R16

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
B. Tech IV Year II Semester Examinations, July - 2021
REMOTE SENSING AND GIS
(Common to CE, ME, ECE, MSNT)

Time: 3 hours   Max. Marks: 75

Answer any Five Questions
All Questions Carry Equal Marks
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1.a) What is average photo Scale? How you will calculate scale of a vertical photograph?
  b) Explain how parallax measurements are done using fiducial line.   [7+8]

2.a) Explain different types of scattering which occurs when the EMR interacts with the atmosphere?
  b) Explain different resolutions involved in Remote Sensing with examples.   [8+7]

3.a) Draw and explain the spectral signature curves for soil, vegetation and water.
  b) Explain in detail the applications of Remote Sensing with examples.   [7+8]

4.a) Explain the different methods of inputting data into GIS with examples.
  b) What are the commonly used map projections in GIS? Which projection does India use?
          [7+8]

5.a) Describe how you will represent physical features in a vector GIS.
  b) Explain in detail the contributing disciplines of GIS with examples.   [8+7]

6.a) What is topology? Describe with sketches, types of topology established based on entities?
  b) What are the sources of errors that occur in GIS digital databases? How you will rectify them?   [6+ 9]

7.a) What are the elements of Raster data Model? Explain the different raster models.
  b) What are the different types of raster data? Explain with examples how you will Integrate raster data with vector.   [8+7]

8.a) Explain how the map legend acts to link entities and attributes on a map.
  b) Explain the procedure of manual digitization and automated digitization with merits and demerits.   [7+8]

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