UNIT 1 : MEANING OF ENVIRONMENTAL EDUCATION

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1.1 LEARNING OBJECTIVES

After going through this unit, you will be able to-

- discuss the meaning and nature of environmental education
- explain the characteristics, aims and objectives of environmental education
- explain the scope of environmental education
- discuss the various methods of environmental education.

1.2 INTRODUCTION

With the advancement of science and technology mankind has progressed well. But this has drastically changed man's relationship with environment since the prehistoric time to the present day advanced period. The industrial and scientific revolutions have led to rapid changes in our environment. Continuous exploitation of nature has put mankind in a crucial state of environmental crisis. But, the fact is that, the welfare and existence of human race depend upon proper interaction between man and his environment. Therefore, it has become necessary to develop new environmental ethics among all the people which can ensure a more harmonious and sustainable relationship between mankind and natural resources. This cannot be achieved unless humanity adopts a new way of life. The role of education in rebuilding human behaviour and attitude is very important. Therefore, we are evolving an educational system that will give due emphasis on environmental understanding, environmental awareness, environmental planning and management.

Environmental education is that branch of academic discipline which can act as a powerful instrument to educate people to maintain ecological balance with proper awareness, knowledge, skills, attitudes and commitment to improve the quality of environment. This unit deals with the meaning and nature of environmental education, its definition and characteristics, its aims and objectives and the scope of environmental education. Besides having knowledge of environmental education, as a student of education, it is essential for you to know how to impart environmental education. Therefore, the present unit also takes into account the different methods that can be adopted for imparting environmental education.

1.3 MEANING AND NATURE OF ENVIRONMENTAL EDUCATION

The term 'Environmental Education' consists of two words. One is 'environment' and the other is 'education'. Let us first discuss the meaning of the word 'environment'. The dictionary meaning of the word 'environment'

is surrounding or condition under which a person, animal or a plant lives or operates. It is the aggregate of all external conditions that affect our life. Environment as a whole consists of two basic elements- physical or natural environment and man-made or cultural environment. The physical environment consists of both biotic and abiotic elements. Plants and animals are examples of biotic environment, whereas land water, air, climate phenomena, etc are examples of the abiotic environment. Eco-system comprises the physical environment and all the organisms which live on this earth. In a particular territory, a large number of plant and animal species grow together and develop a chain of interaction and interdependence. Any change in any of the species, disturb the life of other species which is called disturbance in ecological balance.

Man is a unique and dominant species that has been interfering with the environment in various ways, such as, clearing forests, breaking grasslands, digging, drilling, mining minerals, etc. Although, in the beginning, the environment of early men consisted of only physical aspects of the planet earth, with the advancement of society men extended their environment through social, economic and political functions. Of late, humans' have exploited some of the valuable natural resources like mineral oil, natural gas, coal, etc. Man's interference with environment has often led to extinction of certain animal species, disturbing the ecological balance in nature. The term environment includes all those external forces that have influenced the conditions which affect life, nature, behaviour and growth, development and maturity of living organisms. It consists of the sum total of the stimulation that an individual receives from conception to death. Thus, environment is an inseparable whole and is constituted by the interacting systems of physical, biological, and cultural elements which are inter-related to each other.

Education is an independent field of study or discipline which is concerned with the process of development, i.e., teaching-learning, training and instruction. It aims at the physical, social, emotional, and intellectual development of the child. The chief concern of all educationists is with the environment of men. But humans cannot exist or live in isolation from the

other forms of life and also from plant life. So, the educationists should be concerned with the environment of all types of biological population. Environmental education is that branch of education which provides sufficient knowledge and understanding about the problems of environment. It contributes towards solving them, and also develops attitude and values conducive to environmental protection and understanding of interdependence of nature and people.

Environmental education aims at generating widespread awareness of environmental problems. It not only educates the world population about the natural environment and its problems, but also aims at developing knowledge, attitude and skills necessary to protect the natural balance in environment. For this, men must learn to distinguish between renewable and exhaustible resources and their relevance for the continuity of the human civilisation.

It is a fact that a man cannot live and prosper by being constantly at war with nature. On the other hand, he must learn to live in peace and harmony with nature. It is possible only when he learns the laws of nature, its secrets and mysteries. Environmental education is nothing but educating a man how to interact with the surrounding world so as to improve his or her world. It enables one to maintain his or her life. This, in turn, helps in the preservation of the human race. It scrutinises men towards the diminishing natural resources, environmental pollution and the problem of population explosion.

It is clear from the above discussion that environmental education is a process of providing learning experiences to obtain knowledge, understanding, skills and awareness with desirable attitudinal changes about man's relationship with his natural and man-made surroundings. Thus, environmental education is a new area of study which has evolved under the discipline of education to meet the challenges of environmental crisis. Thus, environmental education should be seen as a continuous life-long process, beginning at the pre-school stage level and continuing through all formal and non-formal stages. It should also be treated as an inter-disciplinary discipline that would help in teaching environmental education

from a holistic and balanced perspective. In a broader sense, environmental education means education for the environment, about the environment and through the environment.

1.3.1 Definitions of Environmental Education

The term 'Environmental Education' has been discussed in various national and international seminars and has been defined in different ways. Some of the definitions have been provided here to understand its nature and concept.

The International Union for the Conservation for Nature and Natural Resources Commission of Education in the International Working Meeting on Environmental Education in the School Curriculum held under the auspices of UNESCO in Paris in 1970 remarked:

"Environmental Education is the process of recognising values and clarifying concepts in order to develop skills and attitudes necessary to understand and appreciate the inter-relatedness among man, his culture and his biophysical surroundings. It also entails practice in decision making and self-formulation of a code of behaviour about problems and issues concerning environmental quality."

The Finnish National Commission in a seminar held in 1974 stated:

"Environmental Education is a way of implementing the goals of environmental protection. Environmental education is not a separate branch of science or subject of study. It should be carried out according to the principle of lifelong integral education."

The Report of a Conference of African Educators held at Nairobi in 1968 stated:

"To create an awareness and an understanding of the evolving social and physical environment as a whole, its natural, manmade, cultural, spiritual resource, together with the rational use and conservation of the resource for development."

Mishra (1993) opined that, "Environmental education appears to be a process that equips human beings with awareness, knowledge, skill, attitude and commitment to improve the environment."

According to R.A. Sharma (1996): "Environmental Education refers to the awareness of physical and cultural environment and perceive its relevance for real life situation. The problems and issues are to be identified. The imbalance of environment are to be improved in view of sustainable development."

All the definitions mentioned above would remain incomplete, unless the definition formulated in the Tbilisi Conference held at Georgia in the USSR in October, 1977 under the auspices of the UNESCO and UNEP (United Nations Environment Programme) is not taken into account. The Tbilisi conference resolved that Environment Education involves:

a) **Awareness:** to help social groups and individuals so as to get an awareness of and sensitivity to the total environment and its allied problems.

b) **Knowledge:** to help social groups and individuals so as to gain a variety of experiences in and get a basic understanding of the environment and its associated problems.

c) **Attitude:** to help social groups and individuals achieve a set of values and feelings of concern for the environment and the motivation for actively participating in environmental improvement and protection.

d) **Skill:** to help social groups and individuals so as to acquire skills for identifying and solving environmental problems.

e) **Evaluation ability:** to help individuals and social groups so as to evaluate economic, social, aesthetic and educational factors.

f) **Participation:** to give social groups and individuals an opportunity so as to be actively involved at all levels in working towards the resolutions of environmental problems.

1.3.2 Characteristics of Environmental Education

By analysing the above definitions we can derive the following characteristics of environmental education:

- Environmental education is a medium and a process of education that covers man's relationship with his natural and manmade surroundings.
- It refers to the knowledge and understanding of physical, biological and cultural environment and its relevance to real life situations.
- Environmental education also discusses the effects of population explosion, industrialisation, pollution, etc. on environment.
- Environmental education identifies the imbalances of environment and tries to improve it in view of sustainable development.
- It explains the co-existence of both living and non-living organisms and their contribution to the nature for its sustenance.
- Environmental education develops skills, attitudes, feeling and values needed to preserve and maintain environment.
- It utilises educational approaches, methods and techniques of teaching to identify the real causes of environmental problems and gives importance on recognising the interrelatedness of man with his cultural and biological surroundings.
- Environmental education involves both theoretical and practical aspects of environment to improve the imbalances and prevent the deterioration or pollutions.
- It appears to be an educational process that generates in learners positive value towards eco-equilibrium of a pollution free environment.



CHECK YOUR PROGRESS

Q 1: Fill in the blanks :

i) Environmental education is a ..... branch of study.

ii) Environment is ..... under which a person, animal or a plant lives.

iii) Environmental education educates the world population to protect the nature in ..... environment.

iv) Environmental education should be ..... discipline making possible to teach it from a holistic perspective.

Q 2: What is meant by Environmental Education?

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Q 3: Mention five characteristics of environmental education.

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1.3.3 Aims and Objectives of Environmental Education

Now that you are familiar with the nature, concept and characteristics of environmental education, you must have realised that environmental education is an educational intervention to meet the challenges of environmental crisis. As such, it has certain aims and objectives which are mentioned below:

- To help the students in acquiring knowledge and experience of the environment and the problems associated with it.
- To assist students to understand and appreciate the laws of nature and their implications for human beings.
- To develop appreciation and insights into the inter-relationships and interdependence between man and environment.
- To encourage the students to observe nature, appreciate its

beauty, understand its laws, and adjust with it in order to live in harmony with nature.

- To generate in learners positive value towards eco-equilibrium of pollution free environment.
- To help students in acquiring the skills for identifying and solving environmental problems.
- To develop attitude, values and concern for the environment and motivate the students towards active participation in protection and improvement of environment.
- To provide opportunity for active participation in prevention and solution of environmental problems.
- To develop thinking among students about man's destiny, the future of mankind and the duty of every generation to leave this planet as a befitting place for mankind to live infinitely.
- To enjoy life and prosper peacefully by respecting the laws of nature.

1.4 SCOPE OF ENVIRONMENTAL EDUCATION

The literal meaning of the term 'scope' is the range of matters or subjects to be studied. It implies field of activity, operation and application. Scope of environmental education means the breadth and comprehensiveness of learning experiences to be provided to the individual through the process of education.

We know that environmental education is a field of study under the discipline of education. But the concept of environmental awareness or the study of environment as an academic discipline is a new phenomenon which had its roots in the developed western world. At present, we are facing grave environmental problems because of human activities on ecology, ecosystem and the whole environment. Therefore, we are evolving an educational system giving due emphasis on different aspects of the environment which has made environmental education an independent entity.

The broad areas included under the scope of environmental education are- environmental understanding, environmental awareness, environmental planning and environmental management. As an academic discipline, it includes the following content areas within its scope (Shrivastava, 2004, p. 108-109).

- **Concept of Environmental Education:** This area includes concept of environment and its components, concept of education, meaning of environmental education and its relationship with other subjects and environmental education as a discipline.
- **Concept of Ecology and Environmental Pollution:** Ecology is the study which deals with the relationships of life forms with each other and with their surroundings. Pollution refers to the contamination of the environment- air, water and land with harmful wastes resulting from human activities. Environmental pollution has badly affected the whole biosphere and has become a major world-wide threat. This area includes concept of ecology and ecosystem, quality of environment, pollution and degradation, environmental pollution- air, water, land and noise, human ecology and environmentalism, interdependency in environment- food chains and food web flow of energy and biochemical cycles.
- **Concept of Educational and Psychological Environment:** Education aims at the physical, social, emotional and intellectual development of the child in which environment has a significant role. In effective educative process, teacher must know his student and the environment. This is one of the very important areas in the scope of environmental education which includes concept of educational environment, growth and development, psychological environment and mental health, population explosion and environment.
- **Concept of Environmental Management:** Environmental management is the process to improve the relationship between man and environment so that the quality of both the environment and human society may be improved. This improvement of relationships between man and environment may be achieved through check on destruction

activities of man, conservation, protection, regulation and regeneration of nature. This is a very broad area that comes under the scope of environmental education. It includes meaning and nature of environmental management, teacher education and environmental education, role of media in environmental education, social forestry and environmental education, problems and remedies of environmental education and evaluation of environmental education.

While discussing the scope of environmental education, we must keep in mind that the core content of environmental education is highly interdisciplinary in nature. But the difference lies at the level of purpose and objectives. The purpose and objectives of other subjects are to provide awareness of environment and environmental studies. But environmental education has to develop cognitive, affective and psychomotor abilities and efficiencies. In short, the scope of environmental education includes the body of knowledge and experiences about the environment to be provided to the individual through the process of education.



CHECK YOUR PROGRESS

Q 4: State four major objectives of environmental education.

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Q 5: What are the broad areas included in the scope of environmental education?

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1.5 DIFFERENT METHODS USED IN ENVIRONMENTAL EDUCATION

Environmental Education is considered the most significant programme for making people aware of the environmental degradation. People can be made aware through teaching and organisation of different programmes. Teaching of environmental education involves both practical

(hands-on) and theoretical (understanding) aspects. The major objectives of environmental education are creating awareness, changing attitude and bringing people into action towards environmental conservation and protection. It covers cognitive, psychomotor and affective domains of teaching-learning. The strategies of teaching and learning are wide ranging, based on its contents and components, levels of education and the objectives of environmental education. Various methods are there for teaching environmental education. Some of the effective methods are discussed here.

1.5.1 Discussion Method

Discussion is one of the simple forms of group-based learning method. This method can be used in a variety of situations in both secondary and higher education level. The strength of discussion lies in broad participation of members of the group. It is the responsibility of the teachers to encourage the students to participate in discussion. For effective utilisation of this technique, the teacher should give sufficient background information about the subject so that the students are ready to use it in discussion. This is a primary requisite for a discussion because a discussion cannot operate in a vacuum. The teacher can easily arrange discussion on any topic based on the curriculum of environmental education. It can develop higher cognitive abilities effectively apart from reinforcing knowledge. In this method, students can be involved actively. It is a kind of interaction method which makes the classroom more lively and strong. There are four types of interaction in discussion, namely, Teacher-Learner Interaction, Learner-Learner Interaction, Teacher-Material Interaction, and Learner-Material Interaction. Environment is a serious issue. Therefore, the use of discussion method can make the issue more clear among the students.

For teaching environmental education, the teacher can discuss a few environment related issues like scarcity of water in the cities, water pollution in sea, disposal of garbage, etc.



CHECK YOUR PROGRESS

Q 6: What are the types of interaction involved in Discussion method?

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1.5.2 Project Method

Another important method of environmental education is Project Method. It is any purposeful activity. Project is an activity undertaken by the pupils for the solution of a problem. The activity undertaken leads to learning. Some basic principles of the project method are:

- **Activity:** The project should involve activity which is either mental or motor.
- **Purpose:** Activity should be purposeful; it should be a felt need of the pupils.
- **Experience:** Project undertaken should provide varied types of experience to the pupils- manipulative, concrete, mental, etc.
- **Reality:** Project undertaken should provide real experiences.
- **Freedom:** The pupils should be free to undertake the different activities connected with the project.
- **Utility:** The activity undertaken should be useful.

Project method helps the students acquire knowledge about particular topic through their active involvement. It not only helps them to gather knowledge but also ensures self-learning. Basically in project method, students are given some particular topic or area to work on. Through observation, interview and other means students gather data on the selected theme and prepare their project followed by analysis. The report may be hand-written or typed, or it may include charts, models, pictures, etc. They can take help of their teachers as well as parents to accomplish the project.

The role of the teacher is to help the students throughout the project, although the main responsibility of carrying out the project work lies with the students. The teacher should help the students in selecting an appropriate subject, formulating objectives of the project, checking students' progress regularly, suggest modification, etc. In the teaching of environmental education, this method can be best used. A number of environmental projects can be assigned to students in school situations, such as, plantation in school campus, visit to the places of pollution, trip to wild life sanctuary, agricultural practices in rural areas, disposal of houses, etc.

1.5.3 Problem Solving Method

This is another significant method used in Environmental Education. Environmental degradation is a problem which can be addressed through this method. It is essential to make people aware about this problem. This, however, is only possible when the students are encouraged to take active part in the programme. Problem solving method is a method that is used by the teacher to help the students solve problems by themselves. In this method, students learn by working on problems. This helps the students acqire knowledge by facing the problems themselves. In problem solving method, the students are expected to observe, understand, analyse, interpret and find solutions, and perform applications that lead to a holistic understanding of the concept. This method develops scientific process skills. This method helps in developing brainstorming approach to learning concepts. It is a process from practice to theory and not vice-versa. Students live in the real world and like to deal with concrete things where they can touch, feel, manipulate things, then the method is useful in igniting the process of science learning.

Problem solving is the act of defining a problem, determining the cause of the problem, identifying, prioritising and selecting alternatives for a solution and implementing a solution. Problem-solving method aims at presenting the knowledge to be learnt in the

form of a problem. It begins with a problematic situation and consists of continuous, meaningful and a well-integrated activity. The problems are test to the students in a natural way and it is ensured that the students are genuinely interested to solve them.

In this method, students are given some problems, which they need to solve by finding alternative solutions. The report is presented followed by the solutions. In environmental education, the students can be given some problems like water pollution, noise pollution, etc.; by finding alternative solutions to these problems, the students can gain an in-depth idea of such serious problems. Therefore, in environmental education teaching, problem solving is considered one of the most important methods.



CHECK YOUR PROGRESS

Q 7: Write three characteristics of problem-solving method.

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1.5.4 Observation Method

Another method widely used in environmental education is Observation Method. Though this method is the most commonly used method especially in studies relating to behavioural sciences but in environmental studies too, this method can be used. Environment implies our surroundings. When we observe our surrounding, it helps us to know better as well as to establish a harmony with the nature. This will help the young students realise the importance of environment and how we can save it from disasters. The information obtained under this method relates to what is currently happening which helps in finding out the factors of environmental degradation and assist in finding solutions to it.

It is rightly believed that direct experiences are more effective in the processes of learning and are retained for a longer period of

time. Therefore, a student should be allowed and asked to observe simple phenomena of the earth and the sky so that he/she acquires awareness about living and non-living components and develops awareness about his/her wellbeing in the context of social and natural environment. The child gradually begins to form positive feelings and attitudes of environmental protection. He may utilise these skills and attitudes in his actions as personal habits. Personal habits can contribute in improving the quality of the environment. Observation under the careful guidance of teacher, on the immediate natural surroundings, geographic facts and relationships prove invaluable for the teaching of environmental education.

1.5.5 Dramatisation

Drama, as we all know, is primarily a living experience. It helps the child to expand the boundaries of his life space, enables him to express his imagination, concepts and feelings about events and happenings. Acting is a wonderful way of learning. Dramatic teaching is integrated into many different types of curriculum especially in the lower level of education. It is a method which refers to a collection of teaching tools that include traditional drama techniques like improvisation, storytelling, role playing and games. Dramatisation technique lays emphasis on engaging students through interactive activities. There are many ways to use dramatisation teaching methods in the classroom. Teachers can use it to help students gain deeper insights into topic, building concepts and themes. Moreover, it is also used as a means to test student's knowledge. A dramatic performance unfolds with a plot. The enactment of a play illumines the responsibilities of democratic citizenship; provide children with an understanding of the problems of community living, and a realisation of the importance of participating in community activities. It can convey the concepts of good environment and the abuse of environment.

The role of a teacher is very significant in using dramatics as a method of teaching environmental education. He/she may ask the students to prepare scripts on environmental problems, prepare costumes, do the art work necessary for staging, plan a programme and send invitations and make all necessary arrangements. Thus, by engaging in a play, children explore in their own way, the activities and relationships of human living and acquire the much needed information and skills. Environment is a serious issue, and it is very essential to create awareness in children from grassroots level. Dramatisation technique helps the children realise its importance.

1.5.6 Field Trip

Environment itself means our surroundings. To know the environment and to maintain the ecology, we must explore our environment. Only bookish knowledge cannot help in developing a sense of belongingness towards the environment among the students. When they get the opportunity to explore nature they learn and develop the sense of attraction towards the same. The best way of giving them an opportunity to explore nature through education is Field trip, which is an essential part of school education. Generally a field trip is a trip made by students and teachers to see and study something naturally, culturally, socially or geographically significant. Environmental education can be taught effectively with the help of field trips or educational excursion method. This is the most practical method of teaching environmental education. This method provides real experiences through local observation, regional and national observation, geographical conditions observation, observation of historical places and remains, industrial area and natural vegetation which are the major components of the school subjects related to environment.

In the Observation method, awareness of the environment is provided through the perception of the students. It involves observation, imagination and ability of discovering the cause and

effect relationship among environmental components. Thus, it provides the learners a real exposure to environmental education. Field trips also develop the ability to appreciate natural environment and interpret one's own experiences and observations. For developing feelings of co-operation, group activities or team work, etc., field trip is one of the best methods of teaching environmental education. While organising field trips, certain points should be considered important to make teaching-learning effective. They are as follows:

- the specific objectives should be formulated
- to realise these objectives, ways and means should be identified
- a schedule containing date, time, number of students, duration and financial aspects should be finalised
- the means of transportation and time schedule should be finalised
- the visiting organisations should be contacted for the necessary arrangement

The success of field trips depends upon the selection of places and schedule of observation by the students. Every student should prepare a report about his/her observations. Every field trip should be followed by a group discussion to highlight the environmental components.



CHECK YOUR PROGRESS

Q 8: What are the things to be considered while planning a field trip?

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Besides the above mentioned methods, the teacher can organise lectures, debates, seminars and workshops on environmental issues. It is the teacher who can sensitise his/her

students for developing positive attitude towards environment, develop emotional commitment for improving the quality of environment which will ultimately motivate the citizens to work towards the solution of environmental problems



1.6 LET US SUM UP

- The dictionary meaning of environment is the surrounding or condition under which a plant or animal lives or operates.
- Environment as a whole consists of two basic elements- physical or natural, and man-made or cultural.
- Environmental education is that kind of education which provides sufficient knowledge and understanding about the problems of environment. It aims at generating widespread awareness of environmental problems.
- Environmental education is nothing but teaching people how to interact with the surrounding world so as to improve their own world. Thus, it is a medium and a process of education that covers people's relationship with their natural and man-made surroundings.
- Environmental education discusses the effects of population explosion, industrialisation, pollution, etc. on environment and identifies the imbalances of environment and tries to improve it in view of sustainable development. It involves both theoretical and practical aspects of environment to improve the imbalances and prevent deterioration and pollution.
- The scope of environmental education includes concept of environmental education, ecology and environment, educational and psychological environment and environmental management.
- Teaching of environmental education involves both practical (hands-on) and theoretical (understanding) aspects. A teacher can adopt different methods for imparting knowledge on environmental education

to the students. Some of the important methods are: Discussion method, Project method, Problem-solving method, Field trip, etc.



1.7 FURTHER READING

1) Akhatar, P. and others (2008). *Environment and Population Education*. Guwahati: Assam Book Depot.
2) Barua, J. (2009*). Paribesh Aru Janasankhya Siksha*. Guwahati: Chandra Prakash.
3) Bhattacharya, K., Bhattacharya, R & Sharma, S (2012). *Environmental Education*. Guwahati: Assam Book Depot.
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4) Saruna, A. B. (1986). *Environmental Education*. Agra: National Psychological Corporation.
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6) Shrivastva, K.K. (2004). *Environmental Education- Principles, Concepts and Management*. New Delhi: Kanishka Publishers & Distributors.
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1.8 ANSWERS TO CHECK YOUR PROGRESS

Ans to Q No 1: (i) New (ii) surrounding (iii) balance (iv) interdisciplinary.

Ans to Q No 2: Environmental education is that branch of knowledge which has been developed to be used as a powerful instrument to educate people, to maintain ecological balance with awareness, knowledge,

skills, attitudes and commitment, to improve the quality of environment.

Ans to Q No 3: Environmental education covers man's relationship with his natural and man-made surroundings. Secondly, it refers to the knowledge of physical, biological and cultural environment. Thirdly, it discusses the effects of population explosion, industrialisation and population. Fourthly, it explains the co-existence of both living and non-living organisations, and fifthly, it is an educational process that generate in learners positive value towards eco-equilibrium of pollution free environment.

Ans to Q No 4: (i) To help the students in acquiring knowledge of the environment and its associated problems.

(ii) To assist the students to understand and appreciate the laws of nature.

(iii) To generate in learners positive value towards eco-equilibrium of pollution free environment.

(iv) To provide opportunities for active participation in working for prevention and solution of environmental problems.

Ans to Q No 5: (i) concept of environmental education

(ii) concept of ecology and environmental pollution

(iii) concept of educational and psychological environment, and

(iv) concept of environmental management.

Ans to Q No 6: The interaction involved in discussion methods are- Teacher-Learner Interaction, Learner-Learner Interaction, Teacher-Material Interaction, and Learner-Material Interaction.

Ans to Q No 7: Three characteristics of problem solving method are—

1. Problem solving is the act of defining a problem, determining the cause of the problem, identifying, prioritising and selecting alternatives for a solution and implementing a solution.
2. Problem-solving method aims at presenting the knowledge to be learnt in the form of a problem.
3. It begins with a problematic situation and consists of continuous, meaningful, well-integrated activity.

Ans to Q No 8: The things to be considered while planning a field trip are-

- the specific objectives should be formulated.
- to realise these objectives, ways and means should be identified.
- a schedule containing date, time, number of students, duration and financial aspects should be finalised.
- the means of transportation and time schedule should be finalised.



1.9 POSSIBLE QUESTIONS

A) Short Questions (Answer each question in about 150 words)

Q 1: What is meant by environment? Explain briefly.

Q 2: What should be the role of education for sustaining the environment?

Q 3: Write the meaning of sustainable development?

Q 4: What is meant by environmental management?

Q 5: Describe the project method for teaching environmental education.

Q 6: Explain the role of teacher in problem solving method.

Q 7: Write a note on importance of field trip in environmental education.

B) Long Questions (Answer each question in about 300-500 words)

Q 1: Define 'Environmental Education' and write a note on its characteristics.

Q 2: hat are the aims and objectives of environmental education? Discuss the role of education in the development of environmental awareness.

Q 3: What is environmental education? Discuss its nature and scope.

Q 4: What is the need and importance of studying environmental education in the present-day context? Explain citing examples.

Q 5: Discuss elaborately any two methods of imparting environmental education.

Q 6: How does dramatisation help in eradicating environmental degradation? Write from your own point of view.

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