

# Gr 11 Plant diversity

1. The ovary of angiosperms develops into a... \*

- Flower
- Fruit
- Leaf
- Nut

2. Which were the first plants to colonise dry land, including the liverworts. \*

- Gymnosperms
- Spermatophytes
- Bryophytes
- Pteridophytes

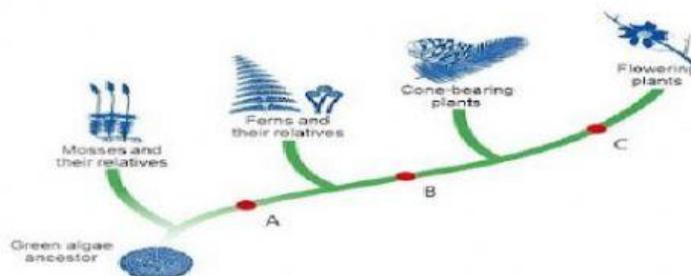
3. The structure of a Pteridophyte that represents the gametophyte generation. \*

- Prothallus
- Frond
- Fiddlehead
- Sori

4. The cross-pollination strategy, where the stigma ripens before the anthers mature and release pollen grains. \*

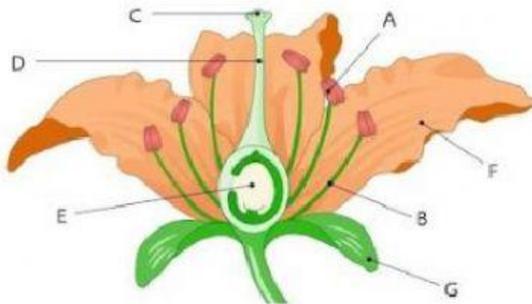
- Dioecious
- Protandry
- Protogyny
- Incompatibility

5. Refer to the cladogram of plant evolution below. Which labels would be most suitable for the developments that evolved at points A, B and C respectively.



- vascular tissue, seeds, seeds enclosed in fruit
- roots, larger leaves, seeds
- conducting tissue, cones, protected seeds
- xylem and phloem, complex leaves, seeds enclosed in fruit

7. Study the structure of a flower below. The male reproductive structures are labelled by the following letters.\*



- A, B, F
- C, D, E
- A, B
- C, D

8. Referring to the diagram of the flower above in question 7. The correct labels for the parts labelled A, D and G respectively, are...\*

- filament, stigma, leaf
- stamen, pistal, sepal
- anther, style, sepal
- stamen, ovary, petal

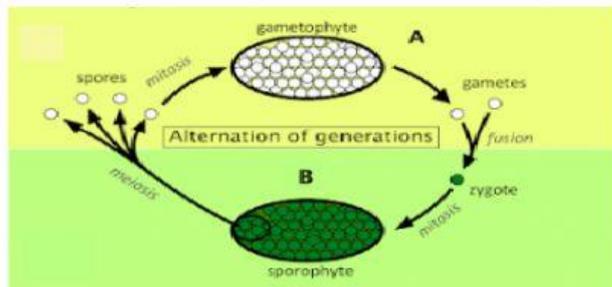
9. Species that are found naturally in a particular area and nowhere else, are said to be...\*

- indigenous
- endemic
- native
- original

10. Which of the following is not used to classify plants? \*

- The presence/ absence of xylem and phloem
- Dependence on water for reproduction
- How tall they grow
- The presence/absence of flowers or cones

11. Refer to the diagram below. Which statement is TRUE for generation A and generation B respectively? \*



- A is haploid, B is diploid
- A is diploid, B is haploid
- A is the dominant generation in Bryophytes, B is the dominant generation in Gymnosperms
- Both options 1 and 3 are correct
- Both options 2 and 3 are correct

12. Why has the development of seeds been so vital to the biodiversity of spermatophytes? \*

- Seeds may remain dormant in unfavourable conditions
- The embryo is protected by a testa and cotyledons
- Dispersal strategies avoid competition with the parent plant
- Genetic diversity enhance chances of survival
- All of the above

13. Looking at the image below, which is the most likely pollinator of this plant? (Could you justify your choice?) \*



- Birds
- Insects
- Bats
- Wind

14. Looking at the image below, which is the most likely pollinator? (Could you justify your choice?) \*



- Insects
- Birds
- Wind
- Rodents

15. Which of the following is a disadvantage of asexual reproduction? \*

- Only one parent is needed
- Weakness in the parent will be transmitted to offspring
- Reliance on pollinators is not needed
- Lots of offspring are produced in a short time