

**CHINMAYA INTERNATIONAL RESIDENTIAL SCHOOL
COIMBATORE**

SAMPLE PAPER – 2010

CLASS : XI

SUBJECT: MATHEMATICS

1. The length of a rectangular plot is 8m greater than its breadth. If the area of the plot is 308 square mts, then the perimeter is:
(a) 62 m (b) 52 m (c) 72 m (d) None of these
2. A father is three times as old as his son. If after 12 years his age will be twice as that of the age of his son, then the sum of their present ages is:
(a) 12 years (b) 48 years (c) 36 years (d) None of these
3. The radius of a circle is 6cm. Find the length of the tangent drawn to the circle from a point at a distance of 10 cm from its centre.
(a) 8 cm (b) 18 cm (c) 6 cm (d) None of these
4. The value of $\frac{1 - \tan^2 \theta}{\cot^2 \theta - 1}$ is:
(a) $\tan^2 \theta$ (b) $\cot^2 \theta$ (c) $\sin^2 \theta$ (d) None of these
5. The volume of a cone, with radius of base 35cm, and slant height 37cm is:
(a) 14400 cm^3 (b) 12400 cm^3 (c) 15400 cm^3 (d) None of these