

GUJARAT TECHNOLOGICAL UNIVERSITY
BE- SEMESTER-IV (NEW) EXAMINATION – WINTER 2020

Subject Code:2141305**Date:19/02/2021****Subject Name:Ecology and Remote Sensing****Time:02:30 PM TO 04:30 PM****Total Marks:56****Instructions:**

1. Attempt any **FOUR** questions out of **EIGHT** questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

		MARKS
Q.1	(a) Write a short note on Dominance Hierarchy.	03
	(b) Discuss Mutualism and Communalism with appropriate example.	04
	(c) Explain the terms (Any seven) (i) Native species (ii) Alien species (iii) Habitat (iv) Population (v) Tolerance level (vi) Parasitism (vii) Ecology (viii) Ecosystem	07
Q.2	(a) Give the full form of ISRO, GIS and HDDT.	03
	(b) Explain Shelford's law of tolerance with appropriate example.	04
	(c) Enlist population estimation methods and explain any one in detail.	07
Q.3	(a) Define Scale of Photograph and explain it.	03
	(b) Differentiate between Photo and Image.	04
	(c) Enlist and explain types of photographs with neat sketch.	07
Q.4	(a) List down the components of camera.	03
	(b) Explain Predation and Parasitism with examples.	04
	(c) Discuss Image Interpretation keys in detail.	07
Q.5	(a) Explain the types of film used in remote sensing	03
	(b) Explain the role of Tone/Colour in Visual image interpretation.	04
	(c) Write a short note on Climographs with appropriate example	07
Q.6	(a) Enlist the instruments used for ground truthing.	03
	(b) What do you understand by 3D visualization of GIS data?	04
	(c) Enlist and explain types of scattering.	07
Q.7	(a) What is GIS? How does GIS work?	03
	(b) Give the difference between Active sensors and Passive sensors	04
	(c) What is GPS? Explain the application of GIS.	07
Q.8	(a) 'GIS is a knowledge hub' Justify the statement.	03
	(b) Explain remote sensing process in brief.	04
	(c) Explain agricultural applications of remote sensing in detail.	07
