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**BIOLOGY CAT**

1. **Explain why male are more muscular than v .(2mks)**

* Male’s bodies have more muscles than fat while females have a lot of fat as compared to the males.

1. **Name and explain any two nutrients that do not require digestion before they are absorbed. (4mks)**

* Water and Vitamins
* Because they are already small enough to be observed by the without being broken down.

1. **Name the factors that determine energy requirements in human beings.(5mks)**

(i). Age (ii). Body size (iii). Sex (iv). Occupation (v). Basal Metabolic Rate

1. **Explain the differences between**

**(i).Turgor pressure and wall pressure (2mks)**

Turgor pressure exerts an outward pressure on the cell of the plant when the cells gains more water and its vacuole enlarges while Wall pressure is the resistant pressure that is equal to the turgor pressure but act opposite so that it resist the stretching pressure.

**(ii).Osmotic pressure and Osmotic potential (2mks)**

Osmotic pressure is applied against semi-permeable membrane to stop water molecules from the distilled water entering the concentrated solution while Osmotic potential is the pressure required to withdraw water molecules from pure water separated by a semi-membrane.

1. **What are the similar characteristics between plants and animals.(4)**

(i). Both excrete

(ii). Both respire

(ii). Both Reproduce

(iv). Growth and development

(v). Nutrition

1. **What is the name given to the double-naming system of living organisms.(1mk)**

* Binomial nomenclature

1. **Give reasons why scientific names are given in Latin(4mks)**
2. The necessity to develop scientific language.
3. Naming of organisms was developed by Carolus Linnaeus
4. The Latin was widely spoken and used by scientists during Linneaus’ time
5. **Name the method by which the molecules like amino acids and glucose enter the cell.**

* Active transport

1. **What is the function of the following apparatus.(5mks)**

**(i).Bait trap.**

* Attracting and trapping small animals

**(ii).Pooter.**

* Sucking small animals from the bark of trees

**(iii).Fish net.**

* For trapping small fish and other small water animals

**(iv).Pitfall trap.**

* Catching crawling animals

**(v)Pair of forceps**

* Picking up small dangerous crawling animals