5. Introduction to Euclids Geometry

Q 1 Write Ecluid's definition of straight line.

Mark (1)

Q 2 State true of false : Two distinct lines intersect at more than one point.

Mark (1)

Q 3 Fill in the blank :
A_____ is that which has no part.

Mark (1)

Q 4 How many points a line segment can have?

Mark (1)

Q 5 State true or false: Given two distinct points, there are two lines which passes through them.

Mark (1)

Q 6 Fill in the blank :
Three or more lines are said to be _____if their common point lies on them.

Mark (1)

Q 7 According to Euclid, Name of geometrical figure which has only length and breadth.

Mark (1)

Q 8 State two equivalent versions of Ecluid's fifth postulate.

Marks (2)

Q 9 If A, B and C are three points on a line, and B lies between A and C then prove that AB + BC = AC.

Marks (2)

Q 10 If a point C lies between two points A and B such that AC = BC, then prove that AC = (1/2)AB.

Marks (2)

Q 11 Which axiom is related to comparison of things According to Euclid's axiom?

Marks (2)

Q 12 If a point C lies between two points A and B such that AC = BC, then find the relation between BC and AB.

Marks (2)

Q 13 As per Euclid's axiom, 'If equals are added to equals, explain with examples.

Marks (2)

Q 14 What are the types of the boundaries of the surfaces?

Marks (2)

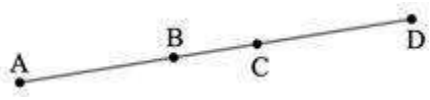
Q 15 Which proof was given by the great mathematician Thales about circle?

Marks (2)

Q 16 Which type of the the shape of altars used for household rituals in the Vedic period?

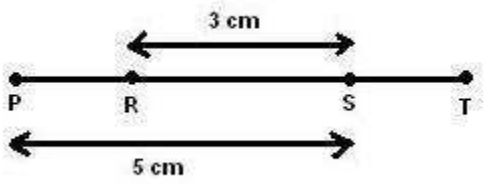
Marks (2)

Q 17 In Fig., if AC = BD then prove that AB = CD.



Marks (3)

Q 18 If PS = RT as shown in the figure, then what will be the value of ST?



Marks (3)

Q 19 Define the following according to book 'Element" by Euclid:
(i) Surface (ii) Point (iii)Straight line (iv) Line.

Marks (3)

Q 20 What is Playfair's Axiom?

Marks (3)

Q 21 What are two equivalent versions of Euclid's fifth postulate?

Marks (3)

Q 22 Define Postulate according to Euclid.

Marks (3)

Q 23 State Euclid's five postulates.

Marks (4)

Q 24 Define the following terms:
(i) Intersecting lines
(ii) Parallel lines

(iii) Line segment
(iV) Collinear points.

Marks (4)

Q 25 Define the following terms:
(i) Axiom (ii) Theorem Marks (4)

Q 26 Give seven Euclid's axioms.

Marks (4)

Q 27 Mention Five postulates of Eulid.

Marks (4)

Q 28 Prove that an equilateral triangle can be constructed on any given line segment. Marks (4)

Q 29 Give the definition for each of the following terms:-

(i) Parallel lines, (ii) Perpendicular lines, (iii) Line segment, (iv) Radius of a circle,(v)Square.

Marks (4)

Most Important Questions

Q 1 Define the following terms
a) Point
b) Line
c) Line Segment

Q 2 Explain the following terms :
a) Concurrent lines
b) Collinear points
c) Parallel lines
d) Intersecting lines

Q 3 How many lines can pass through a given point?

Q 4 How many lines can pass through two given points?

Q 5 How many line segments can pass through three collinear point A, B, C?

Q 6 State True or false
a) Two lines intersect at a point.
b) A line segment has a fixed length.
c) A ray has a fixed length.
d) Only one line can pass through a given point.
e) Two lines are coincident if they have only one point in common.

Q 7 Fill in the blanks:

a)Two distinct points in a plane determine a. …line.

b) Given a line and a point, which is not on the line, there is …… line, which passes through the given point and is …… to the given line.

c) Whole of anything is …… to the sum of its parts and …… than any one of them.

d) If equals are subtracted from wholes the remainders are …… .

Q 8 State the two equivalent version of Euclid's fifth postulate.

Q 9 If C is a point which lies between two points A and B such that AC = BC, then prove that AC= ½ AB. Explain by drawing the line.

Q 10 Prove that the mid-point of any line segment is unique.