UPES
End Semester Examination, May 2023

Course: Remote Sensing and GIS   Semester: IV
Program: B.Sc. Geology   Time   : 03 hrs.
Course Code: PEGS 2039   Max. Marks: 100

Instructions: Attempt all questions. There are internal choice in some questions

SECTION A
(5Qx4M=20Marks)

S. No.		Marks	CO
Q 1	Define the sampling limited and definition limited spatial object	4	CO2
Q2	Explain the term 'spatial resolution'	4	CO2
Q3	Define regional navigation system	4	CO1
Q4	Define the term 'Rayleigh scattering'	4	CO1
Q 5	Describe the term 'thermal inertia'	4	CO2

SECTION B
(4Qx10M= 40 Marks)

Q 6	Examine the role of global position system in civilian and military applications	10	CO3
Q 7	Explain the process of creating line, point and polygon shapefiles in GIS	10	CO3
Q 8	Examine the various interpolations techniques available for single map feature analysis	10	CO2
Q 9	Describe the relevance of thermal inertia and emissivity extracted from thermal satellite data in geological investigation **OR** Examine the steps for georeferencing of image	10	CO4

SECTION-C
(2Qx20M=40 Marks)

Q 10	Evaluate the potential of remote sensing data in natural resource mapping	20	CO4
Q 11	Discuss the spectral details of Landsat 8 satellite with their potential applications in surface features identification.	20	CO5

	OR Develop an integrated approach of Remote Sensing, GIS, GPS and other related data in study of geological modelling		