## Class – IX

## Maths

**ASSIGNMENT**:-

1. Define all kinds of triangle with examples.
2. Define all kinds of quadrilateral with examples.
3. Write all formula of Algebra. Example: $(a+b)^2 = a^2 + b^2 + 2ab$
4. Write all formula of mensuration. Exa- Area of Rectangle= Length x Breadth.
5. Define the terms:- Rational number, Real number, Associative Law of Addition, VAT (Value Added Tax), Axiom, Postulates, Theorem, Reflex Angles, Mean in Term of Statistic and Frequency in Term of Statistic.

**SOLVE THESE PROBLEMS :-**

1. Find the area of an isosceles triangle whose one side is 10 cm greater than each of its equal sides and perimeter is 100 cm.
2. Construct a triangle PQR in which $<R= 45^0$, $<Q= 60^0$ and PQ+QR+RP = 11 cm.
3. Prove that the line segment joining the mid points of two equal chords of a circle makes equal angles with the chords.
4. Prove that the line segments joining the mid points of two sides of a triangle is parallel to the third side.
5. Water is flowing at the rate of 7 m/s through a circular pipe whose internal diameter is 2 cm into cylindrical tank the radius of whose base is 40 cm. Determine the increase in the water level in ½ hr.

**PROJECT:-**

Write a biography of great mathematician "VASHISHTH NARAYAN SINGH" in 500 words.

## English

1. Fill in the blanks with appropriate conjunctions:-
    (a) I worked hard ………………. I failed the exam.
    (b) He fled ………………  He was afraid.
    (c) Hurry up, ……………… you will be late.
    (d) ……………. you try, you will not succeed.
    (e) I am sure …………… she will come.
    (f) Will you wait ………. I return?
    (g) He finished first ……………he started late.
    (h) I will not go ……………………. I am invited.
    (i) ………………. He was industrious, I encouraged him.
    (j) The wallet has either been lost ……………stolen.
    (k) She is fat …………… she runs fast.
    (l) I don't know  ……………… she will come or not.
    (m)……………… his father's influence, he could not find a good job.
    (n) ……………. getting the best possible treatment, his health is not improving.
    (o) ………………. he doesn't follow his doctor's advice, his health will deteriorate.

2. Accidents happen when people violate traffic rules. Careless drivers cause suffering to themselves and others. Write an article in 100-120 words on "safe driving."

3. Write an article on the bad effect of covid-19 on Indian economy in about 250 words.

4. Write the structure the of tense on cardboard.
5. Write the structure the of voice on cardboard.

## Physics

1. What do you mean by S.I units. Write fundamental units and give some examples of derive units.
2. Draw the diagram of human ear and working also.
3. What do you mean by rest and motion. Explain with appropriate examples.
4. Write difference between distance and displacement. Explain with suitable example.
5. Write differences between:
   (a) Speed and velocity
   (b) Uniform and non- uniform motion
6. Draw the diagram of sound producing objects (at least 10).
7. Write the biography of Newton.
8. Define the terms:
   (a) Amplitude     (b) Frequency     (c) Wavelength     (d) Time - Period

## Economics & Geography

1. Distinguish between Bangar and Khadar.
2. Give an account of the Northern Plains of India?
3. The name of the states where the highest peaks are located?
4. Why $82^0 30'$ E has been selected as the standard Meridian of India?
5. Why is the difference between the duration of a day and night hardly felt at Kanyakumari but not so in Kashmir?
6. Find out which songs, dances, festivals and special food preparations are associated with certain seasons in your region. Do they have some commonality with other regions of India.
7. On an outline map of India show that following:-
   (a) Mountain and hill ranges the Karakoram, The Zaskr
   (b) Peaks-$K_2$, Kanchenjunga
   (c) The Indian Desert, Lakshadeep Islands