1204E162

Candidate's Seat No :_____

IM.Sc. App. Geo Sem.-6 Examination

AGL-309

Remote Sensing & GIS

April-2025

Time : 2-30 Hours] **[Max. Marks : 70**

Q-I	**A**define radiance, irradiance, precision, geodatabase, analogue, composite image, radiometer, band width, band ratio, validation, reliability, reflectance curve and masking	7
	Bwrite a detailed note on the applications of remote sensing in ocean ecosystem monitoring	7

or

Q-I	**A**write a detailed note on applications of remote sensing in geotechnical studies	7
	Bdefine correction in RS, write a detailed note on the different corrections applied in a RS image, and its need	7

Q-II	**A** write a detailed note on the electromagnetic spectrum (fig must). Also write a note on the limitations of RS in fluvial studies	7
	Bdefine DEM, DTM and DSM and write a note on each (fig must)	7

or

Q-II	**A** write a note on the elements of image interpretation, and its significance (fig must)	7
	B write a detailed note on the types of orbits with its significance in various earth system studies (fig must)	7

Q-III	**A**write a note on the limitations of remote sensing in climate studies	7
	B write a detailed note on the types of aerial imageries (types of photographs-camera tilt) fig must	7

Or

Q-III	**A**write a note on the differences between ground truth	7

(P.T.O)

	and reference data with respect to remote sensing and state the significance of each for geological studies	
	Bwrite a note on the significance and applications of RS in ground water monitoring	7

Q IV	**A**write a note on active and passive remote sensing systems with at least two exampleson each (fig must)	7
	Bwrite a note on the advantages of remote sensing with special emphasis on aeolian studies	7

or

Q-IV	**A**write in detail on the limitations of remote sensing and its impact on glacial studies	7
	Bwrite a note on the types of scattering and the significance of scattering mechanisms in remote sensing	7

Q-V	MCQs attempt any seven out of twelve	14

1) **state the full form of LIDAR**
2) **Define metadata**
3) **state the full form and functions of a GPS**
4) **Define geocoding**
5) **Define non selective scattering**
6) **What is a shapefile**
7) **define obliquity**
8) **Define nadir and zenith**
9) **Define topology in GIS**
10) **What is data integration**
11) **what is a theodolite**
12) **Provide state the full form of ENVI**