**Self-Assignment -1**

**Topic: The Elements of Geometry**

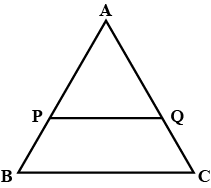
**Class: 9th Max. Marks: 20**

**Answer all questions. Each question carries 1 mark. 10 × 1 = 10M**

1. What is conjecture? Give an example?
2. Write any three axioms from the daily life?
3. Define ‘Play Fair axiom’?
4. Give an example to prove “Whole is greater than the part”?
5. Write Euclid’s fifth postulate?
6. What are the building blocks of Geometry?
7. Who is the Indian Mathematician said Pythagoras theorem early than Pythagoras?
8. What is the common relation between axiom and a theorem?
9. Who is father of Geometry?
10. How many books are there in Euclid’s “The Elements”?

**Answer all questions. Each question carries 2 marks. 5 × 2 = 10M**

1. Draw an equilateral triangle whose side is 3.5cm?
2. If a point Q lies between two points P and Q such that PQ = QR, then prove that PQ = PR? Write the axioms used to prove the problem also?
3. In the following figure, we have AP = AB and AQ = AC and AB = AC. Show that AP = AQ?



1. Prove that two distinct lines cannot have more than one point in common?
2. If G, F and H are three points on a line and ‘F' lies between G and H, then prove that GH – GF = FH?

