

**COMMON POOL OF DISCIPLINE SPECIFIC ELECTIVE (DSE) COURSES
OFFERED BY THE DEPARTMENT OF GEOGRAPHY**

DISCIPLINE SPECIFIC ELECTIVE COURSE – 01 (DSE-01): BIOGEOGRAPHY

Credit distribution, Eligibility and Pre-requisites of the Course

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course	Department offering the course
		Lecture	Tutorial	Practical/ Practice			
BIOGEOGRAPHY	4	3	1	-	-	-	GEOGRAPHY

Course Objectives:

- To understand various dimensions of biogeography.
- To get detailed analysis of energy cycles and their function.
- To understand the concept of ecological succession and various biogeographical processes.
- To identify geographical distribution of flora and fauna of the world.
- To realize and understand the conservation of biodiversity.

Learning Outcome:

- Detailed exposure of biogeography and biodiversity.
- In-depth knowledge of circulation of biogeochemical cycles.
- Functionality of the biogeographical processes.
- Knowledge of Phytogeographical realms and Zoogeographical realms.
- Develop understanding of the global level efforts to conserve biodiversity.

SYLLABUS OF DSE-01

Unit-I: Biogeography- Nature, Approaches, significance and Scope.

Unit-II: Biogeographical Processes- Dispersal, Speciation, Ecological Succession, Extinction.

Unit-III: Biogeochemical Cycles- Oxygen, Carbon and Nitrogen.

Unit-IV: Geographical Distribution of flora and fauna- Phytogeographical realms, Zoogeographical realms (with specific reference to Wallace and Weber line)- Basis and Classification.

Unit-V: Conservation: In situ and ex situ, CBD (Convention on Biodiversity).

Suggestive Readings:

1. Bhattacharyya, N.N. (2003). Biogeography. New Delhi, India: Rajesh Publications.
2. Huggett, R.J. (1998). Fundamentals of Biogeography, USA: Routledge
3. Lomolino, Mark. V., 2020, Biogeography: A Very Short Introduction, Oxford Publication, ISBN: 9780198850069
4. Cox, C.B, et.al, 2016, Biogeography: An Ecological and Evolutionary Approach, 9th Edition, Wiley-Blackwell.
5. Taylor, J.A., 2021, Themes in Biogeography, Routledge, Taylor and Francis publications, ISBN 9780367351106
6. Pielou, E.C., 1979, Biogeography, John Wiley & Sons, USA.
10: 0471058459 ISBN 13: 9780471058458
7. L.C Aggarwal, 2018, Biogeography, Rawat publication Jaipur
8. Mathur, H.S. (1998). Essentials of Biogeography. Jaipur, India: Anuj Printers.
9. Singh, Savindra. (2015). Jaiv Bhoogol (Hindi). Allahabad, India: Prayag Pushtak Bhawan
10. Sivaperuman, Chandrakasan et al. (2018). Biodiversity and Climate Change Adaptation in Tropical Islands. London, UK: Academic Press.