

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

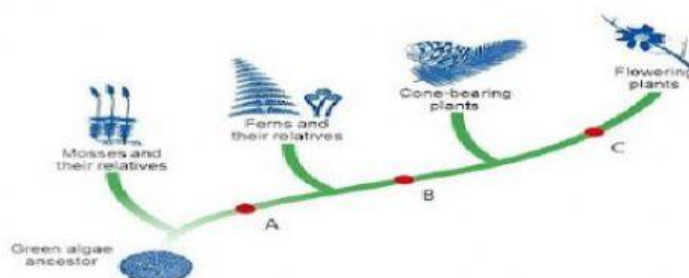
3. The structure of a Pteridophyte that represents the gametophyte generation. *

- ☐ Prothallus
- ☐ Frond
- ☐ Fiddlehead
- ☐ Sori

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

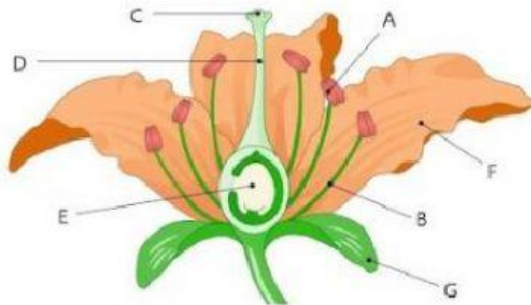
- ☐ Dioecious
- ☐ Protandry
- ☐ Protogyny
- ☐ Incompatibility

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

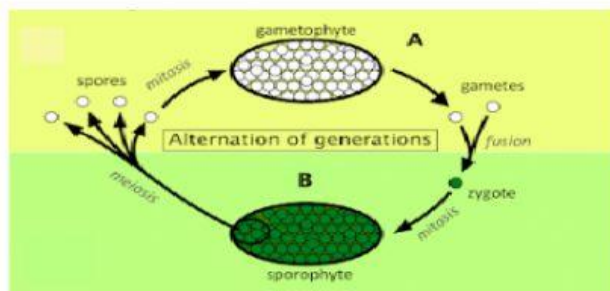
9. Species that are found naturally in a particular area and nowhere else, are said to be...*

- ☐ 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