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# Syllabus

- **Disaster and Disaster Management. GS Paper III**

- **Disaster and its type**

- **Earthquakes & Tsunami**

- **Cyclones**

- **Floods**

- **Drought**

- **Cloudburst**

- **Dam Failure**

- **Landslides and avalanche**

- **Wildfire**

# Syllabus

- **Disaster and Disaster Management. GS Paper III**
- **Disaster Management**
- **Laws and Institutions**
- **International Framework**

# PYQs

✓  
Q.1) Dam failures are always catastrophic, especially on the downstream side, resulting in a colossal loss of life and property. Analyse the various causes of dam failures. Give two examples of large dam failures. [150 Words] [10 Marks] [2023]

Q.2) Explain the mechanism and occurrence of cloudburst in the context of the Indian subcontinent. Discuss two recent examples. [150 Words] [10 Marks] [2022]

Q.3) Explain the causes and effects of coastal erosion in India. What are the available coastal management techniques for combating the hazard? [250 words] [15 Marks] [2022]

Q.4) Describe the various causes and the effects of landslides. Mention components of the important components of National Landslide Risk Management strategy. [250 Words] [15 Marks] [2021]

Q.5) Discuss about the vulnerability of India to earthquake related hazards. Give examples including the salient features of major disasters caused by earthquakes in different parts of India during the last three decades. [150 Words] [10 Marks] [2021]

# PYQs

**Q.6) On December 2004, tsunami brought havoc on 14 countries including India. Discuss the factors responsible for occurrence of Tsunami and its effects on life and economy. In the light of guidelines of NDMA (2010) describe the mechanisms for preparedness to reduce the risk during such events. [250 Words] [15 marks] [2017]**

**Q.7) The frequency of urban floods due to high intensity rainfall is increasing over the years. Discussing the reasons for urban floods, highlight the mechanisms for preparedness to reduce the risk during such events. [200 Words] [12.5 Marks] [2016]**

**Q.8) The frequency of earthquakes appears to have increased in the Indian subcontinent. However, India's preparedness for mitigating their impact has significant gaps. Discuss various aspects. [200 Words] [12.5 Marks] [2015]**

**Q.9) Drought has been recognized as a disaster in view of its spatial expanse, temporal duration, slow onset and lasting effects on vulnerable sections. With a focus on the September 2010 guidelines from the National Disaster Management Authority (NDMA), discuss the mechanisms for preparedness to deal with likely El Nino and La Nina fall outs in India. [200 Words] [12.5 Marks] [2014]**

# PYQs

**Q.1) Discuss the recent measures initiated in disaster management by the Government of India departing from the earlier reactive approach. [250 Words] [15 Marks] [2020]**

**Q.2) Vulnerability is an essential element for defining disaster impacts and its threat to people. How and in what ways can vulnerability to disasters be characterized? Discuss different types of vulnerability with reference to disasters. [150 Words] [10 Marks] [2019]**

**Q.3) Disaster preparedness is the first step in any disaster management process. Explain how hazard zonation mapping will help disaster mitigation in the case of landslides. [250 Words] [15 marks] [2019]**

**Q.4) Describe various measures taken in India for Disaster Risk Reduction (DRR) before and after signing 'Sendai Framework for DRR (2015-2030)'. How is this framework different from 'Hyogo Framework for Action, 2005'? [250 Words] [15 marks] [2018]**

**Q.5) With reference to National Disaster Management Authority (NDMA) guidelines, discuss the measures to be adopted to mitigate the impact of the recent incidents of cloudbursts in many places of Uttarakhand. [200 Words] [12.5 Marks] [2016]**

**Q.6) How important are vulnerability and risk assessment for pre-disaster management? As an administrator, what are key areas that you would focus on in a Disaster Management System? [200 Words] [10 Marks] [2013]**





How to prepare?

→ dynamic topic

→ Class notes

✓ X-factor → Research

→ Current Affairs

# Disasters

( ) factors outside  
human control

Natural hazard

→ All of a sudden

→ large scale devastation

Disaster

Natural

Artificial  
human made  
disasters

# Disasters and Hazards

- **Disasters** *caused by it is very high*
  - Sudden occurrence
  - large scale
  - widespread devastation of life and property
- **Hazards** *Extreme climatic condition in desert.*
  - Causes harm to people as well as property
  - Swift or permanent
  - unstable structural features in Himalayas

# UPSC

Figures	2023	2022	2021	2020	2019
Overall losses in US\$ b (Munich Re)	250	270	280	210	166
Uninsured losses in US\$ b (Munich Re)	155	150	160	128	109
Insured losses in US\$ b (Munich Re)	95	120	120	82	57
Recorded events (CRED)	-	387	407	380	505
Deaths (CRED)	-	30,704	18,274	17,664	27,199
People affected in million (CRED)	-	185	103.5	97.6	109.2
People displaced by disasters in million (IDMC)	-	8.7	23.7	7	24.9
People in million living in acute food insecurity driven by weather extremes (FSIN)	-	56.8 [12 countries affected]	23.5 [8 countries]	15.7 [15 countries]	33.8 [25 countries]

UN

1000

2500b

Shack value

400+

disruptions  
mitigation

human-made

→ Bhopal gas

tragedy

→ Chernobyl  
nuclear disaster

→ why do we need a effective

~~dis~~ disaster management  
policy and Institutions??

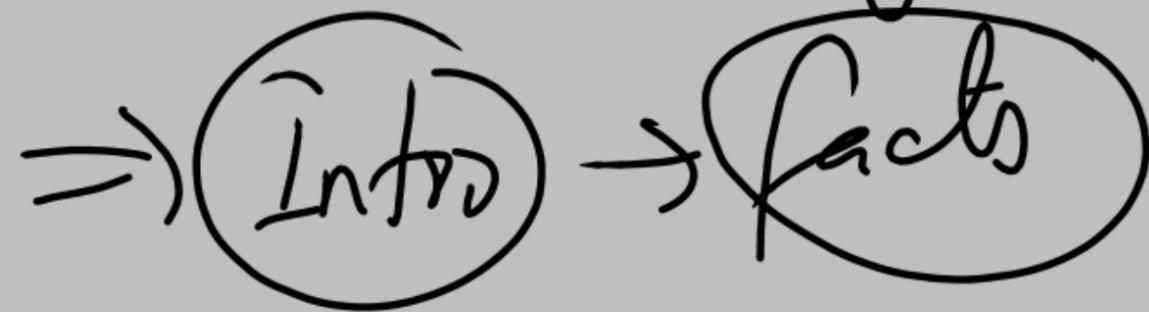
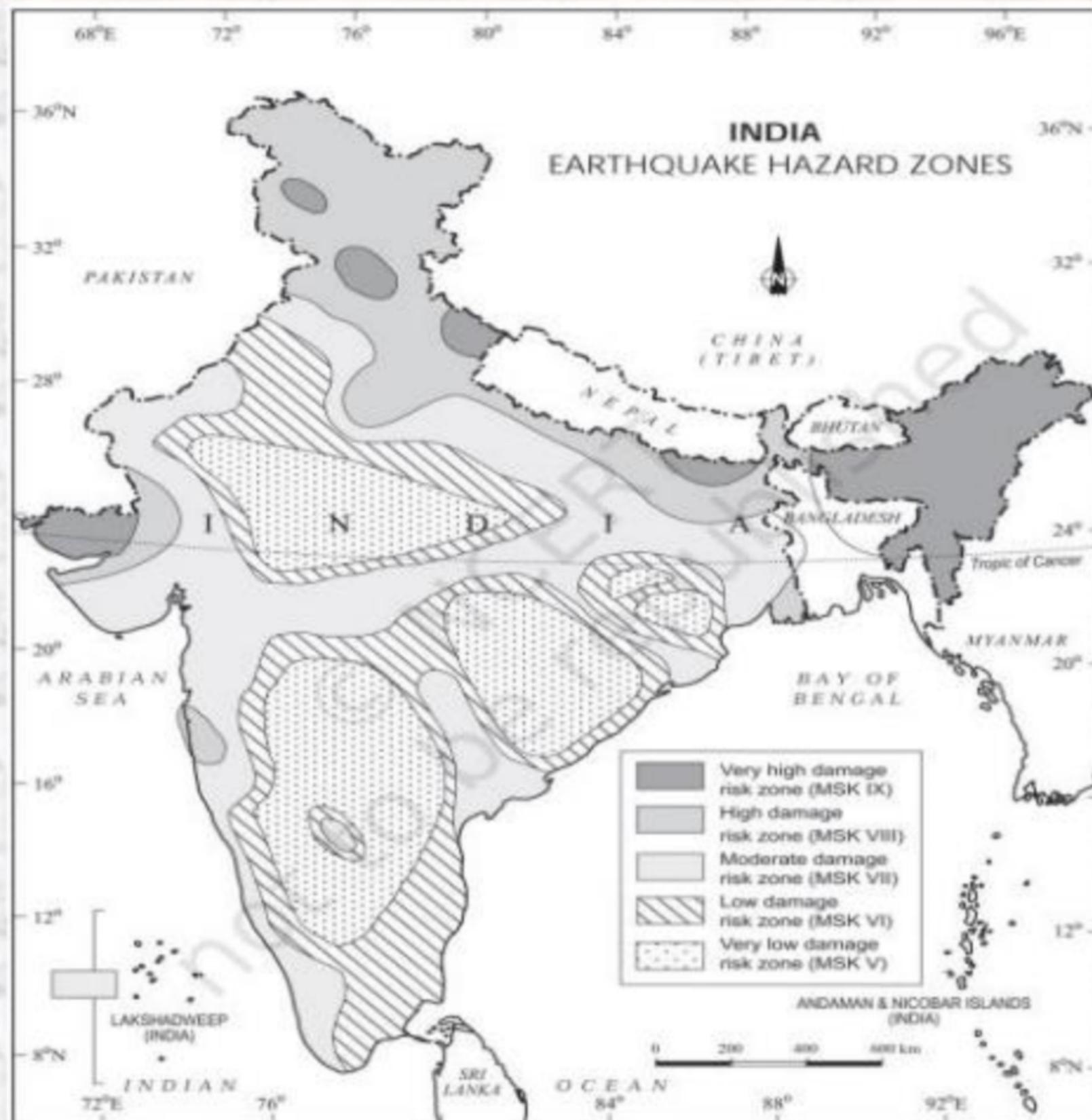


Table 7.2 : Classification of Natural Disasters

<i>Atmospheric</i>	<i>Terrestrial</i>	<i>Aquatic</i>	<i>Biological</i>
Blizzards ✓ Thunderstorms ✓ Lightning ✓ Tornadoes ✓ Tropical Cyclone ✓ Drought ✓ Hailstorm ✓ Frost, Heat Wave or Loo. Cold Waves, etc. ✓	Earthquakes ✓ Volcanic Eruptions ✓ Landslides ✓ Avalanches ✓ Subsidence ✓ Soil Erosion ✓	Floods ✓ Tidal Waves ✓ Ocean Currents ✓ Storm Surge ✓ Tsunami ✓	Plants and Animals as colonisers (Locusts, etc.). Insects infestation— fungal, bacterial and viral diseases such as bird flu, dengue, etc.

# UPSC





# KHAN GLOBAL STUDIES

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**THANKS FOR WATCHING**

