CLASS: X BIOLOGY - LIFE PROCESSES

Q1 How exchange of gases take place in plants?
Q2 Differentiate between photosynthesis and respiration.
Q3 Explain the mechanism of breathing in human beings.
Q4 How does water rise in tall trees?
Q5 Leaves of a potted plant are coated with Vaseline to block the stomata. Will this plant remain healthy for long? State the 3 reasons for your answer.
Q6 How is prepared food transported to different parts of the plant?
Q7 What is blood? What are the components of blood? Also write the function of each component.
Q8 What are the advantages of having very thin and highly branched capillaries for blood flow?
Q9 What is the difference between the blood flowing in the arteries and that flowing in the veins?
Q10 What is the meaning of the term “Double circulation”?
Q11 What will happen if excess bleeding takes place and what natural device preventing it?
Q12 Correct the false statement
a) The walls of the atrium are thicker than the ventricles
b) The oxygen carrying blood goes into the left auricle
c) Valves open on both the sides.
d) Xylem transports food material.
e) The blood circulation in man is of open type in man
Q13 Differentiate between excretion ands osmoregulation? Describe how excretion takes place in amoeba.
Q14 What is dialysis? How is it useful?
Q15 What is excretion? How is solid and gaseous waste excreted in humans?
Q16 List the functions of blood.

CLASS: X CHEMISTRY - CHEMICAL REACTIONS AND EQUATIONS

1. Give 5 examples each of physical and chemical changes that take place around us in our day to day life.
2. When a magnesium ribbon is burnt in air, what are the two observations that you make?
3. Write a balanced chemical equation to represent decomposition of lead nitrate on heating. What are brown fumes due to?
4. Make a list of at least 10 cations and 10 anions.
5. Taking help from the list prepared in Q4,, write the chemical formulae of:-
(i) Barium chloride (ii) Sodium Sulphate (iii) Ammonium phosphate (iv) Calcium hydroxide
(v) Aluminium carbonate (vi) Magnesium hydrogen carbonate (vii) Zinc sulphide
(viii) copper (I) chloride (ix) Potassium Bromide (x) Lead nitrate (xi) Iron (III) oxide (xii) Sodium Oxide (xiii) Silver sulphide (xiv) Calcium Fluoride
6. Write the following in the form of balanced chemical equations:-
(a) Calcium carbonate decomposes on heating to form calcium oxide and carbon – di – oxide.
(b) When ammonium hydroxide is added to a solvent of iron (II) Sulphate, a green ppt of iron (II) hydroxide and ammonium Sulphate are formed.
(c) When a nail of iron is added to a solution of copper Sulphate, iron (II) Sulphate and copper metal are formed.
(d) Zinc reacts with dil hydrochloric acid to form zinc chloride and hydrogen gas is liberated.
7. A chemical reaction which is both combination as well as exothermic, is used by us for white washing purposes. Write the equation for the same.
8. What is a decomposition reaction? Give 2 examples each of decomposition taking place due to heat, light and electricity.

9. How does a displacement reaction differ from a double displacement reaction? Give examples to explain.