



# SUCCESS KEY TEST SERIES

X (English)

(Unit test-1 Science -1 (Ch-1,2,3))

Science And Technology - I-

DATE:

TIME: 1 hrs

MARKS: 20

SEAT NO:

--	--	--	--	--	--	--	--

**Q.1 A) Solve the following questions.**

**(2)**

- 1)  $ZnSO_4$  : Colourless solution ::  $CuSO_4$  : .....
- 2) A point inside or outside any object where all its total mass is assumed to be concentrated is called ..... of an object.

**B) Choose the correct alternative and rewrite the sentence**

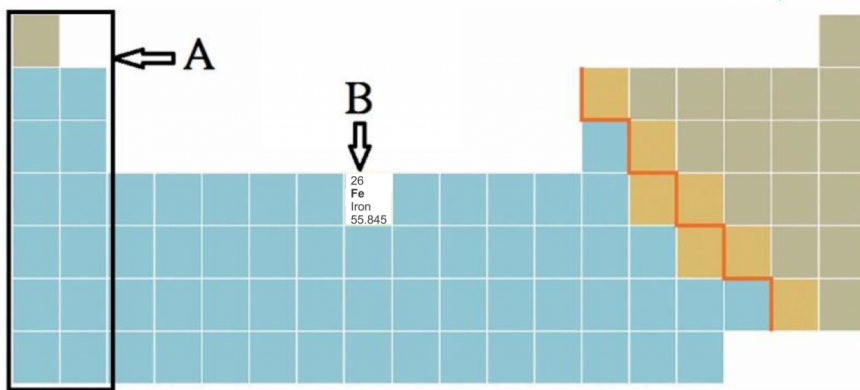
**(3)**

- 1) Value of G is .....
  - a.  $6.67 \times 10^{-11} \text{ Nm}^2\text{kg}^{-2}$
  - b.  $6.67 \times 10^{-23} \text{ Nm}^2 \text{ kg}^{-2}$
  - c.  $9.8 \times 10^{-11} \text{ Nm}^2\text{kg}^2$
  - d.  $9.8 \text{ m/s}^2$
- 2) Value of g is more at .....
  - a. Polar region
  - b. equatorial region
  - c. about 100 km from surface
  - d. a pit 20km deep
- 3) In the Mendeleev's periodic table gaps were left for the elements to be discovered later. Which of the following elements found in the periodic table.
  - a. Germanium
  - b. Chlorine
  - c. Oxygen
  - d. Silicon

**Q.2 Solve the following questions. (Any two)**

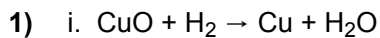
**(4)**

- 1) Weight of the person on the earth and on the moon is very different.
- 2) Newton concluded that the centripetal force which is the force acting on the planet and is responsible for its circular motion, must be inversely proportional to the square of the distance between the planet and the Sun. Newton identified this force with the force of gravity and hence postulated the inverse square law of gravitation. The gravitational force is much weaker than other forces in nature but it controls the Universe and decides its future. This is possible because of the huge masses of planets, stars and other constituents of the Universe.
  - i. What is the direction in which centripetal force acts in ?
  - ii. What will happen to the centripetal force if the distance between the planet and the sun is halved ?
- 3) Observe the figure and answer the following questions.
  - i. Identify the block shown by box A and write an electronic configuration of any one element of this block.
  - ii. Identify the block of element denoted by letter B and write its period number.

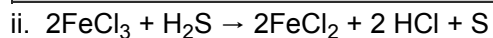


**Q.3 Solve the following questions. (Any two)**

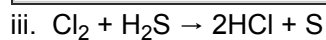
**(6)**



Reducing agent	Reduced product

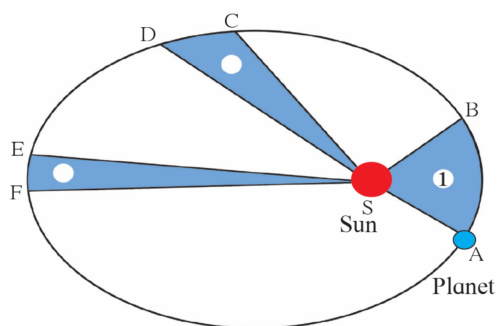


Reducing agent	Reduced product

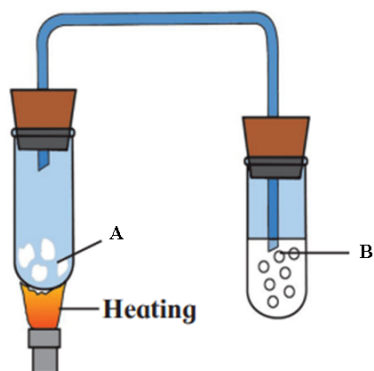


Reducing agent	Reduced product

3) Write a note on given figure.



2)



From the above diagram answer the following question.

- i. Label A and B
- ii. What is the aim of above experiment.
- iii. Give the equation.
- iv. Give one observation.

**Q.4 Solve the following questions. (Any one)**

**(5)**

- 1)
  - i. What is the symbol and used for elements francium in Periodic Table.
  - ii. To which group and period doesn't it belong.
  - iii. How many valence elections will it have.
  - iv. It is a metal on a non-metal.
  - v. Name another element of the same group.

2)

Elements	P	Q	R
Mass Number	23	20	35
Number Of Neutrons	12	10	18

Study The Table And Answer The Following.

- i. Write the atomic number and electronic configuration of elements. P, Q and R
- ii. To which groups do P, Q, and R belong
- iii. To which period do P, Q And R belong
- iv. Which among P, Q and R is (i) An Alkali Metal (ii) Noble Gas (iii) Halogen