

Undergraduate Examination, 2018
Semester-II (CBCS)
Botany
Generic Elective Course (GEC-2)
(Plant Ecology and Taxonomy)

Time: Three Hours

Full Marks: 40

Questions are of value as indicated in the margin.

1. Answer **any ten** from the following: 1×10=10
- a) What is detritus food chain?
 - b) How many floristic realms are there in the world?
 - c) What is heterophylly?
 - d) What are heliophytes?
 - e) Give an example of relic endemic.
 - f) What is herbarium?
 - g) Define flora.
 - h) What is nominalistic species concept?
 - i) What is Paratype?
 - j) Name the first international botanical garden.
 - k) What is Biometrics?
 - l) What is artificial classification?
 - m) What is OTUs?
 - n) What is Homonym?
 - o) What is a species?

Group-A (Ecology)

2. Draw a labeled outline of nitrogen cycle. What is meant by sedimentary biogeochemical cycle? 4+1=5
- Or
- What is an ecosystem? Mention its different components? 1+4=5
3. What is meant by edge effect? State the different types of species diversity? 2+3=5
- Or
- Describe the general process of succession. How primary succession is different from secondary succession? 4+1=5
4. Describe the morphological and anatomical adaptations of Xerophytes. 2.5+2.5=5
- Or
- Discuss the importance of light as an ecological factor. What is Shelford's law of tolerance? 3 + 2 =5

Group- B (Plant Taxonomy)

5. Write down the method of making a herbarium. Mention two important function of herbarium. 4+1=5
- Or
- What is Nomenclature? Describe the role of a botanical garden. 1+4=5

P.T.O.

(2)

6. Describe in brief either palynology or molecular data as taxonomic evidence. What is taxonomic hierarchy? 4+1=5

Or

Write down the principles of ICBN/ICN. What is a valid publication? 4+1=5

7. Give a schematic diagram of Bentham and Hooker system of classification. Mention its merits. 4+1=5

Or

What is Character? Describe in brief the methodology of numerical taxonomy and mention its significance in plant classification. 1+4=5
