Code No: 157EZ

R18

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
B. Tech IV Year I Semester Examinations, February/March - 2022
REMOTE SENSING AND GIS
(Common to EEE, CSE, IT)

Time: 3 Hours

Max. Marks: 75

Answer any five questions
All questions carry equal marks

- - -

1.a) What is electromagnetic spectrum? How is it useful in Remote Sensing?
 b) What is the need of terrain evaluation? How do you interpret in Remote Sensing? [7+8]

2.a) What are the different types of platforms and sensors in Remote sensing? Explain.
 b) Explain the concept of digital image processing. [8+7]

3.a) Explain in brief the components of GIS.
 b) What is Map scale? What are different types of scales? [7+8]

4.a) Discuss in detail about coordinate systems and map projection with neat illustration.
 b) Discuss the applications of GIS in real life. [8+7]

5.a) Explain the Database structure models.
 b) What is GIS data model? Explain its importance. [7+8]

6.a) Describe the entity-relationship model.
 b) Differentiate between vector and raster data structure. [7+8]

7.a) Explain the different sources of error in GIS.
 b) Discuss the spatial interpolation techniques and state its importance. [7+8]

8.a) Discuss the evaluation of alternative systems while implementing a GIS.
 b) How is GIS useful in road network planning? Provide an example. [8+7]

--ooOoo--