



Biology Assignment WK-5

Question no. 1

1. (A) Petals of 5 or multiple of five
2. (B) Gymnosperm
3. (C) Sphenopsida
4. (C) 7 cells
5. (C) Saccharum munja

Question no. 2

(1)

Bryophytes as amphibians

Bryophytes are often called amphibians of the plant world because they can live in moist environments both on land and in water. They require water for reproduction.

(2)

Significance of Alternation of Generation

Alternation of generation is significant because it allows a plant to spread its genetic material through both sexual and asexual means, increasing genetic diversity and adaptability.

(3)

Plants belong to sphenopsida

Plants in Sphenopsida, such as horsetails have joined stems. The term arthropyte refers to



this characteristics, with "arthro" meaning joint

(4) **Cycle of Bryophyte**

Bryophytes have a life cycle that includes a dominant gametophyte stage, where the plant is haploid and produces gametes. Following fertilization, a sporophyte is formed which is diploid and often remains attached to the gametophyte. The sporophyte produces spores through meiosis that will grow into new gametophytes.

(5)

Hornworts

Hornworts are considered more advanced due to their ability to better regulate their internal water content and their photosynthetic capacity because of the presence of thalli with one large chloroplast per cell, which is efficient for photosautotrophy.