## INDIAN SCHOOL SOHAR FORMATIVE ASSESSMENT- III SUBJECT: MATHEMATICS

SET-I

CLASS: X MARKS: 20 TIME: 40 minutes

#### **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 AP  $\sqrt{8}$ ,  $\sqrt{18}$ ,  $\sqrt{32}$
- 2. Find the 10<sup>th</sup> term from the end of the AP 8, 10 12, ......, 126.
- 3. Find p if 2p + 1, 13, 5p 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 25cm. Given that radius of the circle is 7cm.

### **SECTION C**

- 6. Find the sum: 2+4+6+....+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 4m and 9m 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°. On moving a distance of 20 m towards the foot of the tower to a point B, the angle of elevation increases to 60°. Find the height of the tower and the distance of the tower from the point A.

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