### INDIAN SCHOOL SOHAR FORMATIVE ASSESSMENT- 3 MATHEMATICS

Date: 11-02-2015 Class: IX

General Instructions:

All questions are compulsory. Section A comprises 3 questions of 1 mark each, Section B comprises 2 questions of 2 marks each, Section C comprises 3 questions of 3 marks each and Section D comprises 1 question of 4 marks.

# SECTION A

- 1. Find the value of x for y = 0 in the equation, y = 2x + 1.
- 2. What is the equation of the Y axis?
- 3. The length of a chord in a circle of diameter 10 cm is 6 cm. Find the distance of the chord from its centre.

# **SECTION B**

4. Determine the point on the graph of the linear equation 2x + 5y = 20 whose abscissa is  $\frac{5}{2}$ 

times its ordinate.

5. If the point (2k-3, k+2) lies on the graph of the equation 2x + 3y + 15 = 0. Find "k"?

SET 2

### INDIAN SCHOOL SOHAR FORMATIVE ASSESSMENT- 3 MATHEMATICS

Date: 11-02-2015 Class: IX Time: 40mnts Marks: 20

General Instructions:

All questions are compulsory. Section A comprises 3 questions of 1 mark each, Section B comprises 2 questions of 2 marks each, Section C comprises 3 questions of 3 marks each and Section D comprises 1 question of 4 marks.

# SECTION A

- 1. What is the general form of a linear equation in two variables?
- 2. What is the equation of the X axis?
- 3. The length of a chord in a circle is 6 cm and its perpendicular distance from the centre is 4 cm Find the radius of the circle .

#### **SECTION B**

- 4. Determine the point on the graph of the linear equation 2x + 5y = 19 whose ordinate is
  - $\frac{5}{2}$  times its abscissa.

5. If the point (2p-3, p+2) lies on the graph of the equation 2x + 3y + 15 = 0. Find "p"?

Time: 40mnts Marks: 20

#### **SECTION C**

- 6. Two circles of radii 5cm and 3cm intersect at two points and distance between their centers is 4cm .Find the length of the common chord.
- 7. ABCD is a cyclic quadrilateral whose diagonals intersect at E. If  $\angle$  DBC = 70<sup>0</sup>,  $\angle$  BAC = 30<sup>0</sup>, find  $\angle$  BCD. Further, if AB = BC, find  $\angle$  ECD.
- 8. Draw the graph of the linear equation 4x + y = 6. At what points the graph of the equation cuts the X axis and Y axis.

# **SECTION D**

9. Prove that the angle subtended by an arc at the centre is double the angle subtended by it at any point on the remaining part of the circle.

# ---- THE END ----

# **SECTION C**

- 6. Two circles of radii 5cm and 3cm intersect at two points and distance between their centres is 4cm .Find the length of the common chord.
- 7. PQRS is a cyclic quadrilateral whose diagonals intersect at E. If  $\angle$  SQR = 70<sup>0</sup>,  $\angle$  QPR = 30<sup>0</sup>, find  $\angle$  QRS. Further, if PQ = QR, find  $\angle$  ERS.
- 8. Draw the graph of the linear equation 2x + y = 4. At what points the graph of the equation cuts the X axis and Y axis.

# **SECTION D**

9. Prove that the angle subtended by an arc at the centre is double the angle subtended by it at any point on the remaining part of the circle.

---- THE END ----