

## SCIENCE

### TEST : 1 ( HOTS)

1. A silvery –white metal X taken in the form of ribbon, when ignited burns in air with a dazzling white flame to form a white powder Y. When water is added to powder it dissolves partially to form another substance Z. a) What could metal X be?  
b) What is powder Y?  
c) With which substance metal X combine to form powder Y?  
d) What is substance Z? Name one domestic use of substance Z.  
e) Write a balanced chemical equation of the reaction which takes place when metal X burns in air to form powder Y.
2. When a black metal compound XO is heated with a colourless gas  $Y_2$ , then metal X and another compound  $Y_2O$  are formed. Metal X is red-brown in colour which does not react with dilute acids at all. Gas  $Y_2$  can be prepared by the action of a dilute acid on any active metal . The compound  $Y_2O$  is a liquid at room temperature which can turn anhydrous copper sulphate blue.  
a) What do you think is metal X?  
b) What could be gas  $Y_2$ ?  
c) What is compound XO?  
d) What is compound  $Y_2O$ ?  
e) Write the chemical equation of the reaction which takes place on heating XO with  $Y_2$ .  
f) What type of chemical reaction is illustrated in the above equation?
3. Explain giving examples: a) tartaric acid is a component of baking powder used in making cakes.  
b) Gypsum ,  $CaSO_4 \cdot 2H_2O$  is used in the manufacture of cement.
4. A) Here are some results of solutions tested with universal indicator paper, sulphuric acid- red, Metal Polish : Dark blue, Washing liquid- Yellow, Milk of magnesia – light blue, oven cleaner- purple, car battery acid: pink.  
Arrange the solutions in order of their increasing pH values.  
b) A first-aid manual suggests that vinegar should be used to treat wasp stings and baking soda for bee stings . What does this information tell you about the chemical nature of a) wasp stings b) bee stings.
5. Give reasons: 1. Sodium and Potassium are stored under kerosene.  
2. Aluminium is a highly reactive metal. Even then it can be used to make utensils for cooking.  
3. Ionic compounds have generally high melting points.
6. A. Write the name and formula of one salt each which contains a) two molecules of water of crystallization b) five molecules of water of crystallization c) ten molecules of water of crystallization.

13/11/17

## Rainy day homework.

Pg 1

CLASS: 8

subject: Mathematics

Write the steps of construction also for the following (1), (2), (3) ans:

- 1) Draw a line segment of length 9cm and divided it in the ratio 4:5.
- 2) Construct a triangle with sides 5cm, 5.5cm and 6.5cm. Now construct another triangle whose sides are  $\frac{3}{5}$  times the corresponding sides of the given triangle.
- 3) Construct a triangle ABC in which  $BC = 9\text{cm}$ ,  $\angle B = 60^\circ$  and  $AB = 6\text{cm}$ . Construct another triangle whose sides are  $\frac{2}{3}$  of the corresponding sides of  $\triangle ABC$ .
- 4) Prove that opposite sides of a quadrilateral circumscribing a circle subtend supplementary angles at the centre of the circle.
- 5) Prove that the tangent to a circle is perpendicular to the radius through the point of contact.

### Social Science

- 1, State the various functions of political parties perform in a democracy?
- 2, What are the various challenges faced by political parties?
- 3, What is the need of the political parties?
4. How can political parties be reformed? Explain.
- 5, Write briefly about the six major parties of India?

**Class: X**

**ENGLISH**

**Julius Caesar**

1. Describe the night before the assassination of Caesar?
2. What was Calpurnia's dream?
3. How did Decius Brutus interpret Calpurnia's dream?
4. Who was Metellus Cimber?
5. What reason does Brutus give to the Romans for killing Caesar?