**SINDHI HIGH SCHOOL, HEBBAL**

**III PERIODIC TEST [2023-24]**

**Subject: SCIENCE ANSWER KEY**

**Class: IX Max. Marks: 30**

1. a) a force of 1 N displaces a body by 1 m **(1)**

2. c) Milk **(1)**

3. b) Increasing grain production for storage in warehouses alone can solve the problem of malnutrition and hunger. **(1)**

4. d) A is false but R is true. **(1)**

5. b) Both A and R are true but R is not the correct explanation of A. **(1)**

6. a) Both A and R are true and R is the correct explanation of A. **(1)**

7. 2N- two atoms of nitrogen, N2- one molecule of nitrogen **(½+½)**

Ammonium sulphate. NH4 + and SO4 2- ions **(½+½)**

8. Air- C, O Water – H **(½+½)**

Soil - P, Cu, B Fe, Cl, N, K, S **(1)**

9. **Manure**  **Fertilisers**

a. long term benefits Short term benefits **(½+½)**

b. Never cause any pollution When not used judiciously cause

pollution **(½+½)**

10. i)1KWh = 3.6 X 106 J  **(1)**

ii) Given, Power of electric iron, P =1200 W=1200/1000 = 1.2 kW **(½)**

Time, t = 0.5 h

Electric energy consumed in a day = Power X time = (1.2 x0.5) kWh **(½)**

Electric energy consumed in month of April (i.e. 30 days) , E = (1.2 X0.5)

30 = 18kWh. **(1)**

11. a) The number of atoms constituting a molecule is known as its atomicity.

The atomicity of ozone is 3. **(½+½)**

b) **Formula mass of Ca(OH)2 = 1x40+16x2+1x2 = 74u (½)**

**Percentage composition = Mass of an element x100 (½)**

Mass of compound

= 40/74 x100

= 54.05% **(1)**

12. Higher yield, Improved product quality, Biotic and Abiotic resistance,

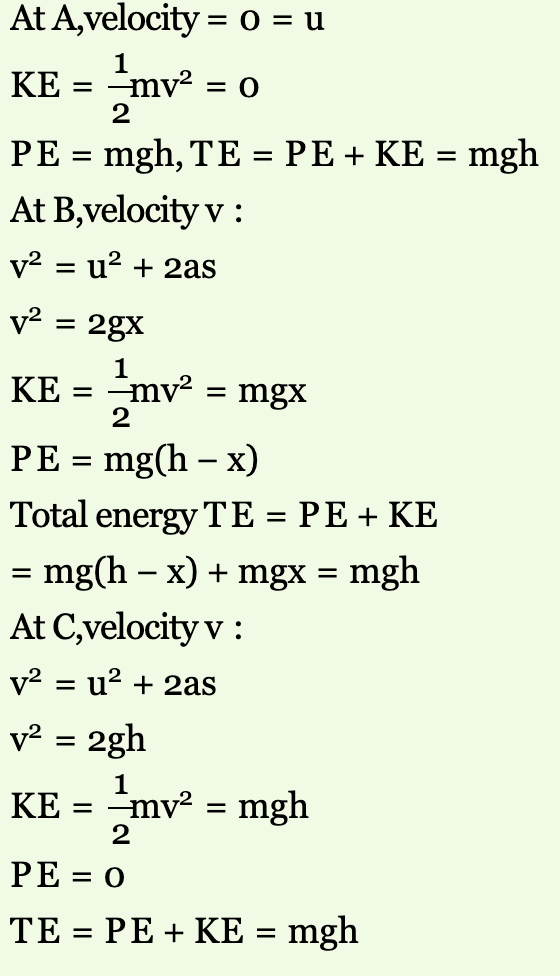
Change in maturity duration, Wider adaptability and desirable agronomic

characteristics. **(½x6=3)**

13. : i) Energy can neither be created nor destroyed, it can only be transformed from one

form to another. **(1)**

ii)

 **(1+½+½+1+½+½)**

14. i) The chemical formula of carbon dioxide is CO2.

Atomic mass of carbon is 12.

Atomic mass of oxygen is 16.

Mass ratio = 1 × 12 : 2 × 16  
= 12 : 32  
= 3 : 8 **(½+½)**

ii) X2Y3 **(½+½)**

iii) Hydrogen and oxygen combine in the ratio of 1: 8 by mass,  
 So it means that 1 g hydrogen combines with 8 g oxygen.  
 Therefore, 3 g of hydrogen which combines with oxygen =8×3 =24g. **(½+½)**

iv) **(½+½)**