

M Ed Two Year Programme

S.Sc. 2 (e) : Environmental Education and Biology

Maximum Marks: 100

Rationale

Environmental Education has a long history of an eternal debate on its place in education as well as a component of school curriculum. Environmental Education has been determined by various ideologies resulting from the orientations of different environmentalisms that further influence the curricular approaches within. Therefore, a critical examination of various ideologies and their implications for the field of education would contribute in comprehending the issues related to implementation of environmental education at various levels of education, including the school curriculum. The understanding of interdisciplinary and trans disciplinary nature of environmental education that offers several interlinkages to curricular frameworks of different subject areas vis-à-vis its implications would help in envisioning various potential spaces for environmental education in school curriculum. Biology has an intricate relationship with environmental education in terms of contributing to the conceptual understanding of various environmental issues, response of biology education to environmental issues and the influence of paradigm shifts in biology on environmental education. The course thus also provides a focused exploration of the possibilities of this interrelationship and the challenges within, specifically for candidates interested in biology education too.

Objectives of the Course:

- 1) To acquire a theoretical understanding of the concept of Environmental Education.
- 2) To develop abilities to establish relevant curricular links to Environmental Education.
- 3) To develop abilities to examine the intrinsic relationship between biological sciences and Environmental Education vis-à-vis the possibilities and challenges within.
- 4) To facilitate an in-depth understanding of various issues related to implementation of Environmental Education in schools.
- 5) To help them acquire a critical understanding of effective teacher education program w.r.t. Environmental Education.
- 6) To provide them an overview of National and Global trends with regard to various researches and initiatives taken in Environmental Education.

Unit 1: Understanding Environmental Education: Review and Prospects

1. History and Development of the concept
2. Paradigms, Philosophies, and Ideologies linked to Environmental Education
3. Education for Sustainable Development
4. Environmental Education Principles, aims and Objectives

Unit 2: Converging Environmental Education with Biology Education: Possibilities & Challenges

1. Frameworks for knowledge building in biology for sustainable development
2. Approaches/ strategies in Biology Education contributing to Environmental Education
3. The Gaia's Hypothesis: Debates and Implications

Unit 3: Environmental Education in Schools: Theory to Practice

1. Approaches in Environmental Education: Interdisciplinary or Multidisciplinary
2. Development of Environmental Education Curriculum for various levels of School Education
3. Analysis of Existing Environmental Education Curriculum & Curricular Materials
4. Pedagogical Approaches/ Strategies in Environmental Education
5. Community Resources: Beyond Classrooms
6. Assessment Concerns in Environmental Education

Unit 4: Teacher Preparation: Trends & Issues

1. Pre-service Teacher Preparation in Environmental Education
2. Status of Teacher Preparation in Environmental Education in India
3. Review of International Teacher Preparation Programmes in Environmental Education
4. Possibilities of Professional Development of in-service teachers in Environmental Education

Unit 5: Perspectives and Research in Environmental Education: National & Global Scenario

1. Policy Perspective in Environmental Education
2. Place in various Education Commissions
3. Initiatives at National & International Environmental Education Programmes
4. Trends in Environmental Education Research

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