

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

**CLASS: MUP
BRANCH: ARCHITECTURE**

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

SUBJECT: AR604 DISASTER MANAGEMENT AND PLANNING

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.
 6. Support your answers with suitable sketches/figures.
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		CO	BL
Q.1(a)	Explain the terms -Natural Phenomenon, Hazard and Disaster. Enumerate the different types of vulnerabilities.	[5] 1	1
Q.1(b)	Enumerate the factors contributing to the movement of tectonic plates. Discuss the causes and effects of tsunamis.	[5] 1	2
Q.2(a)	Define “risk matrix”. Discuss the 4T’s of risk control and mitigation.	[5] 2	2
Q.2(b)	Outline the different types of technological hazards. Citing suitable case instances, discuss the hazards caused due to “hazardous materials”.	[5] 1	2
Q.3(a)	Write short notes on i) Environmental Risk Assessment ii) Strategic Environmental Assessment	[5] 2	2
Q.3(b)	Define “Resilient Cities”. Discuss the various indicators of resilience.	[5] 3	2
Q.4(a)	Write short notes on i) Soil liquefaction ii) Disaster risks of water infrastructure	[5] 2	3
Q.4(b)	Enumerate the financial and non-financial incentives that can be adopted in urban planning for disaster risk mitigation.	[5] 2	2
Q.5(a)	Discuss the use and implications of remote sensing and GIS tools in pre- and post-disaster mitigation phases.	[5] 3	3
Q.5(b)	List the roles and responsibilities of local government, armed forces, NDRF and media during and after the disasters.	[5] 2	1

:20/11/2024:E