**NATURE OF SCIENCE AND UNIVERSE:**

**NATURE:**

The concept of nature is at the very core of science, considered as its principal and deepest link with human societies. The phenomena of the physical world collectively, including plants, animals, the landscape, and other features and products of the earth, as opposed to humans or human creations.

Anything in the real world that isn't created by humans (plants, birds, rivers, oceans, stars, etc.)

Nature, in the broadest sense, is the natural, physical, material world or universe. "Nature" can refer to the phenomena of the physical world, and also to life in general. The study of nature is a large, if not the only, part of science. Although humans are part of nature, human activity is often understood as a separate category from other natural phenomena.

**SCIENCE:**

Science is a Latin word that Driveved from scio that means “to know”.

Science is a law of nature. Science is defined as the study of natural processes through observation, explanation, scientific analysis, and theoretical understanding. The study of science and scientific knowledge is called a history of science.

Science means a  body of empirical, theoretical, and practical knowledge of the natural world (the world is a science). Science is a mechanism by which we try to understand how the natural and physical world works and how it came to be that way.

Science is concerned with understanding how nature and the physical world work. Science is a process by which we try to understand how the natural and physical world works and how it came to be that way. Science is mainly responsible for solving problems of the physical and natural world.

All people need to understand what science is, what it can and cannot do, and how it works. People need to be able to evaluate scientific information to make informed decisions about:

* Health care
* Environmental issues
* Technological advances
* Public health issues

**UNIVERSE:**

The Universe is everything we can touch, feel, sense, measure, or detect. It includes living things, planets, stars, galaxies, dust clouds, light, and even time. The Universe contains billions of galaxies, each containing millions or billions of stars. The space between the stars and galaxies is largely empty

**NATURE OF SCIENCE:**

The nature of science is to investigate through experiences and then to logically explain the data gained through those experiences.

The nature of science refers to the way scientific knowledge is developed.

**NATURE OF UNIVERSE:**

* The Unity of the universe. The universe as a whole is an interacting community of beings inseparably related in space and time. From its beginning, the universe has had a psychic-spiritual dimension. The universe is a communion of subjects, not a collection of objects.
* Modes of Expression. The universe expresses itself at all levels through communion (intimacy, interrelatedness), differentiation (diversity), and subjectivity (interiority, self-organization).
* Cosmogenesis. The universe is a creative, emergent, evolutionary reality that has developed and is still developing through a sequence of irreversible transformations.

**Earth and Its Current Dilemma :**

* Earth. Earth is a one-time endowment in the unfolding story of the universe.
* The Current Dilemma. The effects of human activity on Earth have become so pervasive and invasive that the survival and health of the Earth community now rest on decisions being made, and actions being taken, by humans.
* Transition to the Ecozoic Era. There is a need to move from the current technologic period where Earth is seen as a resource for the benefit of humans, to an Ecozoic Era where the well-being of the entire Earth community is the primary concern

**Three Key Building Blocks :**

* The New Story. The scientific story of the evolutionary development of the universe from its primordial beginnings to the emergence of the Ecozoic Era invites new cosmological reflection on meaning and value and the role and place of humans in the universe process.
* Bioregionalism. Bioregionalism, care for Earth in its relatively self-sustaining geo-biological divisions, reorients human activity in developing sustainable modes of living, building inclusive human community, caring for the rights of other species, and preserving the health of the Earth on which all life depends.
* Ecological Spirituality. Ecological spirituality, presence to the primal mystery and value of nature and Earth as a single sacred community, provides a basis for revitalizing religious experience and healing the human psyche.

**Special Contributors to the Ecozoic Era :**

* Women, Indigenous People, Science, and Humanistic and Religious Traditions. The wisdom of women, indigenous people, science, and classical humanistic and religious traditions will have an important role to play in redefining concepts of value, meaning, and fulfillment, and in setting norms of conduct for the Ecozoic Era.
* The Earth Charter. The Earth Charter provides a comprehensive set of values and principles for the realization of the Ecozoic Era.

**The Great Work :**

* The Great Work. The epic task, or “Great Work,” of our time is to bring into being the Ecozoic Era. It is a task in which everyone is involved and from which no one is exempt, and it will require a change in every aspect of human society. On it the fate of the Earth depends, and in it lies the hope of the future