# INDIAN SCHOOL SOHAR FORMATIVE ASSESSMENT- III <br> SUBJECT: MATHEMATICS 

CLASS: X
DATE: 21 .01. 15
GENERAL INSTRUCTIONS:

- All questions are compulsory.
- The question paper consists of 9 questions divided into 4 sections $A, B, C$ and D. Section $A$ comprises of 3 questions of 1 mark each, section B comprises of 2 questions of 2 marks each, section C comprises of 3 questions of 3 marks each and section D comprises of 1 question of 4 marks.


## SECTION A

1. Write the next term of the $\mathrm{AP} \sqrt{8}, \sqrt{18}, \sqrt{32}$
2. Find the $10^{\text {th }}$ term from the end of the AP $8,1012, \ldots \ldots ., 126$.
3. Find $p$ if $2 p+1,13,5 p-3$ are in AP.

## SECTION B

4. Prove that tangents drawn at the ends of a diameter of a circle are parallel.
5. Find the length of the tangent drawn from a point whose distance from the centre is 25 cm . Given that radius of the circle is 7 cm .

## SECTION C

6. Find the sum: $2+4+6+\ldots . .+200$
7. Prove that the parallelogram circumscribing a circle is a rhombus.
8. The angle of elevation of the top of a tower from two points at a distance of 4 m and 9 m from the base of the tower and in the same straight line with it are complementary. Find the height of the tower.

## SECTION D

9. The angle of elevation of the top of a tower from a point A on the ground is $30^{\circ}$. On moving a distance of 20 m towards the foot of the tower to a point B, the angle of elevation increases to $60^{\circ}$. Find the height of the tower and the distance of the tower from the point A .
