

**BIOLOGY REVISION / RESEARCH QUESTIONS**

1. (a) What is a cell?

.....  
.....

(b) State three differences between a plant cell and an animal cell

.....  
.....  
.....

2. (a) State four characteristics;

(i) Organisms in Kingdom animalae.

.....  
.....  
.....  
.....

(ii) Organisms in Kingdom Plantae.

.....  
.....  
.....  
.....

3. State three reasons as to why viruses are regarded as ;

(a) Non-living Organisms

.....  
.....  
.....

(b) Living Organisms;

.....  
.....  
.....

4. State five characteristics of insects.

.....  
.....  
.....  
.....  
.....

5. Mention three economical importance of house flies

.....  
.....  
.....

6. Describe the mode of life of a cockroach.

.....  
.....  
.....

7. State five importances of soil living organisms.

.....  
.....  
.....  
.....  
.....

8. Outline the four types of soil erosion.

.....  
.....  
.....  
.....

9. Distinguish between an organ and organisms.

.....  
.....

10. State three functions of a cell cytoplasm.

.....  
.....  
.....

**CHEMISTRY REVISION / RESEARCH QUESTIONS**

1. Chemical substances are either elements or compounds.

(a) Define the term;

(i) An element?

.....  
.....

(ii) A compound?

.....  
.....

(b) Group the following substances as either elements or compounds;

Magnesium oxide. Lead, Nitrogen, Copper (ii) oxide, Carbon and Sodium chloride.

.....  
.....  
.....

2. Describe briefly how the following mixtures can be separated.

(a) Sugar with Iron fillings.

.....  
.....  
.....

(b) Sand mixed with salt

.....  
.....  
.....

3. (a) What is a rock?

.....  
.....

(b) State three types of rocks you know.

.....  
.....  
.....

4. Ethanol was added to water;

(a) State what was observed

.....  
.....

(b) State how the mixture ethanol and water can be separated.

.....  
.....

(c) What is the principle behind the method you have stated I (b) above.

.....  
.....

5. (a) What is air pollution?

.....  
.....

(b) Mention three causes of air pollution.

.....  
.....

6. State the composition of the following compounds

Compound	Composition
(i) Zinc Oxide	
(ii) Sodium Sulphate	
(iii) Ammonia	

7. Alloys are preferred to their metals for use in our daily life.

(a) Name one alloy you know and state its makeup.

.....  
.....

(b) Name two reasons why alloys are preferred for use to their constituent metals.

.....  
.....

8. Complete the following word equations

(a) Hydrogen + Oxygen  $\longrightarrow$

(b) Sodium + Oxygen  $\longrightarrow$

(c) Aluminium + Sulphur  $\longrightarrow$

9. Air is gaseous solution

(a) Name the solvent and two solutes of air;

(i) Solvent

.....  
.....

(ii) Solute

.....  
.....

10. Perfume was sprayed in a room containing occupants.

(a) State what was observed.

.....  
.....

(b) Name the process that took place.

.....  
.....

**END**