

MBEP 3005

M.B.A. DEGREE EXAMINATION, MAY 2026.

Third Semester

Common Elective

DISASTER MANAGEMENT

(2023 onwards)

Time : Three hours

Maximum : 75 marks

PART A — (5 × 4 = 20 marks)

Answer any FIVE questions.

1. Differentiate between the social and psychological impacts of disasters.
2. Summarize the disaster vulnerability of India at both national and district levels.
3. Identify the factors that influence disaster preparedness and responses at the national level.
4. Examine the role of communication rooms in enhancing the efficiency of disaster relief camps.
5. Discuss the challenges associated with restoring livelihoods after a disaster.

6. Compare the roles of national and state-level disaster management authorities.
7. Explore the methods used to mobilize youth in disaster management efforts.
8. Review the role of youth organizations in improving disaster preparedness.

PART B — ($5 \times 8 = 40$ marks)

Answer any FIVE questions.

9. Evaluate the implications of disaster vulnerability on India's economic and social structures.
10. Discuss the factors that contribute to disaster vulnerability at various levels (global, national, district, individual).
11. Compare community responses to disasters between rural and urban areas.
12. Contrast different strategies for income generation during the rehabilitation phase.
13. Analyze the role of sanitation facilities in ensuring health and safety during disaster recovery.

14. Assess the contributions of international organizations to disaster management efforts.
15. Explore the relationship between disaster management and sustainable development.
16. Review the approaches of various youth organizations in their disaster management initiatives.

PART C — ($1 \times 15 = 15$ marks)

Answer the following.

17. Case study : Compulsory.

On March 11, 2011, Japan was struck by a catastrophic 9.0 magnitude earthquake, the strongest ever recorded in the country's history. The earthquake triggered a massive tsunami that devastated the northeastern coast of Japan. The dual disaster led to the loss of nearly 16,000 lives, displaced over 230,000 people, and caused widespread destruction of infrastructure, including roads, buildings, and the Fukushima Daiichi nuclear power plant, which suffered a meltdown and released radioactive materials into the environment.

Japan's disaster preparedness and response systems were tested to their limits during this crisis. Despite the unprecedented scale of the disaster, Japan's preparedness measures significantly mitigated the potential damage and loss of life. Japan has a long history of dealing with earthquakes and tsunamis, which has led to the development of a comprehensive disaster management system that includes early warning systems, strict building codes, public education campaigns, and regular drills.

One of the key aspects of Japan's disaster preparedness is its early warning system, which played a crucial role during the 2011 earthquake and tsunami. The Japan Meteorological Agency issued tsunami warnings within three minutes of the earthquake, allowing residents in coastal areas to evacuate to higher ground. This early warning system, combined with Japan's culture of preparedness, saved countless lives. In many cases, schools and public facilities served as evacuation centers, where people sought refuge during and after the disaster.

The community response was another vital component of Japan's disaster preparedness. Local communities were well-organized, with clear disaster management plans in place. These plans included designated evacuation routes, assembly points, and trained volunteers who guided and assisted others during the evacuation process. The Japanese government and various non-governmental organizations (NGOs) also played significant roles in coordinating rescue and relief efforts, providing food, medical care, and shelter to those affected.

However, the disaster also exposed vulnerabilities in Japan's disaster preparedness, particularly in dealing with the nuclear crisis that followed the tsunami. The meltdown at Fukushima Daiichi highlighted gaps in the safety protocols and emergency response plans for nuclear facilities, leading to a widespread evacuation and long-term environmental contamination. The disaster prompted Japan to re-evaluate its energy policies and disaster management strategies, particularly concerning nuclear safety.

In the years following the disaster, Japan has made significant efforts to improve its disaster preparedness. These efforts include strengthening the early warning system, enhancing public education on disaster risks, and revising building codes to ensure greater resilience against earthquakes and tsunamis. The government also implemented stricter regulations for nuclear safety and invested in research and development to improve disaster response technologies.

The 2011 earthquake and tsunami serve as a powerful reminder of the importance of disaster preparedness. Japan's experience provides valuable lessons for other countries, emphasizing the need for comprehensive disaster management plans, robust early warning systems, and community involvement in disaster preparedness efforts.

Questions :

- (a) Evaluate the effectiveness of Japan's disaster preparedness measures during the 2011 earthquake and tsunami. What were the key factors that contributed to the successful aspects of the response?
 - (b) Analyze the vulnerabilities in Japan's disaster preparedness exposed by the Fukushima nuclear crisis. How can these lessons be used to improve disaster management strategies for nuclear facilities globally?
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