Reg. No. :

Question Paper Code: 50708

B.E./B.Tech. DEGREE EXAMINATIONS, APRIL/MAY 2023

Fifth/Seventh Semester

Civil Engineering

GE 8071 – DISASTER MANAGEMENT

(Common to: Aeronautical Engineering/Aerospace Engineering/ Agriculture Engineering/ Automobile Engineering/Biomedical Engineering/Civil Engineering/ Computer Science and Engineering/Computer and Communication Engineering/Electrical and Electronics Engineering/ Electronics and Communication Engineering/ Electronics and Instrumentation Engineering/Electronics and Telecommunication Engineering/Environmental Engineering/Geoinformatics Engineering/Industrial Engineering/ Industrial Engineering and Management/ Instrumentation and Control Engineering/Manufactruing Engineering/Marine Engineering/Material Science and Engineering/Mechanical Engineering/ Mechanical Engineering (Sandwich)/Mechanical and Automation Engineering/ Mechatronics Engineering/Medical Electronics/Petrochemical Engineering/ Production Engineering/Robotics and Automation/Bio Technology/Chemical Engineering/Chemical and Electrochemical Engineering/Fashion Technology/ Food Technology/Handloom and Textile Technology/Information Technology/Petrochemical Technology/Petroleum Engineering/Pharmaceutical Technology/Plastic Technology/Polymer Technology/Textile Chemistry/ Textile Technology.

(Regulations 2017)

Time: Three hours

Maximum: 100 marks

Answer ALL questions.

PART A — $(10 \times 2 = 20 \text{ marks})$

- 1. Distinguish between Hazard and Vulnerability.
- 2. Classify the different types of disaster.
- Outline the significance of early warning system in disaster.
- 4. State the role of State Disaster Management Authority (SDMA)
- 5. Enlist the factors affecting vulnerability.
- 6. What do you mean by climate change adaption?
- 7. Enumerate the different components of disaster.

- 8. Mention the objective of disaster damage assessment.
- 9. Elucidate any two recent natural disaster in India.
- 10. List down the different types of floods.

PART B — $(5 \times 13 = 65 \text{ marks})$

11. (a) Illustrate and describe each stages involved in the disaster management cycle.

Or

- (b) Narrate the Do's and Don'ts to be followed during the time of earthquake.
- 12. (a) Discuss the roles and responsibility of (PRI/ULB's) local bodies during and disaster.

Or

- (b) Analyze the structural and non-structural mitigation measures for various types of disasters.
- 13. (a) Explain the differential impacts of disasters and its impact on development projects.

Or

- (b) Brief the IPCC Scenario in the context of India.
- 14. (a) Discuss the role of GIS and Information Technology components in Disaster risk management in India.

Or

- (b) Explain the Disaster Management Act, it's policies and plans in India.
- 15. (a) Examine the significance of damage assessment, different factors and tools influencing the assessment process.

Or

(b) Describe any recent flood disaster occurred in India and identify the reason and preventive measures to avoid such causes in mere future.

PART C — $(1 \times 15 = 15 \text{ marks})$

16. (a) Analyse the role of different types of media in disaster management.

Or

(b) Considering Bhopal Gas disaster as a case study, brief the applicable principles of disaster management to mitigate the effect of such disaster in future.