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

CLASS: MSc   SEMESTER : III
BRANCH: GEOINFORMATICS   SESSION : MO/2022

SUBJECT: GI607 GEOINFORMATICS IN DISASTER MANAGEMENT

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 Natural and Human induced disasters?	BL1; CO1	[2]
Q.1(b)	Explain the types of Natural and Human induced Disasters?	BL1; CO1	[3]
Q.1(c)	Elaborate the Disasters and National losses – give a perspective in the Indian context	BL2; CO1	[5]
Q.2(a)	What are the fundamental concepts of Disaster Management?	BL1; CO2	[2]
Q.2(b)	Disaster Management Cycle – how does it help in Disaster Risk Mitigation?	BL2; CO2	[3]
Q.2(c)	Explain Organizational structure for managing disasters in India and elaborate role and responsibility of NEC BL2; CO2		[5]
Q.3(a)	Describe landslides	BL1; CO3	[2]
Q.3(b)	Elaborate the types of landslides and its hazard potential	BL2; CO3	[3]
Q.3(c)	Appraise GLOF as one of the most severe glacier melt hazards	BL3; CO3	[5]
Q.4(a)	Explain Flash floods and River floods	BL1; CO4	[2]
Q.4(b)	How can different types of floods be distinguished?	BL3; CO4	[3]
Q.4(c)	Appraise Desertification as one of the most severe land degradation hazard	BL3; CO4	[5]
Q.5(a)	Explain the use of satellite data and GIS in flood hazard and risk mapping	BL2; CO5	[2]
Q.5(b)	Appraise an example in the Indian context with emphasis on satellite data usage	BL3;CO5	[3]
Q.5(c)	Evaluate Earthquake hazard in the Indian context with geospatial techniques for its impact mitigation BL4; CO5		[5]