BHARATH COACHING CENTRE

9th CBSE	Euclid's Geometry	Total: 50
Maths		Time: 1.30hrs

SECTION - A $5 \times 1 = 5$

1. Non-Euclidean geometry is also known as _____.
2. All right angles are _____ to one another.
3. _____ can be produced indefinitely.
4. Dimension of a point is _____.
5. _____ is a breadth less length.

SECTION - B $5 \times 2 = 10$

6. Define Euclid's fifth postulate.
7. If A, B, C are the three points on a line, and B lies between A and C, then prove that AB+BC=AC.
8. Consider the following statement: there exists a pair of straight lines that are everywhere equidistant from one another. Is this statement a direct consequence of Euclid's fifth postulate? Explain.
9. Define parallel lines.
10. Define square.

SECTION - C $5 \times 3 = 15$

11. Does Euclid's fifth postulate imply the existence of parallel lines? Explain.
12. Why is Axiom 5 in the list of Euclid's axioms, a considered a 'universal truth'?
13. Write down the Euclid's postulate?
14. Define parallel and perpendicular lines?
15. Write down the Euclid's axiom?

SECTION - D $4 \times 5 = 20$

16. If a point C lies between two points A and B such that AC=BC, then prove that AC=$\frac{1}{2}$AB. Explain by drawing figures.
17. In above question, point C is called a midpoint of the line segment AB. Prove that every line segment has one and only one mid-point.
18. From figure, if AC=BD, then prove that AB=CD.
19. How would you rewrite Euclid's fifth postulate so that it would be easier to understand?
20. Prove that an equilateral triangle can be constructed on any given line segment.