Question Paper Code: 90289

B.E./B.Tech. DEGREE EXAMINATIONS, NOVEMBER/DECEMBER 2019

Fifth Semester

Civil Engineering

GI 8014 – GEOGRAPHIC INFORMATION SYSTEM

(Regulations 2017)

Time: Three Hours

Maximum: 100 Marks

Answer ALL questions.

PART – A

 $(10\times2=20 \text{ Marks})$

- What is coordinate system?
- 2. Define: Spatial data.
- 3. What is TIN data?
- 4. Give a short note on vector data.
- 5. How Georeferencing is done in GIS?
- 6. Give short note on Digitization.
- 7. What is metadata?
- 8. Write few lines about positional accuracy.
- 9. List various data management functions.
- 10. Write the application of vector to raster conversion.

PART - B

 $(5\times13=65 \text{ Marks})$

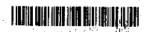
11. a) Describe various components of GIS.

(OR)

- b) Explain on various types of data involved in GIS.
- 12. a) Elaborate on raster data structures and vector data structures.

(OR)

b) Describe on TIN and GRID data models.



13. a) Explain various data compression techniques used for efficient storage of Raster Data. Give their limitations.

(OR)

- b) Describe about various Data Input Methods.
- 14. a) Describe quality of data and its various basic aspects.

(OR)

- b) Elaborate on spatial data infrastructure.
- 15. a) Describe on various data management functions.

(OR)

b) Elaborate on various data output using GIS.

PART - C

(1×15=15 Marks)

16. a) Evaluate the GPS data integration with GIS and its potential in improving the efficiency of mapping.

(OR)

b) Evaluate the data quality and GIS standards for interoperability and various applications.