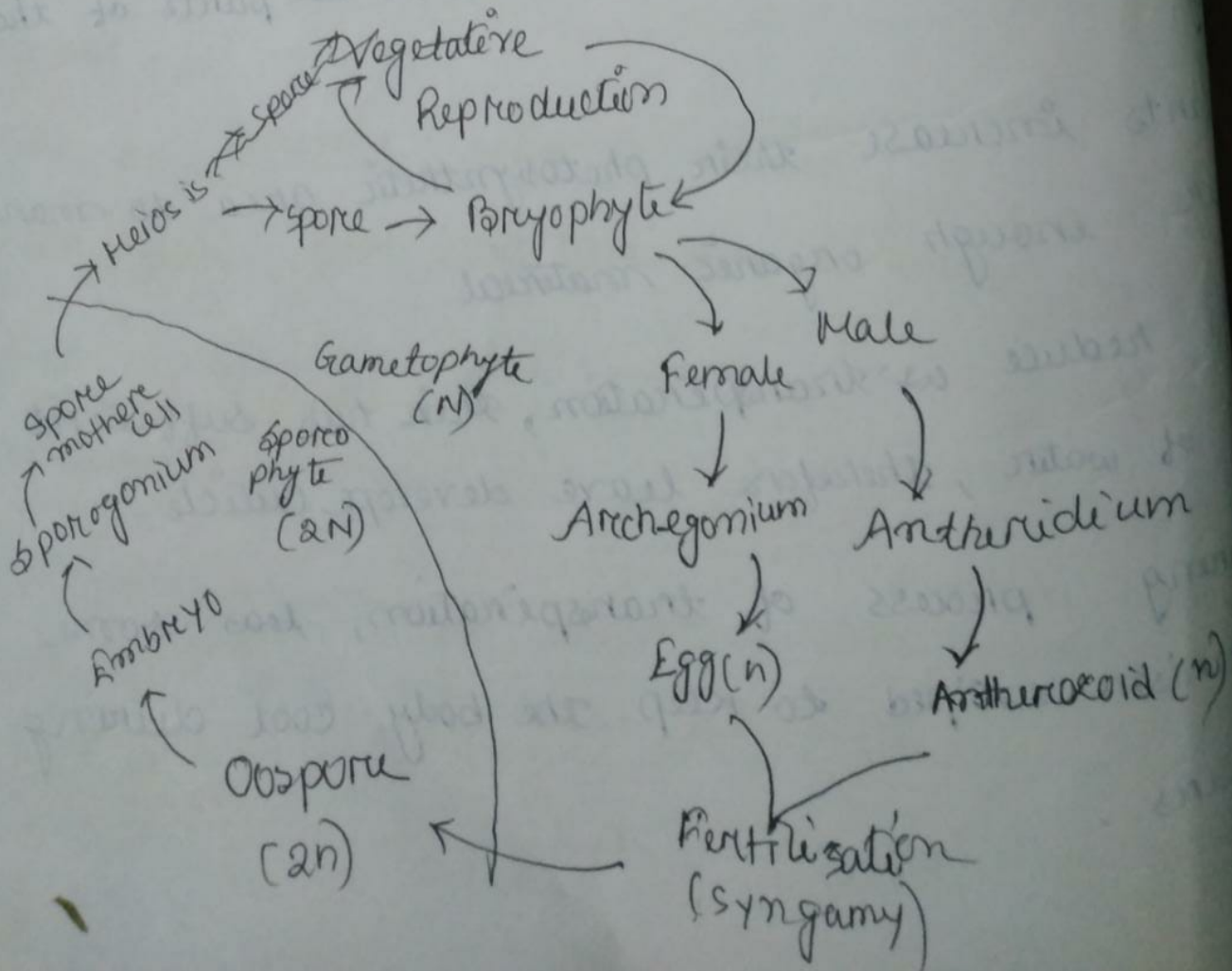


Alternation of Generation in Bryophytes :



and neck (slender elongate upper part)

8. Water is necessary for fertilization

9. Gametophytic and sporophytic phase are present in the life cycle of bryophytes.

11. The gametophytic phase is long lived, independent and sporophytic phase is dependent upon gametophytic phase

12. In primitive forms (e.g. Riccia, Marchantia) the gametophyte is prostrate and thalloid.

13. The sporophyte is a projecting str. differentiated into foot, seta and capsule.

14. Spores are non-motile and they disseminate exclusively by wind.

15. Under favourable condition, the spore either forms a filamentous germ tube, which give young gametophyte or forms protonema as in mosses.

Range of Thallus Organisation:

The range of thallus str. is very diverse in bryophyte. Ranging is from flat ribbon-like to liver do filamentous as well as erect stem like str.

1. In hornwort, typically represented by Anthoceros sp. the thallus is bilobed, pinnately branched or spongy with large no. of sub-spherical spongy bodies like gemma or raised on thick vertical stalk like str. The dorsal surface of thallus may be smooth or velvety ^{b/c of} stalk-like str. the P/ of several lobed lamellae or rough with spines and ridges (A. fusiformes). On the other hand ventral surface bears many unicellular, smooth walled rhizoids and some dark bluish green spot seen in ventral surface. These cavities form mucilage and filled with Nostoc colonies. Such thallus develop erect, elongated and cylindrical sporangia. Each sporogonium is surrounded by sheath like str. on its base called involute.

The vertical T.S of thallus is uniformly