

Parvatibai Chowgule College of Arts and Science

Autonomous

B.Sc. Semester End Examination, February, 2022.

Semester: III

Duration: 2 Hours

Subject: Botany

Max. Marks: 45

Title: Ecology and conservation

Instructions: 1. All question are compulsory, however internal choice is available

2. Briefly answer sub question of Q.4

3. Figures to the right indicate maximum marks to each question/ sub question

Q. 1. Answer **ANY THREE** of the following: (09)

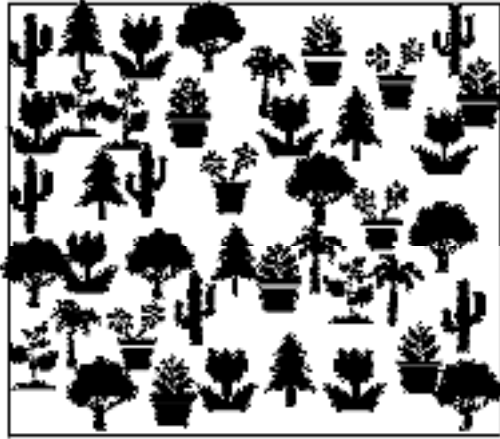
- a) Biotic components of ecosystem.
- b) Describe the committees related to western ghats.
- c) Thermal stratification.
- d) Biotic interactions.

Q. 2. Answer **ANY TWO** of the following: (12)

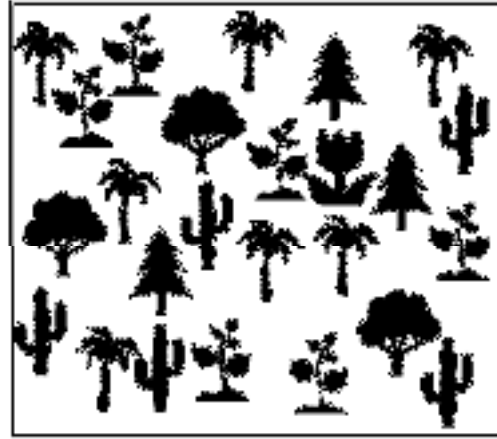
- a) Write a note on categorization of plant taxa on the basis of their geographical distribution.
- b) Describe edaphic factors influencing plant growth.
- c) Discuss determinant attributes of population.

Q. 3. Answer **ANY TWO** of the following: (12)

- a) What is photoperiod? How it can affect plant growth?
- b) Analyse the given plots to determine the species diversity indices and compare.



Plot 1



Plot 2

c) Discuss on conservation acts.

Q. 4. Answer **ANY ONE** of the following:

(12)

- a) 'Plants develop certain morphological and anatomical changes to adapt to environmental conditions they live in'. Justify the statement by giving examples.
- b) Write a note on phytogeographical regions of India.

OR

- a) Write a note on national and international role on conservation of environment.
- b) 'Microbes can be used in biological degradation of pollutants.' Justify.
