**इयत्ता: दहावी** पहिली घटक चाचणी **विषय: Science 1**

**गुण: 20** **वेळ: 1 तास**

**Q.1 Solve the following questions.** **(5 Marks)**

(i) The number of electrons in the outermost shell of alkali metals is.....

(A) 1 (B) 2 (C) 3 (D) 7

(ii) Alkaline earth metals have valency 2. This means that their position in the modern periodic table is in ....

(i) Group 2 (ii) Group16 (iii) Period 2 (iv) d-block

(iii) Write the name and symbol of the element from the description.

a. The atom having the smallest size.

b. The atom having the smallest atomic mass.

(iv) To prevent rusting, a layer of ..... metal is applied on iron sheets.

(v) The conversion of ferrous sulphate to ferric sulphate is ..... reaction.

**Q.2 Solve the following questions. (Any Three)** **(6 Marks)**

(i) What is the reaction called when oxidation and reduction take place simultaneously? Explain with one example.

(ii) An element has its electron configuration as 2,8,2. Now answer the following questions.

a. What is the atomic number of this element?

b. What is the group of this element?

(iii) What is the difference between mass and weight of an object.

(iv) What are (i) free fall, (ii) acceleration due to gravity

**Q.2 Solve the following questions. (Any Three)** **(9 Marks)**

(i) Solve the problem: The mass and weight of an object on earth are 5 kg and 49 N respectively. What will be their values on the moon? Assume that the acceleration due to gravity on the moon is 1/6th of that on the earth.

(ii) Write scientific reasons: Atomic radius goes on decreasing while going from left to right in a period.

(iii) Write the names from the description.

a. The period with electrons in the shells K, L and M.

b. The group with valency zero.

c. The family of nonmetals having valency one.

d. The family of metals having valency one.

e. The family of metals having valency two.

f. The metalloids in the second and third periods.

(iv) Observe the following picture a write down the chemical reaction with explanation.