# CHAPTER 10

**Q1. Explain why it is essential to study about nature.**In order to ensure the continuity of happiness (harmony) we need to understand the harmony not only within us, but also at all levels of our being – the individual, the family, the society and nature/existence. Once we understand this harmony, we can live in harmony at all these four levels.

Nature is the collection of all the units – the air, soil, water, plants, trees, animals, birds, other human beings and even things that are a little distant from us like the sun, the moon, the other planets, etc. When we look around, we see all kinds of units. For example, in a classroom there may be units like chairs, tables, copies, pens, blackboard, projector, laptop, etc. Outside the classroom, in a garden or forest, we may see other kinds of units like trees, shrubs, butterflies, flies, birds, animals, pond, stones, etc. If we look further, we see the sun, moon, stars, the Earth itself – all of these are units.  
If nature and existence is in the form of interconnectedness and mutual fulfilment, only then it will be possible for us to live in harmony at all levels of human living. On the other hand, if nature is by way of opposition, by struggle, we are bound to face opposition and struggle.

**Q2. List the four orders in nature with examples of units in each order. What is the basis of this classification?**Nature is the collection of all the units – the air, soil, water, plants, trees, animals, birds, other human beings and even things that are a little distant from us like the sun, the moon, the other planets, etc.  
Although the units are innumerable, they can all be classified into just four groups or four orders:  
1. Physical order – this includes units like air, water, metal and so on.   
2. Bio order – this includes grass, plants, trees, etc.   
3. Animal order – this includes animals and birds.   
4. Human order – this includes human being.  
It is relevant to classify the units based on their common intrinsic properties. These innumerable units can all be classified into just four definite orders. This is a very important point, because if we can understand the basic properties of each of these four orders, we can understand the properties of all the units in nature. Similarly, if we can understand the interaction between few units of each order, we can understand the interconnectedness amongst all the units.

**Q3.** **Units in nature, other than human beings without right understanding, are interconnected in a relationship of mutual fulfilment. Examine this statement with a few examples.**The units of the physical order, like soil, water and air provide the basic materials for plants to develop, survive and grow. Wherever the soil is fertile and there is sufficient water available, seeds germinate and plants grow. In this way, the units of the physical order nourish the units of the bio order. Similarly, when the leaves, flowers and fruits of plants fall to the ground and degenerate, they get converted back into soil. These plant residues are manure for the soil, making it more fertile. Plants also help in maintaining the level of oxygen in the air, participating in the water cycle on the Earth and so on. In this way, the units of the bio order fulfil units of the physical order. We can also see that the soil gets converted into plants and the plants get converted back into soil.   
Animals and birds (units of the animal order) depend on plants (units of the bio order) for their food. For example, a cow (a unit of animal order) eats grass (unit of bio order) as its food. In turn, the cow is also fulfilling for plants. Animals and birds help to spread the seeds of plants from one place to the other. They protect plants from harmful insects and pests. Similarly, the units of physical order, like air and water, are essential for animals to survive. In turn, animals enrich the soil – their dung and their dead bodies act as very good manure which makes the soil fertile.  
In a forest we can observe that these three orders exist together – soil, ponds, rivers, air, rocks and metals (units of the physical order), varieties of lush green shrubs, plants and trees (units of the bio order) as well as different types of healthy animals and birds (units of the animal order). They are together, they are interdependent and interconnected. They are related to each other in a mutually fulfilling manner – they enrich and fulfil each other.

**Q4. Why is the human order, by and large, not mutually fulfilling for any of the four orders? Is your natural acceptance to be fulfilling for all four orders? What does human being need to do to be mutually fulfilling for each of the four orders?**If we place the human being in the picture, we can see that all these three orders are enriching for the human being. The physical order, the bio order and the animal order, all enrich the human order.   
The air that we breathe, the water that we drink, the house in which we live – all of these are units of the physical order which are required for the survival of the Body.  
We get a variety of farm produce like fruits, vegetables, grains, flowers, etc. from shrubs, plants and trees which are units of the bio order. The bulk of the food that nourishes our bodies is obtained from the bio order.  
We get milk, wool, etc. from animals. Since the early days, bullocks are of help to cultivate land; while horses and donkeys carry luggage and transport materials from one place to the other. This all is obtained from the animal order.  
But the human being is not only unfulfilling for the other three orders, rather it is dominating and exploiting them, to the extent of global warming and climate change.  
Some of the indicators of human activity that is disturbing the harmony in nature are:   
• Atmospheric has increased tremendously in the last hundred years.   
• The drying up of rivers, lakes and underground aquafers.   
• Rapid melting of polar and glacial ice and potential of rising sea levels.   
• Depletion of forest cover.   
• Farmland being taken up for human habitation / industrialisation.   
• Rapid species loss and sharp reduction in bio-diversity.  
What is naturally acceptable to me is to enrich all the four orders. When we have the feeling of exploitation of any of the four orders, this feeling itself is not naturally acceptable to us and therefore, it leads to a state of contradiction within, thus a state of unhappiness within – whenever there is a feeling, a thought of exploitation, there is unhappiness. In spite of obtaining huge amounts of physical facility, unhappiness persists, and it keeps nagging the human being that something is wrong. If we become aware of it, the unhappiness is just an indicator of disharmony and can point towards need to understand and then to live in harmony (happiness).

**Q5. Processes in nature are cyclic and mutually enriching. Explain this statement with three examples.**There is self-regulation in nature. It does not need to be regulated by human being to be in harmony. With right understanding, human being will also be self-organised, in harmony within and participate in the harmony in the larger order.   
Even now, we can observe that water evaporates from the sea, clouds form, they are dispersed far and wide over the surface of the Earth, there is rain, streams, over-ground rivers, under-ground aquafers… all participating in a water cycle. Year after year definite seasons can be observed, the distribution of water can be observed. We can see this cyclic and mutually enriching process is self-regulated by way of nature.  
In a forest, the proportion of soil, plants and animals of various species is self-regulated. It never happens that the lions eat up all the deer or the deer eat up all the grasses or that the plants grow to the extent that there is no space for deer or that there is lack of soil for new plants and so on.  
The temperature of the human body remains at around 37 degrees centigrade (98.4 degrees Fahrenheit) even though people may be living with ambient temperatures varying widely, sometimes as much as +45 degrees centigrade to -10 degrees centigrade. It is by way of the self-regulation in nature.

**Q6.** **The four orders in nature have been classified on the basis of their distinct activity, innateness, natural characteristics and inheritance. Explain with one example for each order.**Activity:  
Each order is characterised by certain activities. The units of the physical order are characterised by the activity of formation and deformation. For example, if a piece of iron is left exposed to the air, you may notice that after a period of time it gets rusted. In the bio order, in addition to formation and deformation, the activity of respiration is also taking place. The animal order is a co-existence of the Self and the Body. When we look at the activities of the Body, we can observe the activities of respiration along with formation and deformation, just like the activities in a plant (a unit of the bio order). Now let us talk about the human being – a unit of the Human order. Human being is the co-existence of Self and Body. The human body also is a unit of the bio order; therefore, it has the activities of formation, deformation and respiration. Many cells are being formed every day in our body.  
Innateness:  
The innateness of the physical order is ‘existence’. For example, a piece of iron is a unit of the physical order. It remains as a piece of iron unless it gets converted into something else by way of formation and deformation. Now let us see the innateness of units of the bio order. A plant has the innateness (self-organisation) of existence as well as growth. Thus, a plant exists as a plant and it also grows. When we look at the animal order, we can observe the Self and the Body separately because a unit of the animal order is the co-existence of both Self and Body. The animal body has the innateness of existence and growth just like plants and trees. Now, coming to the human order, the human being is also a co-existence of Self and Body. At the level of the Body (a unit of the bio order), the innateness is existence and growth. The human body takes birth, grows, passes through various stages from childhood, adolescence, adulthood, becomes old and dies.  
Natural Characteristics:  
The natural characteristic of the physical order is composition-decomposition. Both composition and decomposition involve the activity of formation and deformation. In the rusting of iron, iron atoms are deforming in the presence of air and moisture and forming molecules of ferric oxide. Iron is decomposing and ferric oxide is being composed. The bio order participates with the bio order in terms of nurturing or worsening the other. It is easy to see that the apple fruit (a unit of the bio order) nurtures the human body (a unit of the bio order). When it comes to the animal order, we have to see the natural characteristic of both, the Body of the animal as well as the Self of the animal. The Body is a unit of the bio order, so it participates like it is described above – it is in terms of nurturing or worsening other units of bio order. In the human order, the human being is the co-existence of Self and Body. The Body belongs to the bio order, and hence has the natural characteristic of the bio order.

**Q7.** **With the clarity of the natural characteristic, how would you interact with units of each of the four orders?**Natural characteristic of a unit refers to its natural participation in the larger order. Larger order means a larger unit of which this unit is a part of. Larger order for the cells of your stomach may be the digestive system. The larger order for the digestive system would be the human body. The larger order for the human body may be the human being, the family and so on. Units exhibit their natural characteristic only when they are self-organised, in accordance with their innateness, i.e. when they are in harmony within.  
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**Q8.** **Give some examples of units that only have the activity of recognising and fulfilling. Also give examples of units that have the activity of assuming, recognising and fulfilling. What is the basic difference between these two sets of units?**

**Q9.** **Describe the abundance in the nature. How is human order dependent on the other three orders?**Nature is organized in such a manner that the physical facility required for any order is available in abundance. Whatever is required for any order to exist is already available in abundance for that order. For example, the bio order is dependent on the physical order. A plant (bio order) requires soil, water, air, etc. (physical order) to grow. We can observe that first there is soil, moss is formed, grass appears followed by small plants, shrubs and then trees. We can easily see that more than enough soil, water and air are available for plants to exist and to thrive. The quantity of soil is far more than that of plants and trees. We can see that the quantity of the physical order is far more than the quantity of the bio order. That is how nature is organized.  
Human beings require all these three orders to survive, and the quantity of all these three orders together is far more than the quantity of human beings. By its very being, nature is organized in a manner where quantity of all four orders is in a sequence: Physical order >> Bio order >> Animal order >> Human order. Therefore, the requirement of any order is already available in abundance.