Two adjacent angles of a parallelogram are as 2:3. Find the measure of each of its angles.
2. Find compound interest on Rs. 7500 at 4% per annum for 2 years, compounded annually.
3. Two numbers are in the ration 5:3. If they differ by 18, find these numbers.
4. The perimeter of a rectangular swimming pool is 154 meters. Its length is 2m more than twice its breadth. What are the length and breadth of the pool?
5. A man’s age is three times his son’s age. Ten years ago his age was five times his son’s age. Find their current age.
6. If A's salary is 50% more than B's salary. Then by what percent B's salary less than A's salary.
7. The cost price of 11 pens is equal to the selling price of 10 pens. Find the loss or gain percent.
8. Factorize: 16 - 4x^2
9. If \((x + \frac{1}{X}) = 3\). Find the value of \(x^3 + \left(\frac{1}{x}\right)^3\).

Section B (3 marks each)

10. If \(a^2 + b^2 + c^2 = 20\), \(a + b + c = 6\) find \(ab + bc + ca\).
11. Three angles of a quadrilateral are equal and the measure of the fourth angle is 120. Find the measure of each of the equal angles.
12. If a solid cylinder has a total surface area 462 sq. cm. & CSA is 1/3rd of it so what is the volume of the cylinder?
13. 140 liter of an acid contains 90% of acid and the rest water. How much water must be added to make the water 12.5% of resulting mixture?