1 a) They serves as medicinal treatments to humans. E.g. the penicillin is used in the production of antibiotics that that be used for bacteria

 b) Fungi helps in recycling of dead organisms to serve as manure to the soil and they act as decomposer to the ecosystem and breaking down if organic matters in release of carbon dioxide.

 c) Fungi can be used in the production of food and drinks and they can also useful in crop and disease controls

 d) The mycorrhizal relationship between fungi and the plant roots is essential for the productivity of farm lands.

 e) Fungi also help in the control in the populations of pest to farmland

2. 

The cell wall: it gives shape to the cell and gives it its rigid structure.

The nucleolus: it is found in the nucleus and hold the genetic material of the cell and also tells the cell what to do

The centrosome: it is found in the middle of the cell and supports the production of microtubule and provides structure to the cell.

The vacuole: this is a space on the cell the acts as a waste of disposal and also storage

The nucleus: holds the genetic materials...

The chromatin threads: this is found round the nucleus and it carries the DNA and the rRNA.

 3 The sexual reproduction in filamentous fungi includes:

* Firstly, two mating types of hyphae grow in the same medium
* A chemical interaction between them causes growth perpendicular to the hypae in opposite directions , so that they could meet one and another
* The growths are the delimited by the wall just so the nuclei are isolated in the differentiated sex organs called gamentangia
* The gamentangia fuses in a process called plasmogamy and together they form a zygote.
* The nuclei in the zygote fuse in twos and under meiosis independently.
* In summary sexual filamentous fungi involves three stages which are the plasmogamy, karogamy and the meiosis...

 4 Bryophytes are able to adapt in the environments through:

* They posses definite structures for water and nutrients absorption from the soil
* They also poses a waxy cuticle that keeps from drying out through the process of desiccation
* The gamentagia keeps plants gametes against drying out.

5 \* Eusteles: this is a type of stele in which the vascular tissue in the stem forms a central ring of bundles around pith. The vascular bundles are discrete, concentric collateral bundles of xylem and phloem.

* Atactostele: a type of stele found on monocots, in which the vascular tissue in the stem exist as a scattered bundles
* Siphon stele: this is when the vascular bundle is arranged and shaped like a cylinder around the pith.
* Dictyostele: a type of stele in which the vascular cylinder is broken up into a longitudinal series of network of vascular strands around pith…



6 The **life cycle** of seedless **vascular plants** is an alternation of generations, where the diploid sporophyte alternates with the haploid gametophyte phase. The diploid sporophyte is the dominant phase of the **life cycle**, while the gametophyte is an inconspicuous, but still-independent, organism…