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Question Paper Code: 90691

B.E./B.Tech. DEGREE EXAMINATIONS, NOVEMBER/DECEMBER 2022.

Fifth/Seventh Semester

Aeronautical Engineering

GE 8071 - DISASTER MANAGEMENT

(Common to: 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/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 pandemic.
- 2. Explain hazard briefly.
- List out disaster risk reduction.
- 4. Define early warning system.
- 5. Identify mitigation plans for community-based DRR.

- 6. List out salient details on indigenous knowledge.
- 7. What is GIS and spatial data.
- 8. Explain vulnerability profile.
- 9. Describe the storm surge assessment.
- 10. List out the effects of manmade disasters.

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

11. (a) Discuss the classification of hazards in detail.

Or

- (b) Dramatize about the climate change-Do's and Don'ts to maintain the status quo.
- 12. (a) Explain the roles and responsibilities of state government in disaster.

Or

- (b) Illustrate disaster framework at the state and central levels in India.
- 13. (a) Illustrate the impact of development plans like dams and embankments on the environment.

Or

- (b) Critically evaluate how indigenous knowledge and local resources can benefit the disaster management plans?
- 14. (a) Explain the disaster management act and policy in detail.

Or

- (b) Demonstrate the role of information technology in risk assessment, response and recovery phases of disaster.
- 15. (a) Discuss on earthquake vulnerability assessment of buildings and infrastructure.

Or

(b) Illustrate the manmade disasters in detail and how to rebuild it.

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

16. (a) Explain the space based inputs on disaster mitigation. Will the actions we take today would be enough to forestall the direct impacts of climate change?

Or

(b) Summarize and evaluate the governmental arrangements for disaster preparedness, response, and recovery?