Max. Marks: 75

## Code No: 117GY

## JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD B. Tech IV Year I Semester Examinations, March 2017

## REMOTE SENSING AND GIS

(Common to CE, CEE)

Note: This question paper contains two parts A and B. Part A is compulsory which carries 25 marks. Answer all questions in Part A. Part B consists of 5 Units. Answer any one full question from each unit. Each question carries 10 marks and may have a, b, c as sub questions.  Part-A (25 Marks)  1.a) What do you mean by relief displacement. [2] Beplain the importance of parallax. [3] Define remetic sensing. [2] d) Draw electromagnetic spectrum. [3] Explain the use of spatial data. [2] Explain datum and its importance. [3] What do you mean by data structure? [2] Beplain goebase data model. [3] What is metadata? Explain along with examples. [2] Describe the process of digitization. [3]  Part-B (50 Marks)  2. Elaborate the effect of flying height on ground coverage along with a neat sketch. [10] OR  3.a) Explain photographic resolution. b) Elaborate the fundamentals of air photo interpretation. [5+5]  4. List and explain any two satellites and write down characteristics of satellites. [10] OR  5.a) Explain advantages of remote sensing. b) Elaborate remote sensing process along with a flow chart. [5+5]  6. Explain the UTM projection along with its applicability. [10] OR  7.a) What are the map projections parameters and its importance in GIS. b) List and explain any three GIS operations. [5+5]  8.a) Write down advantages of rester models. Write down disadvantages of vector models.  OR  9.a) List and explain different shape files used in GIS. b) List out various topology rules used in GIS data processing. [5+5]  10.a) Differentiate between manual and automatic digitization. b) Explain different data input methods in GIS. [5+5]		3 Hours		$\mathbf{M}$	Iax. Mar	ks: 75
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