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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 — $(10 \times 2 = 20 \text{ marks})$

- 1. Define Disaster and how it differ from Calamity.
- 2. List the various types of Disasters.
- 3. What is Disaster Cycle?
- 4. 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.

Or

(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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