## Modern College of Arts, Science and Commerce (Autonomous), Shivajinagar, Pune 05

## F.Y.B.Sc. Geography NEP 2023 Pattern

## **Syllabus**

## To be implemented from Academic Year 2023-24

Semester	Paper	Subject code	Title of Paper	No. of credits			
Semester I							
F.Y.B.Sc. Sem I	OE	23ScGeoU1401	Geography of Disaster Management –I	2			
Semester II							
F.Y.B.Sc. Sem II	Minor (Paper I) Practical	23ScGeoU2301	Techniques in Physical Geography (P)	2			
	OE	23ScGeoU2401	Geography of Disaster Management –II	2			

## Modern College of Arts, Science and Commerce (Autonomous), Shivajinagar, Pune 05

## F. Y. B. Sc. Geography (2023 Course under NEP 2020) Course Code: 23ScGeoU1401

Title of the Course: Geography of Disaster Management-I

No. of Credits: 02 Total Lectures: 30

## **Objectives:**

- 1) To introduce students the concept of disaster & its relation with Geography.
- 2) To acquaint the students with the utility & application of hazards in different areas & its management.
- 3) To make the students aware of the need of protection & disaster management.

	Semester – I	Lectures
Chapter 1	Introduction to Hazards and Disasters	
	Definition and types	
	A. Meaning and definitions of hazard and disaster	
	B. Geographical conditions and disasters	
	C. Classification of disasters	
Chapter 2	Basic concepts in Disaster Management	12
	Terminology and concepts	
	A. Concept of disaster management	
	B. Aims and objectives	
	C. Pre-disaster management	
	D. Post-disaster management	
Chapter 3	Disaster Management and Measures	12
	Structural and Non-structural measures  A. Structure of disaster management: Preparedness, Response, Recovery, Mitigation, Rehabilitation  B. Standard operating procedure of management on government level  C. Role of media	

#### **Learning Outcomes:**

- 1. Students will understand the natural and manmade disasters.
- 2. To prepare students for prevention of disasters.
- 3. In the field of disaster management students will create their employment opportunities.
- 4. To develop ability in the field of management, planning and their own agency.
- 5. Group discussions, effective communications and personal opinion may be improve their socio-economic responsibilities.

#### **Reference books:**

1. Alexander David, 2000, Introduction in Confronting Catastrophe, Oxford University Press.

- 2. Alexander, D. (1993): Natural Disasters. UCL Press Ltd., London
- 3. Andharia J. 2008, Vulnerability in Disaster Discourse, JTCDM, Tata Institute of Social Sciences Working Paper no. 8.
- 4. Blakie, P. Cannon T, Davis I, Wisner B. 1997, At Risk Natural Hazards, People Vulnerability and Disasters Rourledge.
- Bloom, A.L., 1998. Geomorphology. A Systematic Analysis of Late Cenozoic Landforms.
   Pearson Education (Singapore) Pte. Ltd.
- Chandna, R. C., 2000. A Geography of Population, Concepts, Determinants and Patterns, Kalyani Publishers, New Delhi.
- 7. Copola P Damon, 2007, Introduction to International Disaster Management
- 8. Cuny, F. 1983, Development and Disaster, Oxford University Press.
- 9. Govt. of India, 2005, Disaster Management Act Government of India, New Delhi.
- 10. Hamblin, W.K., 1989. The Earth's Dynamic Systems, Macmillan Publishing Company, New York.
- 11. Huggett, D.A., 2004. Fundamentals of Biogeography, Routledge.
- 12. Kale, V.S. and Gupta, A., 2001. Introduction to Geomorphology, Orient Longman, Calcutta.
- 13. Knox, P. and Agnew J., 1998. The Geography of the World Economy, Arnold, London.
- 14. Lutgens, F.K. and Tarbuck, E.J., 2007. The Atmosphere. Prentice Hall, EnglewoodCliffs, New Jersey, USA.
- 15. Ross, D. A., 1988. Introduction to Oceanography. Prentice Hall, New Jersey.
- 16. Saptarshi P. G., More J. C., Ugale V. R. (2009), "Geography and Natural Hazard" Diamond, Pune.
- 17. Savindra Singh, (2000): Environmental Geography. Prayag Pustak Bhavan, Allahabad
- 18. Singh, S., 1998. Geomorphology, Prayag Pustak Bhavan, Allahabad.
- 19. Strahler, A.A. and Strahler, A. N., 2002. Physical Geography: Science and Systems of the Human Environment, John Wiley and Sons, INC.
- 20. A. H. Choudhar, P. N. Salve, S. M. Kadam, R. H. Choudhar, V. C. Ithape (2010), "Contemporary Issues and Geography", Atharva, Pune.

# Modern College of Arts, Science and Commerce (Autonomous), Shivajinagar, Pune 05 F. Y. B. Sc. Geography

## (2023 Course under NEP 2020) Course Code: 23ScGeoU2301

## Title of the Course: Techniques in Physical Geography

No of Credits: 02 No of Practicals: 15

## **Objectives:**

- 1. To acquire the knowledge of various techniques in Physical Geography.
- 2. To enable the student to use techniques of specific maps and map reading.
- 3. The students will able to apply particular practical knowledge in the programmes and planning in the society.

	Semester – I	Practicals
Chapter 1	Maps	4
	A. Definition	
	B. Elements of Map: Title, Scale, Direction, Projection,	
	Conventional signs and symbols, Legends	
	C. Types of Maps	
	D. Significance of Maps	
Chapter 2	Map Scales	6
	A. Definition	
	<ul><li>B. Types: Verbal Scale (VS), Representative Fraction (RF), Graphical Scale</li></ul>	
	<ul> <li>C. Conversion of scale: VS into RF and RF into VS (Minimum 2 examples each)</li> </ul>	
	D. Construction of simple graphical scale (Minimum 2	
	exercises)	
Chapter 3	Relief	3
	A. Methods of relief representation	
	i. Qualitative: Hachures, Hill shading, Layer tint	
	ii. Quantitative: Spot height, Triangulation point, Bench	
	mark, Contours, Form lines	
	B. Representation of following features by contours:	
	<ul> <li>a) Slopes: uniform slope, concave slope, convex slope, terraced slope</li> </ul>	
	b) Landforms: conical hill, plateau, ridge, saddle, V-	
	shaped valley, U-shaped valley, waterfall, gorge, spur	
	and cliff	
Chapter 4	Representation of Data	2
	A) Thematic maps	
	i. Dot methods	

ii. Choropleth method	
iii. Isopleth method	
B) Field Visit, preparation of report (Report should be	
submit in to the department)	

#### **Course Outcome:**

- 1. To develop the practical knowledge and skills of map, scale and projections.
- 2. Students should aware new techniques and skills of map making.
- 3. Students will understand the different types of relief representation methods.
- 4. To acquire knowledge of various thematic maps and their use.
- 5. To improve ability of representation of data.
- 6. Field visit get wide view of observation skills related to geographical landforms and various geomorphic processes.

#### Reference books:

- 1. Siddhartha, K., 2006. Geography through maps, Kisalaya Publications Pvt. Ltd, Delhi.
- 2. Singh, G., 2005. Map work and practical geography. Vikas Publishing House Pvt. Ltd., New Delhi.
- 3. Singh, R.L., 2005. Elements of Practical Geography. Kalyani Publishers, New Delhi. India.
- 4. Ramamurthy, K., 1982. Map Interpretation, Rex Printers, Madras.
- 5. Singh, L.R. and Singh, R., 1973. Map work and practical geography, Central Book Allahabad.
- Monkhouse, F.J. and Wilkinson, H.R., 1971. Maps and Diagrams. Methuen and Co. Ltd., London.
- 7. Steers, J.A., 1970. An Introduction to Study of Map Projections. University of London Press Ltd., London.
- 8. Singh, R.L., and Dutt, P.K.,1968. Elements of practical geography, Students' Friends, Allahabad.

## Modern College of Arts, Science and Commerce (Autonomous), Shivajinagar, Pune 05

## F. Y. B. Sc. Geography (2023 Course under NEP 2020) Course Code: 23ScGeoU2401

Title of the Course: Geography of Disaster Management-II

No. of Credits: 02 Total Lectures: 30

## **Objectives:**

- 1) To introduce students the concept of disaster & its relation with Geography.
- 2) To acquaint the students with the utility & application of hazards in different areas & its management.
- 3) To make the students aware of the need of protection & disaster management.

	Semester – II	Lectures
Chapter 1	Climatic disasters and management	10
	Causes, effects, areas and management	
	A. Cyclones	
	B. Droughts	
	C. Floods	
Chapter 2	Anthropogenic disasters and management	10
	Trends, types, areas, causes, effects and remedies	
	A. Deforestation	
	B. Forest fire	
	C. Soil degradation	
	D. Over exploitation of resources	
Chapter 3	Global issues and movements	10
	Causes, effects and measures to conservation	
	A. Global warming	
	B. Ozone depletion	
	C. Green house effects	

### **Learning Outcomes:**

- 1. Students will understand the natural and manmade disasters.
- 2. To prepare students for prevention of disasters.
- 3. In the field of disaster management students will participate to help the community problems.
- 4. To develop ability to understand local, regional and global hazards for reducing the problems.
- 5. Group discussions, effective communications and personal opinion may be improve their socio-economic responsibilities.

#### **Reference books:**

- 1. Alexander David, 2000, Introduction in Confronting Catastrophe, Oxford University Press.
- 2. Alexander, D. (1993): Natural Disasters. UCL Press Ltd., London

- 3. Andharia J. 2008, Vulnerability in Disaster Discourse, JTCDM, Tata Institute of Social Sciences Working Paper no. 8.
- 4. Blakie, P. Cannon T, Davis I, Wisner B. 1997, At Risk Natural Hazards, People Vulnerability and Disasters Rourledge.
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   Pearson Education (Singapore) Pte. Ltd.
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- 12. Kale, V.S. and Gupta, A., 2001. Introduction to Geomorphology, Orient Longman, Calcutta.
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- 19. Strahler, A.A. and Strahler, A. N., 2002. Physical Geography: Science and Systems of the Human Environment, John Wiley and Sons, INC.
- 20. A. H. Choudhar, P. N. Salve, S. M. Kadam. R. H. Choudhar, V. C. Ithape (2010), "Contemporary Issues and Geography", Atharva, Pune.