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

CLASS: MSc.   SEMESTER : III
BRANCH: GEOINFORMATICS   SESSION : MO/2024

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 handbook/Graph paper etc. to be supplied to the candidates in the examination hall.

			CO	BL
Q.1(a)	How do you understand hazards and disasters? How can they be differentiated?	[5]	1	1
Q.1(b)	What is understood by hazard zonation? How can hazard zonation be carried out and how can it help in disaster risk reduction?	[5]	1	2
Q.2(a)	How has disaster management undergone a paradigm shift from rescue and relief to a culture of prevention and mitigation? Explain with help of disaster management cycle.	[5]	2	3
Q.2(b)	How can geoinformatics be vital in disaster management and how can it help in disaster risk mitigation?	[5]	2	3
Q.3(a)	How do earthquakes take place? Elaborate in the light of theory of plate tectonics.	[5]	1	3
Q.3(b)	In the Indian context, how can earthquake intensity zones be understood especially in relation to Himalayan regions.	[5]	1	3
Q.4(a)	What are the characteristics of flash floods and riverine floods? How can they be distinguished?	[5]	3	3
Q.4(b)	Why is desertification considered as a hydro-meteorological hazard? Desertification mapping through remote sensing and geoinformatics in India - comment	[5]	3	4
Q.5(a)	How do landslides impact the Indian Himalayan region? Elaborate the vulnerabilities and risks in these regions.	[5]	5	4
Q.5(b)	Why increasing drought severity in India require more attention for mitigation to arrest likely food security related disaster?	[5]	5	4

::::::22/11/2024::::::E