

**BIRLA INSTITUTE OF TECHNOLOGY, MESRA, RANCHI
(MID SEMESTER EXAMINATION)**

**CLASS: B.TECH
BRANCH: ALL**

**SEMESTER:
SESSION: MO/2022**

SUBJECT: RS520R1 REAL WORLD OPERATIONALISATION OF GIS AND GNSS

TIME: 2 HOURS

FULL MARKS: 25

INSTRUCTIONS:

1. The total marks of the questions are 25.
 2. Candidates attempt for all 25 marks.
 3. Before attempting the question paper, be sure that you have got the correct question paper.
 4. The missing data, if any, may be assumed suitably.
 5. Tables/Data hand book/Graph paper etc. to be supplied to the candidates in the examination hall.
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		CO	BL
Q1 (a)	How is GIS related to Geoinformatics? Give a proper definition of GIS and write any two applications.	[2] 1	2
Q1 (b)	Differentiate Vector and Raster data models.	[3] 1	2
Q2 (a)	What is the name of widely used commercial GIS software. What are its native vector file formats?	[2] 1	2
Q2 (b)	Describe different components of GIS.	[3] 1	2
Q3 (a)	Describe the role of RDBMS in Geodatabase architecture.	[2.5] 1	3
Q3 (b)	Write the characteristics of NAVSTAR GPS.	[2.5] 3	2
Q4 (a)	Explain principles of positioning	[2] 3	3
Q4 (b)	Explain NAVSTAR GPS satellite transmission	[3] 3	3
Q5 (a)	Explain Ionospheric and Tropospheric delays	[2] 3	3
Q5 (b)	How does satellite geometry affect positioning accuracy?	[3] 3	4

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