20.12.2019   EVERWIN VIDHYASHRAM   Time:1½hrs
STD: IX   PERIODIC ASSESSMENT-III   Marks:40
Science

I. In the following question, a statement of Assertion is given and a corresponding statement of Reason is give. Choose the correct option: 1x1=1

1. Assertion: Honey bees are nuisance to farmers
   Reason: Bees destroy the crops to fulfill their nutritional requirement.
a)Assertion is true, Reason is false
b)Assertion is false, Reason is true
c)Both Assertion and Reason are true
d) Both Assertion and Reason are false.

II. Choose the correct option   3x1=3
2. The method by which insect pest are exposed to chemicals before proper storage of grains:
 a)Spraying   b)Drying   c)Fumigation   d)Pesticide
3. The symbol of calcium proposed by the scientist Berzilius is
 a)C   b)Ca   c)K   d) Ka
4. The weight of an object at the center of the earth of radius R is
 a)Zero   b)Infinite   c)Increase   d) Decrease

III. Very Short Answer: 3x1=3
5. Name one micronutrients and one macronutrients which plant take from the soil.
6. State the law of constant proportion.
7. Why will a sheet of paper fall slower than one that is crumpled into a ball?

IV. Answer the following questions in brief: 6x3=18
8. Write in brief about food requirements of dairy animals.
9. What are three ways by which plants can be attacked by insect pests?
(OR)
10. a) what are ions?
    b) How many atoms are present in one molecule of oxygen and one molecule of phosphorus?
11. a) Calculate the molecular mass of sodium nitrate (atomic mass of sodium = 23u, nitrogen =14u and oxygen = 16u)
    b) Calculate the molecular mass of calcium chloride (atomic mass of calcium = 40u and chlorine = 35.5u)
(OR)

a) Hydrogen and oxygen combine in the ratio of 1:8 by mass to form water. Prove the law of definite proportions by explaining the formation of water.
    b) Write any two postulates of Dalton's atomic theory.
12. Calculate the molar mass of the following substances:
 a)Hydrochloric acid HCl   b)Nitric acid HNO_3
(Atomic mass of H=1, N=14, O=16, Cl=35.5)
13. a) How are molecules of elements classified based on atomicity? Give examples.
(OR)
    b) i) Write down the formulae of:
          Sodium Oxide, Aluminium Chloride, Magnesium Hydroxide, Potassium Sulphate
       ii) Convert 22g of carbondioxide into moles.(Atomic mass of Carbon =12, O=16)

V. Answer in detail: 3x5=15
14.What is connective tissue? Explain the different types of connective tissues in our body.
(OR)
    What are the various methods of Irrigation in India?
15 A stone is thrown vertically upwards with an initial velocity of 40m/s. Find the maximum height reached by the stone. What is the net displacement and the total distance covered by the stone? (Take g=10ms^{-2})
16. a) i) What is a molecule? How are molecules classified? Give examples for each type.
       ii) What is the mass of 0.5 mole of water molecules?
(OR)
    b) i) Calculate the number of molecules of sulphur (S$_8$) present in 16g of solid, Sulphur. (Atomic mass of =32).
       ii) What is an ion? What are the two types of ions? Give an example for each type.