Ecology and Environmental Biology

Purohit & Agrawal

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PREFACE

Ecology, study of the relationship of plants and animals to their physical and biological environment and called environment biology. The physical environment includes light and hear or solar radiation. Moisture, wind, oxygen, carbon dioxide, nutrients in soil, water, and atmosphere. The biological environment includes organisms of the same kind as will as other plants and animals.

Because of the diverse approaches required to study organisms in their environment, ecology draws upon such fields as climatology, hydrology, oceanography, physics, chemistry, geology, and soil analysis. To study the relationships between organisms, ecology also involves such disparate sciences as animal behaviour, taxonomy, physiology, and mathematics.

A relatively new field, environmental science is highly interdisciplinary, integrating natural sciences, social sciences, and humanities in a broad, holistic study of the world around us. In contrast to more theoretical disciplines, environmental science is mission-oriented. That is, it seeks new, valid, contextual knowledge about the natural world and our impacts on it, but obtaining this information creates a responsibility to get involved in trying to do something about the problems we have created.

The book has been specially been framed for under and post graduate students of all Indian universities keeping in view the new syllabus of University Grants Commission. The book includes chapters like, Introduction, Climatic Factors, Topographic Factors, Biotic Factors, Edaphic (Soil) Factor, Ecosystems, Ecosystem Functioning, Community Ecology, Biogeochemical Cycles, Plant Geography and Biomes of the World, Ecological Adaptations, Autecology, Genecology (Ecological Concept of Species and Individuals), Natural Resources and their Management, Energy Resources and their Management, Wildlife Resources and their Management, The Human Population, Water Pollution, Air Pollution, Indoor Pollution, Global Warming, Soil Pollution, Radiation Pollution, Noise Pollution, Environmental Pollutants and Bioindicators, Remote Sensing and GIS for Environmental Studies, Natural Disasters, Bioconservation of the Environment, Environmental Education, International and National Environmental Organizations, Environmental Programmes, Appendix, Abbreviations, Latin and Other Words, Related Measurements/Units, and Subject Index.

Author

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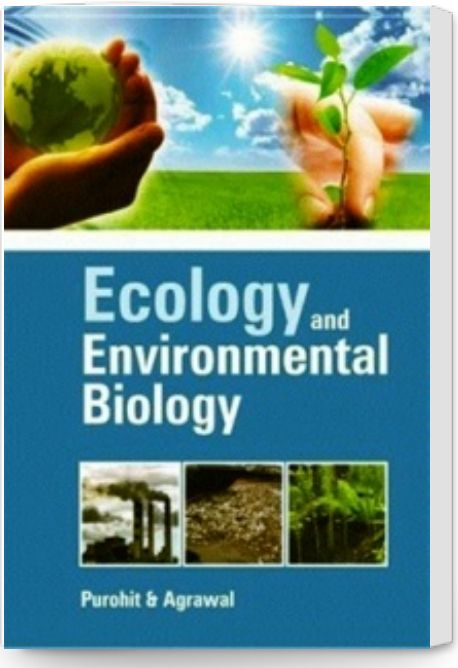

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