GURUDAS COLLEGE

B. Sc. SEMESTER VI (Honours) Examination, 2021 Under CBCS Online Practical Examination, 2021 Subject: BOTA Subject Category: Honours Discipline specific elective course (DSE) Course: BOT-A-DSE-B-6-8-PR Course Name: Natural Resource Management

Date of Examination: 06/08/2021, 12noon

Time: 1 Hour 30 minutes

FM: 30

Answer any three questions from the following

Q1). Write down the procedure, measurement of dust deposition/fall by dry and wet methods, principle of dust holding capacityfor estimation of foliar dust deposition. Give one example with one foliar characteristic of plant sample for estimation of foliar dust deposition.

2+2+2+2+(1+1)

Q2. Write down the apparatus requirements and procedure for determination of total dissolved solids (TDS) in water. Calculate and fill up the TDS value from 100mL sample water from the data provided. Is calculated TDS (mg/L) value safe for drinking water?

(3+4) + (2+1)

Description		Weight (g)
Weight of the clean porcelain evaporating dish (g)	W_1	1.6329
Weight of the dish and the residue (g)	W ₂	1.6531
Weight of residue (g)	W	
Volume of the Sample (mL)	V	100.0
Total Dissolved Solids (mg/L)	TDS	

Q3a). What are Biodegradable and Non-biodegradable solid Waste? Write down one environmental impact on land degradation from solid waste generated by a domestic system.

4 + 1

Q3b). What is the need for the estimation of forest cover? State three advantages of using GIS and remote sensing in forest cover estimation. 2+3

Q4). In what form(s) is nitrogen usually present in the soil? Describe one method each of detection of nitrate and carbonate in soil following the rapid spot test? 2 + (4+4)

Q5).

a.	What is the average range (in percentage) of the soil organic matter?	What is the
	importance of carbonates in the soil?	1+1
b.	What is the purpose of soil testing? (Any two)	2
c.	Why is presence of soil organic carbon important?	2
d.	Name one test method for detection of iron in the soil. Iron is detected	d in what form
	after using this method?	1+1
e.	Why is soil testing done?	2

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

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