

**Q.P. Code: 25847**

**(3 Hours)**

**Total Marks: 80**

- N.B.** 1) Answer any **FOUR** questions  
2) Each main question carries equal marks.
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**Q1.**

- a) Explain the concepts of physics of remote sensing. What do you mean by Ideal remote sensing system. (10)  
b) Differentiate between Raster Data and Vector Data (10)

**Q2.**

- a) State the advantages of GIS. (Explain in brief the various commercially available GIS hardware and software.) (10)  
b) Write note on Interpolation techniques. State the various techniques used (10)

**Q3.**

- a) Differentiate between Absolute Positioning and Relative positioning (10)  
b) Write Short note on Digital image processing (DIP) (10)

**Q4.**

- a) Write application of GIS in Traffic congestion analysis and accidents analysis (10)  
b) Write in brief on various G.P.S.Receivers (10)  
i. Navigational Receivers,  
ii. Surveying Receivers  
iii. Geodetic Receivers

**Q5.**

- a) Differentiate between Spatial and Non Spatial Information systems (10)  
b) Write application of GIS in Urban Transport system (10)

**Q6.**

- a) Write short note on (10)  
i. Image histogram,  
ii. Image rectification  
iii. Image enhancement  
b) Write in brief about the various GIS data mentioned below (10)  
i. Field data  
ii. Statistical data  
iii. Maps and aerial photographs  
iv. Satellite data
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