CLASS: MTECH/MUP   SEMESTER : II
BRANCH: CS/CIVIL/ECE/SER/EEE/ARCH   SESSION : SP/19

SUBJECT: : RS502 GEOGRAPHICAL INFORMATION SYSTEM AND SATELLITE NAVIGATION
TIME: 3:00 HOURS   FULL MARKS: 50

INSTRUCTIONS:
1. The question paper contains 5 questions each of 10 marks and total 50 marks.
2. Attempt all questions.
3. The missing data, if any, may be assumed suitably.
4. Before attempting the question paper, be sure that you have got the correct question paper.
5. Tables/Data hand book/Graph paper etc. to be supplied to the candidates in the examination hall.

Q.1(a)	Define GIS. What are the major contributing domains for GIS and why?	[5]
Q.1(b)	What are the different components of GIS? Explain each of them in brief.	[5]
Q.2(a)	By giving examples, bring out the difference between accuracy and precision.	[5]
Q.2(b)	What do you mean by Conical projection? Where in real world situations it may be applied?	[5]
Q.3(a)	What are the steps in GIS for spatial analysis? Give an example wherein it may be applied to the real world.	[5]
Q.3(b)	Water extent layer extracted from IRS 1C PAN(Pixel size-1m) image covering 600 square Km on the ground is to be overplayed with LU/LC raster of same spatial extent extracted from LANDSAT 8 (pixel size-30m) image. Calculate the following: i) The no of pixels in water extent layer ii) The no of pixels in final overlayed output iii) Aggregation co-efficient	[5]
Q.4(a)	What is the need of coordinate transformation from one system to other?	[4]
Q.4(b)	Explain Helmertz coordinate transformation.	[6]
Q.5(a)	What is the significance of performing DGPS survey?	[5]
Q.5(b)	How DGPS survey is performed? Explain with a diagram.	[5]

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