

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

**CLASS: MSc
BRANCH: GEOINFORMATICS**

**SEMESTER : III
SESSION : MO/2025**

SUBJECT: GI607 GEOINFORMATICS IN DISASTER MANAGEMENT

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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		CO	BL
Q.1(a)	What are natural and human induced disasters? How can they be distinguished?	[5]	1 1
Q.1(b)	What is understood by hazard zonation? How can geoinformatics be useful in hazard zonation?	[5]	1 3
Q.2(a)	What do you understand by the disaster Management Cycle? How can it help in mitigating or reducing the disaster risk?	[5]	2 2
Q.2(b)	In terms of disaster management at the national level, what is the organizational structure and what are the roles and responsibilities of its important committees?	[5]	2 2
Q.3(a)	What do you understand by landslide as a geological hazard? How can different types of landslides be understood in terms of their respective hazard potentials?	[5]	3 2
Q.3(b)	How Glacial Lake Outburst Flood (GLOF) is the most devastating form of glacial hazard? How can geoinformatics be helpful in studying such hazards?	[5]	3 3
Q.4(a)	How do flash floods and riverine floods differ? What are the different known forms of floods under these two categories usually experienced?	[5]	4 2
Q.4(b)	What is understood by drought? What are the different forms of drought and what are their impacts/consequences?	[5]	4 3
Q.5(a)	How do earthquakes impact India with respect to its different geographical regions? How can seismic zonation map help in disaster risk reduction?	[5]	5 3
Q.5(b)	How can the vulnerabilities of floods in the Indo-Gangetic plains be explained? How can geospatial tools help in studying potential impacts of such floods?	[5]	5 4

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