

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

**CLASS: MSc
BRANCH: GEOINFORMATICS**

**SEMESTER: I
SESSION: MO/2024**

SUBJECT: GI503 DIGITAL CARTOGRAPHY AND GPS

TIME: 3 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.
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Q.1(a)	How is conventional map making different from modern map making? Bring out the difference.	[5]	CO1	BL4
Q.1(b)	How should a good map be? Give 5 characteristics which distinguish a good map from a poor one.	[5]	CO1	BL3
Q.2(a)	What is the significance of 'DPI'?	[2]	CO3	BL2
Q.2(b)	What are non-spatial data bases? How are they useful in Digital Cartography? Cite two Examples	[3]	CO2	BL4
Q.2(c)	Generate two examples wherein data from the Census can be Mapped. Create a prototype of these two maps.	[5]	CO3	BL5
Q.3(a)	What are the characters to be taken care of for 'Map Design'.	[5]	CO3	BL3
Q.3(b)	Enlist the protocol for 'Map Lettering'.	[5]	CO3	BL1
Q.4(a)	Explain how GPS receiver location and coordinates are determined?	[5]	CO4	BL 4
Q.4(b)	What is Ionospheric delay? Write factors that determine the Ionospheric delay	[5]	CO3	BL3
Q.5(a)	What is the concept of Differential GPS survey method? Explain Rapid static DGPS method.	[5]	CO5	BL3
Q.5(b)	Write applications of various DGPS methods	[5]	CO5	BL3

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