GURUDAS COLLEGE

B. Sc. SEMESTER IV (Honours) Examination, 2021
(Under CBCS)
Online Practical Examination, 2021
Subject: BOTA
Subject Category: Honours
CORE COURSE-8
Course: BOT-A-CC-4-8-P
Course Name: PLANT GEOGRAPHY, ECOLOGY AND EVOLUTION

Date of Examination: 9th Aug, 2021 Time: 12 noon - 1:30pm

Time: 1hr 30min   FM:30

Answer *any three* questions from the followings:

1. What is quadrat? Write down the formulae to calculate frequency, relative frequency, density and abundance of components.   2+ 2 + 2 +2 + 2

2. Write down the procedure to determine minimal size of quadrat.   10

3.

Plant	Quadrat 1	Quadrat 2	Quadrat 3	Quadrat4	Quadrat 5
Euphorbia hirta	+	+	-	+	+
Sida acuta	+	+	+	+	+
Amaranthus spinosus	+	-	+	+	+
Vernonia cinerea	+	-	+	+	+
Lantana camara	-	-	-	-	+

From the above table calculate frequency and relative frequency of the five species. 10

4.

Plant	Quadrat 1	Quadrat 2	Quadrat 3	Quadrat4	Quadrat 5
Euphorbia hirta	3	6	0	3	4
Vernonia cinerea	2	0	3	4	5

From the above table calculate density and abundance of the two species. What can we infer from knowing the density of a particular species? 8+2

5. What is the purpose of conducting a test by Winkler Method? Mention some morphological and anatomical changes in a leaf growing in a polluted area. What is the importance of carbon dioxide dissolved in water? 2+4+4

Instructions for submission of answer scripts

1. Write the front page/top sheet as per instruction.
2. Scan the pages in sequence and make a single PDF file.
3. Rename file as per instruction.
4. Email the PDF file within the stipulated time to the following

Email IDs: gcdbot2020@gmail.com

botasem4gdc@gmail.com