

M.Sc. AGRICULTURE (Semester – III)

Session: 2023-24

Paper: Disaster Management

Paper Code: PGS 505

Maximum Marks - 100

Theory- 70 Marks

Internal Assessment - 30 Marks

Time Allowed: 3 Hours

Total Teaching Periods -30

Total Course Credits: 2

INSTRUCTIONS FOR THE PAPER SETTERS

The question paper will consist of three sections A, B and C. Sections A and B will have four questions from the respective sections of the syllabus and carry 14 marks each. Section C will consist of 14 short answer-type questions that will cover the entire syllabus uniformly and carry 01 mark for each. Candidates are required to attempt two questions each from sections A and B of the question paper and the entire Section-C.

Theory

Section/Unit- I

1. Natural Disasters- Meaning and nature of natural disasters.
2. Types and effects of natural disasters; floods, drought, cyclones, earthquakes, landslides, avalanches, volcanic eruptions, heat and cold waves, Climatic change: global warming, Sea level rise, ozone depletion.
3. Man-Made Disasters- Nuclear disasters, chemical disasters, biological disasters, building fires, coal fires, forest fires, oil fires, air pollution, water pollution, deforestation, industrial wastewater pollution, road accidents, rail accidents, air accidents, sea accidents.

Section/Unit- II

4. Disaster Management- Effect to mitigate natural disasters at national and global levels— international strategy for disaster reduction.
5. Concept of disaster management, national disaster management framework; financial arrangements; the role of NGOs, community-based organizations, and media.
6. Central, state, district and local administration; Armed forces in disaster response; Disaster response: Police and other organizations.

TEACHER LEARNING ACTIVITIES:

1. Online/Offline Quizzes.
2. Assignments.
3. Visual demonstration of studies material.
4. PPT Presentation.

Suggested readings:

1. Thakur, V.: *A Text Book of Environmental Science*.
2. Stoltman, J.P. et al.: *International Perspectives on Natural Disasters*, Kluwer Academic Publications. Dordrecht, 2004.
3. Misra, R.: *Ecology Workbook*.
4. Misra, R.: *Indian Manual of Plant Ecology*

5. Singh, Prithipal: *Perspectives in Plant Ecology and Environmental Biology*.
6. Singh, R.B.: *Risk Assessment and Vulnerability Analysis*, IGNOU, New Delhi. Chapter 1, 2 and 3, 2005.
7. Chouhan, T.S.: *Space Technology and GIS for Disaster Monitoring and Mitigation*.
8. R, Subramanian: *Disaster Management*; Vikas Publishing House (2018)
9. Varun Dutt Sharma, S K Pandey, Vimal Kumar Sharma: *Environmental Education and Disaster Management*; CBS; 1st edition (1 December 2009).
10. K. N Shastri; *Disaster Management in India*, Neha Publishers.
11. Savindra Singh and Jeetendra Singh; *Disaster Management*, Pravalika publications Allahabad.
12. Dr. S. Ramchandran; *Environmental Impact Assessment*, Airwalk publications, 2019.