CLASS: **MTECH/MUP**   SEMESTER : III/VII
BRANCH: **CSE/IT/SER/ARCH**   SESSION : MO/2022

SUBJECT: RS520R1 REAL-WORLD OPERATIONALISATION OF GIS & GNSS
TIME: **03 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. **Tables/Data handbook/Graph paper etc., if applicable, will be supplied to the candidates**

Q.1(a)	What do you mean by georeferencing? What are the inputs required for georeferencing any spatial data? [CO1, BL-2]		[3]
Q.1(b)	Give two-two example of non-spatial and spatial data. [CO1, BL-2]		[2]
Q.1(c)	Differentiate different types of Geodatabases. [CO1, BL-3]		[5]
Q.2(a)	What is topology? why is so important for vector data model? [CO2, BL-2]		[3]
Q.2(b)	Describe the role of RDBMS in GIS. [CO2, BL-3]		[3]
Q.2(c)	Explain the topological errors associated with line feature with proper diagram. [CO2, BL-3]		**[4]**
Q.3(a)	Illustrate outputs of Overlay, Clip and Dissolve operations on vector data with diagrams. [CO2-4, BL-3]		[4.5]
Q.3(b)	Formulate a spatial problem which can be solved by using both subclass of local raster analysis technique. [CO2-4, BL-3]		[4]
Q.3(c)	Give example of simple and complex query statements. [CO2, BL-2]		[1.5]
Q.4(a)	What is broadcast ephemeris? [CO1 BL-2]		[2]
Q.4(b)	What are the advantages of satellite-based positioning? [CO1 BL-2]		[3]
Q.4(c)	How does the atmosphere affect satellite-based positioning accuracy? How can the atmospheric effect be minimized? [CO3 ,BL-4]		[5]
Q.5(a)	What is the Mean Sea Level? [CO3-4, BL-2]		[2]
Q.5(b)	What is the DOP? Write its significance. [CO3, BL-2]		[3]
Q.5(c)	Compare WGS-84 datum with Everest 1956 datum . [CO4 ,BL-4]		[5]

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