

Tribhuvan University

2080 (Regular)

Bachelor Level 4 Yrs. Prog./1st Year/Science & Tech.

Botany - Bot 101

Full Marks: 100

Time: 3 hrs.

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

GROUP "A"

(Long Answers)

(4×10=40)

1. Describe the life cycle of *Aspergillus* with necessary diagrams and comment on its economic importance.

OR

Give an illustrative account of sexual reproduction in *Fucus*.

2. Discuss the evolution of sporophyte in bryophytes with suitable examples.
3. Explain the evolution of stellar system in pteridophytes with suitable diagrams.
4. What are protected areas? How does a protected area help in the conservation of biodiversity?

OR

Describe the structural and functional aspects of pond ecosystem.

GROUP "B"

Write a brief account of (any EIGHT)

(8×5=40)

5. Give a brief account of Gymnosperms found in Nepal with their distribution.
6. Describe the cell wall structure of bacteria.
7. What are the major causes and consequences of global warming?
8. Give the importance of algae on biofertilizer.

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9. Describe various forms of lichens thallus with examples.
10. Give a concise account of five kingdom system of classification.
11. Describe the structure of *Sporophyte Marsilea* with the help of well labelled diagram.
12. Write important characteristic features of cycadopsida with examples.
13. Describe asexual reproduction in *Riccia*.
14. What are the impacts of water pollution on human health?

GROUP "C"

Write short notes on (any EIGHT) (8×2.5=20)

15. What are the limitations of two kingdom system of classification?
16. Give ecological significance of *Anabaena*.
17. Discuss peristome teeth and its mechanism in dispersal of spores in *Funaria*.
18. Differentiate between ascocarp and basidiocarp.
19. What type of relationship exists between the mycobiont and the phycobiont in lichens?
20. Draw a well labelled diagram showing the internal structure of the stem of *Selaginella*.
21. What do you mean by transduction in bacteria?
22. Distinguish between Compression and Incrustation fossil.
23. Write a brief note on ecological adaptation.
24. Write short notes on coralloid root of *Cycas*.

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Hemmi