Name : Maria Adnan Class: 1st Year (FSC-M)

Date : 22-Nov-2024 Test : 5

Biology

Question #1

(1) A

(2) C

(3) D

(4) C

(5) C

Question #2

(i)

Bryophytes; amphibians of plant

The bryophytes are said to be the amphibians of the plant world because they cannot live away from water. They need water for reproduction

(ii)

The significance of alteration of generation

~~These spore~~ During the formation of spores from spore mother cells by meiotic division, reshuffling of genes occurs. As a consequence, a great variety of spores

with different genetic make up are produced. These spores produce gametophytes with different genetic combinations. The gametophyte with better genetic makeup will have a better chance for survival in their environment as compared to gametophytes with less-advantageous characteristics. The oospore developing after fertilization now has a new genetic makeup as compared to the parent. This genetic variation passes to the new sporophyte which on maturity once again produces further genetic recombination which are transferred to the gametophyte

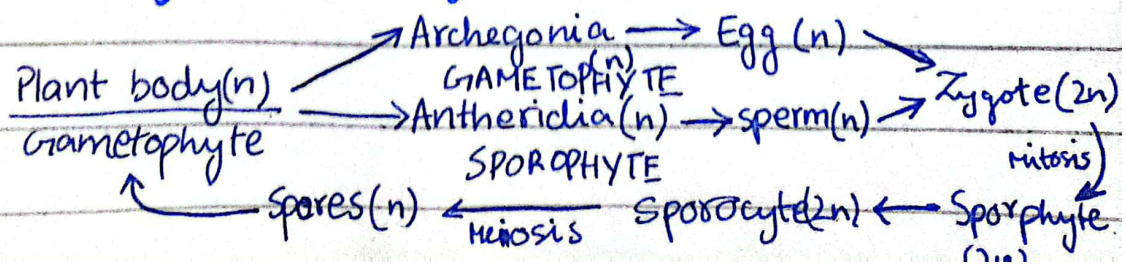
(iii)

Arthrophytes:

Plants belonging in group sphenopsida are called arthrophytes because the whole plant body is composed of large number of joints.

(iv)

Life cycle of bryophytes



(V)

Horn worts: ~~more~~ most advanced bryophytes

The sporophyte of horn worts exhibit many advanced characteristics due to which it is adapted to land better than other bryophytes. The sporophyte has stomata and chloroplasts in the epidermis and can thus photosynthesize its own food rather than obtaining it from gametophyte. It also has a waxy cuticle to check excessive loss of water (dessication). Furtherm at the junction of food and spore producing region there is a band of meristematic tissue.