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Reg. No.:									

Question Paper Code: 70730

B.E./B.Tech. DEGREE EXAMINATIONS, NOVEMBER/DECEMBER 2023.

Fifth/Seventh Semester

Civil Engineering

GE 8071 – DISASTER MANAGEMENT

(Common to : Aeronautical Engineering/Aerospace Engineering / Agriculture Engineering/Automobile Engineering/Biomedical 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/Manufacturing 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 — $(10 \times 2 = 20 \text{ marks})$

- Define Disaster and how it differ from Calamity.
- 2. List the various types of Disasters.
- 3. What is Disaster Cycle?
- What is Early Warning system?
- 5. What is Vulnerability Index?

- 6. What is Crisis Management?
- 7. Mention any International Agreements with reference to climate change.
- 8. What is Tsunami and when it was happened in India?
- 9. Differentiate Earthquake from Earth tremor.
- 10. What are the major causative factors for Forest fire.

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

11. (a) Classify the Disasters. Discuss in detail about the various environmental, social, economic and political impact of earthquake and land slide.

Or

- (b) Discuss the various impact of climate change at the regional and global level and how the effects can be mitigated.
- 12. (a) Enumerate the Role and responsibilities of community, Panchayat Raj institution, urban local bodies during and after disaster.

Or

- (b) With reference to India, Explain the institutional process and frameworks at central and state level for Disaster Management.
- 13. (a) Explain in detail the various Environmental Impact of Developmental Projects viz, dams and embankments especially in India scenario.

Or

- (b) How far the indigenous knowledge, appropriate technology and local resources can be effectively used in controlling climate change in India.
- 14. (a) Explain the Disaster Management Act and Policy of India.

Or

- (b) Explain the various components of Disaster Relief.
- 15. (a) Explain the process of Vulnerability Assessment for Building and infrastructure with reference to earthquake.

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(b) Work out Disaster Management and Mitigation plan for various types of floods and forest fires.

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

16. (a) Discuss Bophal gas case study under Environmental disaster Management.

Or

(b) Explain the role of GIS and Information Technology for Risk Assessment and Disaster Damage Assessment.

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