Regulation R18 *Subject code: 2P7AB*

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

(Autonomous, Accredited by NAAC with 'A+' Grade)

B.Tech VII Semester Supplementary Examinations, April 2024

Remote Sensing & Geographic Information System

(CIVIL ENGINEERING)

Maximum Marks: 70 Date:29.04.2024 Duration: 3 hours

Note:
1. **This question paper contains two parts A and B.**
2. **Part A is compulsory which carries 20 marks. Answer all questions in Part A.**
3. **Part B consists of 5 Units. Answer any one full question from each unit.**
4. **Each question carries 10 marks and may have a, b, c, d as sub questions.**

Part-A

All the following questions carry equal marks (10X2M=20 Marks)

1 What is meant by Aerial photogrammetry?
2 What is meant by stereoscopy?
3 Define resolution.
4 Define a Map.
5 Explain attribute data
6 What are the 4 commonly used map projections?
7 What is coverage and nodes?
8 What is meant by shape file?
9 How do you create new data in GIS?
10 What is meant by metadata?

Part-B

Answer All the following questions. (5X10M=50Marks)

11 Explain different types of photogrammetry with a neat sketch. [10]

OR

12 a) Differentiate Aerial and Terrestrial photogrammetry. [5]
b) Explain in detail the types of Imagery Overlap with a neat sketch. [5]

13 Explain in brief the energy interaction with Earth surface and Atmosphere. [10]

OR

14 What is meant by Electromagnetic Spectrum? Explain it with different bandwidths. [10]

15 a) Define a map projection. Why is map projection necessary in map making? [5]
b) Discuss in detail about UTM projection. [5]

OR

16 Explain with a neat sketch the conical and cylindrical map projection. [10]

17 Write down advantages and disadvantages of vector data. [10]

OR

18 a) Discuss Spaghetti vector data model. [5]
b) Explain GBF/DIME vector model. [5]

19 Explain the Raster data editing with a neat sketch. [10]

OR

20 a) Explain in detail various data conversion models. [5]
b) How do you digitize a map and write the types of digitizing data. [5]