

we can design our production systems through application of science and technology in such a way that this fulfilment is better ensured, rather than disturbing it.

UNIT 4

Q 1. Define harmony in nature. OR Explain the harmony in nature.

ANS. The aggregate of all the mutually interacting units – big or small, sentient or insentient together can be called nature. These units are infinite in number and we could easily observe that there exists a dynamic balance, self regulation among all these units. This self regulation is harmony or balance in nature. The law of nature has a unique cause and effect system which must be understood in order to be in harmony with the natural law of things.

Natural harmony is necessary for the following reasons:

1. Natural harmony is necessary to solve the problem of global warming and depletion of non-renewable natural resource can be avoided.
2. Natural harmony with trees cure all problems like – reduction of wind velocity, energy savings, doing companion planting, development of an eco-subsystem in terms of establishing a forest garden, reduction of building heat.
3. It is possible to achieve natural harmony in the establishment, maintenance and management of educational institution like schools, colleges and universities.
4. One can understand the depths of harmony and alignment in natural by contemplating and reflecting upon the natural order. It is possible to unravel the mystery of the natural synthesis in the midst of ongoing chaos at the material plane.

Q 2. What do you mean by co-existence?

ANS. Co-existence in nature means there is a relationship and complementarity among all the entities in nature including human beings. Co-existence is a state in which two or more groups are living together while respecting their differences and resolving their conflicts non-violently. Co-existence has been defined in numerous ways:

1. To exist together (in time or space) and to exist in mutual tolerance.
2. To learn to recognize and live with difference.
3. To have a relationship between persons or groups in which none of the parties is trying to destroy the other.
4. To exist together (in time or place) and to exist in mutual tolerance.

The world is full of Diversity – there are different nations, cultures, religions, communities, languages, and beliefs. The beauty of existence can only be maximized if everything in this world is in harmony. Peaceful, symbiotic co-existence is the key to harmony in the world.

Q 3. Define the terms Gathansheel, Gathanpurna, Kriyapurnata and Acharanpurnata.

Explain ‘Existence is Gathansheel and Gathanpurna and also there is Kriyapurnata and Acharanpurnata in existence’.

ANS.

Gathansheel: The material units are transformable, and their composition keeps on changing, hence these are gathansheel.

Gathanpurna: The other category of units the sentient ‘I’, do not transform and are complete in composition, hence gathanpurna.

Kriyapurnata: Completion of right understanding in human being is called **kriyapurnata**

Acharanpurnata: Ability to live with complete understanding is called **acharanpurnata**.

The **material units are transformable, and their composition keeps on changing**, hence these are **gathansheel**. The other category of units, **the sentient 'I', do not transform and are complete in composition**, hence **gathanpurna**.

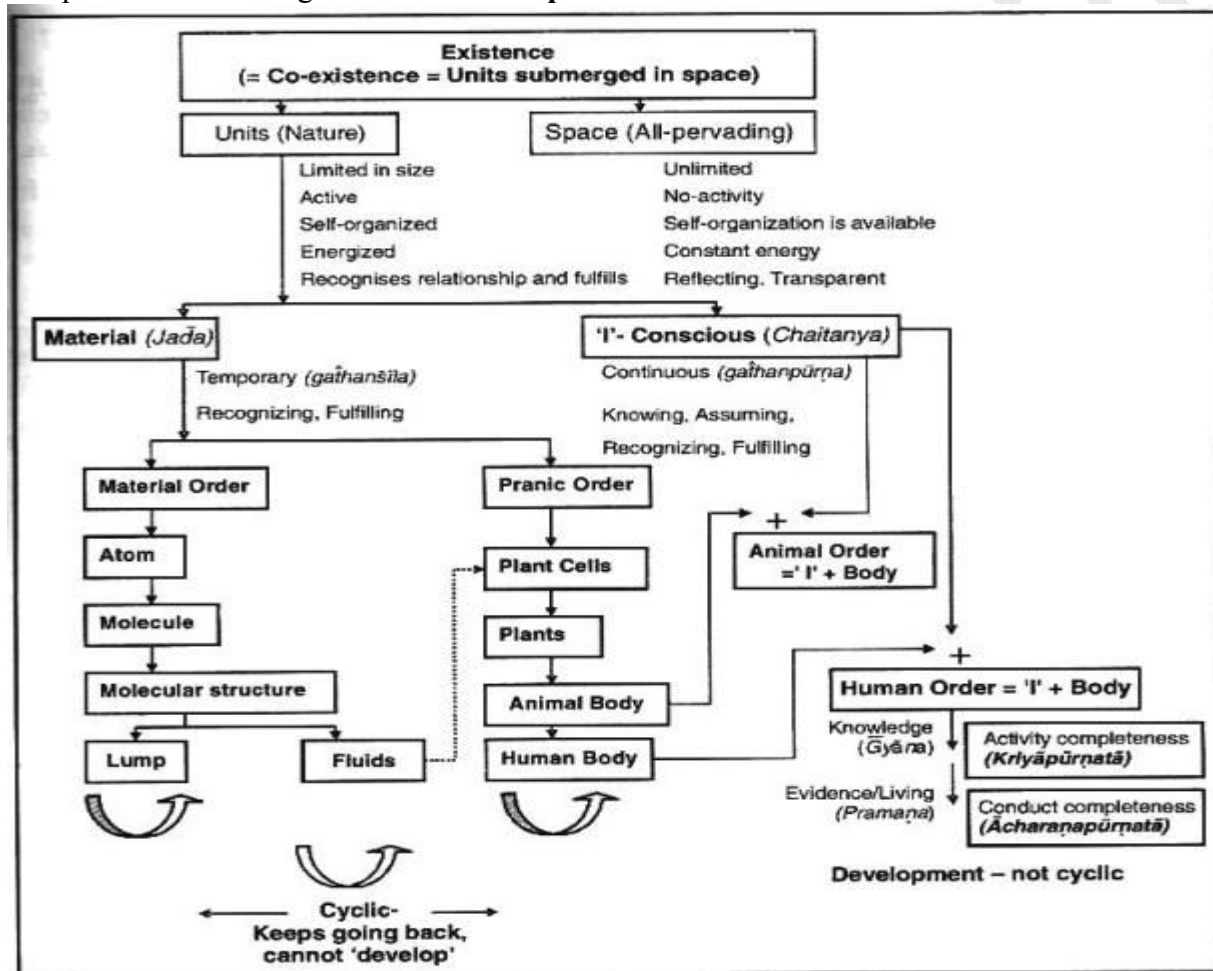
The material units are changeful (with activities of recognizing and fulfillment only) while the other kind of units are continuous (with activities of knowing, assuming, recognizing and fulfillment).

The material units are available in two orders – material order and pranic order. In the material order, an atom combines with another atom to form a molecule, a molecule similarly forms a molecular structure. Molecular structures are found in two forms: lumps and fluids.

Fluids give nutrition to pranic order. In pranic order, the smallest units are plant cells which combine with other cells to form plants, animal bodies and human bodies.

The co-existence of 'I' with the animal body becomes the animal order, and the co-existence of 'I' with the human body becomes the human order.

Completion of right understanding in human being is called **kriyapurnata** and ability to live with complete understanding is called **acharanpurnata**.



Q 4. What is sanskaar? Explain its effects or the conformance of the human order.

ANS. Sanskaar means the values that a person gets at the time of his upbringing. We can see that we humans are not according to our lineage or race, as in animals. We may pick up something from our parents as we grow up, but we are usually very different in many ways from them. We humans are according to our *imagination*; according to our desires, thoughts and selection in 'I'. the desires, thoughts and selections we have in 'I' can come from anywhere. It can come from past memories, it can come from our parents, the environment, the media, anywhere. In the case of humans, we can say 'as the education, so the human'. We are according to our desires, thoughts and selections. Together, we call these 'sanskara'. Hence, we say that *a human being conforms to his or her sanskar or has 'sanskhaar conformance'*.

Order	Things	Conformance
Human order	Human beings	Right values / sanskara conformance

Q 5. What exactly is implied by the term- ‘nature’? Explain. OR Define nature.

ANS. All the physical objects that are in solid, liquid or gas state either living or non living, collectively termed as nature. In other words, the aggregate of all the mutually interacting units – big or small, sentient or insentient together can be called nature. These units are infinite in number and we could easily observe that there exists a dynamic balance, self regulation among all these units. There are four orders of nature:

- Material order
- Animal order
- Pranic order
- Human order

Q 6. "As the seed, thus the plant". Explain.

ANS. As the seed, thus the plant, it means in plant order there is a seed conformance. The plant grown from a seed will have the same qualities that were present in the seed. A neem seed will always sprout a neem plant. All of us know this. Its fruits, its leaves, the taste of the leaves, the colour of the leaves, all this information, this basic information of every neem plant is stored in the seed. Thus, we say the plant is always as the seed, or we can say, ‘as the seed, thus the plant’. Hence, we say that **a plant conforms to the seed, or has ‘seed conformance’**. This ‘seed conformance’ method is the mechanism by means of which the continuity of a plant species is maintained in nature/existence.

Q 7. What do you mean by ‘innateness’? What is the innateness in the four orders? (MTU 2011 – 12)

What do you understand by the term ‘innateness’ (dhaarna) in nature? Explain the innateness of material and animal order in nature. (MTU 2011 – 12 even)

ANS. Innateness (dharana) : Innateness means qualities which are innate to the unit. Each unit in existence exhibits an innateness, an intrinsic quality that cannot be separated from it. We refer this principle as innateness also called dharna of that unit. This is intrinsic to the unit.

Material order → When we burn coal and it has finished burning and only some ash is left and smokes have gone out, it is not that the basic material, the fundamental particles in coal, have ‘ceased to exist’ or ‘disappeared’ from existence. They may not be visible to the eye at that moment, but they continue to exist, they still are in the form of other matter or in the form of gases, etc. This is there with all material units. We cannot destroy matter, we can only convert it from one form to the other. Thus, ‘to exist’, or ‘existence’ is intrinsic to all material, it is innate to it. We cannot separate the ‘existence’ of a thing from the thing itself.

Plant/bio order → Because the pranic order is a development of the material order, it also has the innateness of ‘existence’. In addition, it also exhibits the ‘growth’. This principle of ‘growth’ cannot be separated from any units of this order. If it is of pranic order, it will grow. For example, if you have a plant, you cannot stop it from growing. It will continue to respire and keep changing in this way. The only way you can stop it from growing is by cutting it, but when you do that, it ceases to belong to the pranic order, instead decays and then belongs to the material order. So, as long as you have a plant, it will grow.

Animal order → The animal body is a development of the pranic order and therefore this order inherits the innateness of the previous order namely ‘existence’ and ‘growth’. This is at the level of the body, which is physico-chemical in nature. In addition, all units in this order have the ‘will to live’ in ‘I’. Indeed no unit in this order can be separated from this ‘will to live’. It is intrinsic to every unit in this order.

Human (knowledge) order → When we look at the human being, we find that ‘existence’ and ‘growth’ are fundamentally present in the body, just as in the animal body. At the level of ‘I’ however, in addition to the ‘will to live’, a human being’s innateness is the ‘will to live with happiness’.

Order	Things	Innate-ness
Material order	Soil, water, metals, etc.	Existence
Pranic order	Plants and trees	Existence + growth
Animal order	Animals and birds	(Existence + growth) in body + will to live in ‘I’
Human order	Human beings	(Existence + growth) in body + will to live with happiness in ‘I’

Q 8. What is the svabhava (natural characteristic) of a unit? Elaborate on the svabhava of a human order.

How does the natural characteristics (svabhava) of material order helped man to lead a better life?

Explain the svabhav of human order and how it helps in living with harmony.

Explain the natural characteristics of the material and pranic orders. Give examples. (UPTU 2011–12)

What is the natural characteristics (swabhava) of human order? Explain. (MTU 2011 – 12)

ANS. When we look at the different orders in nature, we find that each order has a certain value. In a fundamental way, this is the ‘usefulness’ or ‘participation’ of the order in existence. This ‘value’ or ‘participation’ is also referred to as “natural characteristic”. The ‘characteristic’ the order displays in ‘natural to itself’. This is the same as the value of the entity, or its participation also called ‘svabhava’. The svabhava of material order is ‘composition/decomposition’, of Plant/bio order is ‘composition/decomposition’ and to nurture or worsen other pranic units. The svabhav of animal order and human order can be understood in two aspects: body and self. The svabhav of animal order is Composition / decomposition, nurture / worsen in body and non cruelty, cruelty in ‘I’. The svabhav of human order is Composition / decomposition, nurture / worsen in body and perseverance, bravery, generosity in ‘I’.

Similar as to the case in animals, the human body also belongs to the plant/ bio order and hence has the same svabhava or value/natural characteristic as the pranic order. **It either nurtures or worsens other pranic units.** As in the example above, when I digest the vegetable, I absorb the plant and it worsens, while my body is nurtured. **The svabhava/ value of the self (‘I’) in human beings is perseverance (dhirata), bravery (virata) and generosity (udarata).**

- **Perseverance (dhirata):** Being assured that the all encompassing solution is to understand and live in harmony at all levels of existence, living with this commitment without any perturbation.
- **Bravery (virata):** Being assured that the all encompassing solution is to understand and live in harmony at all levels and *I am ready to help the other to have the right understanding.* This is the commitment to help the other have the right understanding of the harmony and living at all levels of existence.
- **Generosity (udarata):** Being assured that the all encompassing solution is to understand and live in harmony at all the four levels and *I am ready to invest myself, my body and wealth to help the other have the right understanding.*

Human beings are not living as per this natural characteristic; even though we have a svabhava, we are not living according to this. This is basic reason for the contradiction and conflict that we see in human being. This is what leads to a state of unhappiness. Only when we live according to our basic human characteristics as mentioned above, we have definite character, otherwise, it is not definite, it is uncertain, unlike other three orders as discussed above.

Order	Things	Natural Characteristic
Material order	Soil, water, metals, etc.	Composition / decomposition
Pranic order	Plants and trees	Composition / decomposition + nurture / worsen
Animal order	Animals and birds	(Composition / decomposition, nurture / worsen) in body + (non cruelty, cruelty) in ‘I’
Human order	Human beings	(Composition / decomposition, nurture / worsen) in body + (perseverance, bravery, generosity) in ‘I’

Q 9. Define harmony in nature and why is it important. Explain with examples.

ANS. If one is to enjoy the benefit of life to the fullest, it is necessary to develop and maintain harmony. The law of nature has a unique cause and effect system which must be understood in order to be in harmony with the natural law of things. Natural harmony is necessary for the following reasons:

1. To solve the problem of global warming and depletion of non-renewable natural resource can be avoided.
2. With trees cure all problems like – reduction of wind velocity, energy savings, doing companion planting, development of an eco-subsystem in terms of establishing a forest garden, reduction of building heat.
3. One can understand the depths of harmony and alignment in natural by contemplating and reflecting upon the natural order. It is possible to unravel the mystery of the natural synthesis in the midst of ongoing chaos at the material plane.

First of all we have to understand the importance of nature for our existence then we have to understand our responsibility towards nature. When we take from nature, we should also plan to give back to it. This is possible. Renewable energy sources, such as solar power and wind, are perhaps the best methods to begin moving in this direction. There can be harmony only if each subsystem of the entire creation can strike a mutually satisfying relationship with every subsystem without disturbing the other's peaceful existence and without hindering its own growth.

Q 10. Define harmony in nature and how will you create it. Explain with examples.

ANS. Combination of all that is in solid, liquid or gas state is called as nature. In other words, the aggregate of all the mutually interacting units – big or small, sentient or insentient together can be called nature. These units are infinite in number and we could easily observe that there exists a dynamic balance, self regulation among all these units.

The law of nature has a unique cause and effect system which must be understood in order to be in harmony with the natural law of things. Natural harmony is necessary for the following reasons:

1. Natural harmony is necessary to solve the problem of global warming and depletion of non-renewable natural resource can be avoided.
2. Natural harmony with trees cure all problems like – reduction of wind velocity, energy savings, doing companion planting, development of an eco-subsystem in terms of establishing a forest garden, reduction of building heat.
3. It is possible to achieve natural harmony in the establishment, maintenance and management of educational institution like schools, colleges and universities.
4. One can understand the depths of harmony and alignment in natural by contemplating and reflecting upon the natural order. It is possible to unravel the mystery of the natural synthesis in the midst of ongoing chaos at the material plane.
5. To create harmony in nature, first of all we have to work in the direction of development of mankind from animal consciousness to human consciousness. And this entails working for the right understanding.

Q 11. What are the four orders of nature? Briefly explain them.

ANS. All the physical objects that are in solid, liquid or gas state either living or non living, collectively termed as nature. In other words, the aggregate of all the mutually interacting units – big or small, sentient or insentient together can be called nature. These units are infinite in number and we could easily observe that there exists a dynamic balance, self regulation among all these units. There are four orders of nature:

Material order → The big land mass of the continents, gigantic water bodies like ocean and seas, mountains and rivers, the atmosphere above, the heaps of metals and mineral below, the dense gases and fossil fuels deep below the surface of the earth – all fall into the material order or padartha avastha. In fact, if we look around beyond the earth, the material order is visible even in the form of stars, planets, moons and several astronomical bodies.

Pranic order → Our land mass is covered with grass and small shrubs and they form the lining on the entire soil. Shrubs, plants and trees form huge forest along with the flora in the ocean. All of this is the plant/bio order or prana avastha and it is the next big order on our planet. (The material order is far greater in quantity compared to the plant/bio order)

Animal order → Animals and birds form the third largest order and we call them the animal order or jiva avastha. Here again, we see that the plant/bio order is far greater in quantity than the animal order.

Human order → Human are the smallest order and they are referred to as human order or gyana avastha. Animals are far greater in quantity as compared to the human order.

Q 12. Explain the differences and similarities between animal order and human order. What is the relation between the two orders? (UPTU 2009 - 10)

Present the difference and similarity between a human being and an animal. Give examples to support your answer. (MTU 2010 – 11)

ANS. The two orders can be distinctly recognised in terms of their characteristics, participation with other units in similar order, activities, pattern of inheritance, etc. We can see this in the following diagram:

Order	Things	Activity	Innate-ness	Natural Characteristic	Basic Activity	Conformance
Animal order	Animals and birds	(Composition / decomposition, respiration) in body + selection in 'I'	(Existence + growth) in body + will to live in 'I'	(Composition / decomposition, nurture / worsen) in body + (non cruelty, cruelty) in 'I'	(Recognising, fulfillment) in body + (assuming, recognising, fulfillment) in 'I'	Breed conformance
Human order	Human beings	(Composition / decomposition, respiration) in body + (selection, thought, desire) in 'I'	(Existence + growth) in body + will to live with happiness in 'I'	(Composition / decomposition, nurture / worsen) in body + (perseverance, bravery, generosity) in 'I'	Recognising, fulfillment in body + (knowing, assuming, recognising, fulfillment) in 'I'	Right values / sanskara conformance

Things (Vastu)

Animal order: The animal order is made of various kinds of animals and birds. These entities display both a body (physico-chemical activity) as well as a conscious activity (self or 'I'). The animal order thus is the coexistence of the animal body (pranic order) and the self (or 'I' = consciousness).

Human (knowledge) order: The human order is constituted of all the human beings. Each human being is co-existence of the self ('I', conscious entity = consciousness) and the body (pranic order).

Activity (Kriya)

Animal Order: Body In Animals – Physico-Chemical Activities: The body displays respiration, or breathing, or pulsating also there is composition/ decomposition in the body.

'I' In Animals – Conscious Activities: The activities in 'I' are fundamentally different from those in the body. **'I' is a unit that has the ability or capacity of assuming.** Animals make assumptions. If we have a dog and some strangers come into the house, the dog may start barking at him. If this person stays at our house, the dog may stop barking at him, but will continue to bark at other strangers. What has happened here is that the dog's 'assumption' about this person has changed, due to which; the way in which it responds to the person has changed. We call this assuming.

Human Order: The activities in human body are similar to that in the animal body, i.e. composition/ decomposition and respiration. When it comes to consciousness or 'I', however, the human displays more than just an ability to 'select' or make choices as animals do. In human beings, 'I' has the activities of desiring, thinking, and selecting/tasting, with a possibility or need for understanding and realization. Only humans have this need to know and that is why it is called gyana avastha – the knowledge order.

Innateness (dharana)

Animal Order: The animal body is a development of the pranic order and therefore this order inherits the innateness of **'existence' and 'growth'**. This is at the level of the body, which is physico-chemical in nature. In addition, **all units in this order have the 'will to live' in 'I'**. Indeed no unit in this order can be separated from this 'will to live'. It is intrinsic to every unit in this order.

Human Order: When we look at the human being, we find that **'existence' and 'growth' are fundamentally present in the body**, just as in the animal body. **At the level of 'I' however, in addition to the 'will to live', a human being's innateness is the 'will to live with happiness'.**

Natural Characteristics (Svabhava)

Animal Order: The body of the animal belongs to the plant/bio or pranic order, and hence has the same 'usefulness' or 'value' as the pranic order. Thus **'nurture/worsen' is the svabhava of the animal body. The svabhava of the self ('I') of the animal order is non-cruelty (akrurata) and cruelty (krurata).** Cruelty (krurata) means the feeling that it can fulfil its needs through violence and forcefulness. For ex., cows may largely be living with a feeling of non-cruelty (akrurata); while animals like tigers and lions may exhibit cruelty (krurata).

Human Order: Similar as to the case in animals, the human body also belongs to the plant/ bio order and hence has the same svabhava or value/natural characteristic as the pranic order. **It either nurtures or worsens other pranic units.** As in the example above, when I digest the vegetable, I absorb the plant and it worsens, while my body is nurtured. **The svabhava/ value of the self ('I') in human beings is perseverance (dhirata), bravery (virata) and generosity (udarata).**

1. Perseverance (dhirata): Being assured that the all encompassing solution is to understand and live in harmony at all levels of existence.
2. Bravery (virata): I am ready to help the other to have the right understanding.
3. Generosity (udarata): I am ready to invest myself, my body and wealth to help the other have the right understanding.

Basic Activity:

Animal Order: there is only recognising, and fulfilment in body, and in self (I) there is the basic activity of assuming, recognising, fulfilment.

Human Order: human displays the same basic activity as that of animal body i.e. Recognising, fulfilment, but in self (I) human have one more activity i.e. knowing,

Conformance (Anu-Sangita)

Animal order: Animals conform to their lineage. How animals are, their behaviour is according to their lineage they belong to, the lineage they come from. *Hence, we say that an animal conforms to its breed, or has 'breed conformance'.* This breed conformance method is the mechanism by means of which the continuity of an animal species is maintained in nature/existence.

Human (knowledge) order: We humans are not according to our lineage or race, as in animals. We humans are according to our *imagination*; according to our desires, thoughts and selection in 'I'. The desires, thoughts and selections we have in 'I' can come from past memories, our parents, the environment, and the media, anywhere. In the case of humans, we can say 'as the education, so the human'. Together, we call these '*sanskara*'. *Hence, we say that a human being conforms to his or her sanskar or has 'sanskaar conformance'.*

Q13. Explain the difference and similarities between pranic order and animal order. What is the relation between the two orders?

ANS.

Order	Things	Activity	Innate-ness	Natural Characteristic	Basic Activity	Conformance
Pranic order	Plants and trees	Composition / decomposition + respiration	Existence + growth	Composition / decomposition + nurture / worsen	Recognising, fulfilment	Seed conformance
Animal order	Animals and birds	(Composition / decomposition, respiration) in body + selection in 'I'	(Existence + growth) in body + will to live in 'I'	(Composition / decomposition, nurture / worsen) in body + (non cruelty, cruelty) in 'I'	(Recognising, fulfilment) in body + (assuming, recognising, fulfilment) in 'I'	Breed conformance

Q 14. What are the four orders in nature? Describe their activities and natural characteristics?

What do you understand by 'activity'? Write down the activity of the four orders in nature. (UPTU 2011 – 12)

Distinguish between the activities of different orders of nature giving an example of each. (MTU 2011 – 12)

ANS. Combination of all that is in solid, liquid or gas state, or the aggregate of all the mutually interacting units – big or small, sentient or insentient together can be called nature. We can categorize all these units into four distinct orders.

- Material order
- Animal order
- Pranic order
- Human order

The four orders can be distinctly recognised in terms of their natural characteristics and activities.

Order	Things	Activity	Natural Characteristic
Material order	Soil, water, metals, etc.	Composition / decomposition	Composition / decomposition
Pranic order	Plants and trees	Composition / decomposition + respiration	Composition / decomposition + nurture / worsen
Animal order	Animals and birds	(Composition / decomposition, respiration) in body + selection in 'I'	(Composition / decomposition, nurture / worsen) in body + (non cruelty, cruelty) in 'I'
Human order	Human beings	(Composition / decomposition, respiration) in body + (selection, thought, desire) in 'I'	(Composition / decomposition, nurture / worsen) in body + (perceverance, bravery, generosity) in 'I'

Q 15. How will you show interconnectedness and mutual fulfilment in four order of nature with examples.

“Other than human order, the three orders are mutually fulfilling to each other”. Explain with examples.

Material, pranic and animal order are fulfilling human order but human are not fulfilling them.

There is lack of mutual fulfilment from human order. How and why is it so?

Discuss the human interrelationship with nature.

What are the orders of nature? How are all four orders interconnected?

How are we disturbing the balance in nature?

There are four orders in nature. How does each order participate in the harmony in the nature?

Give few examples. (UPTU 2010 – 11)

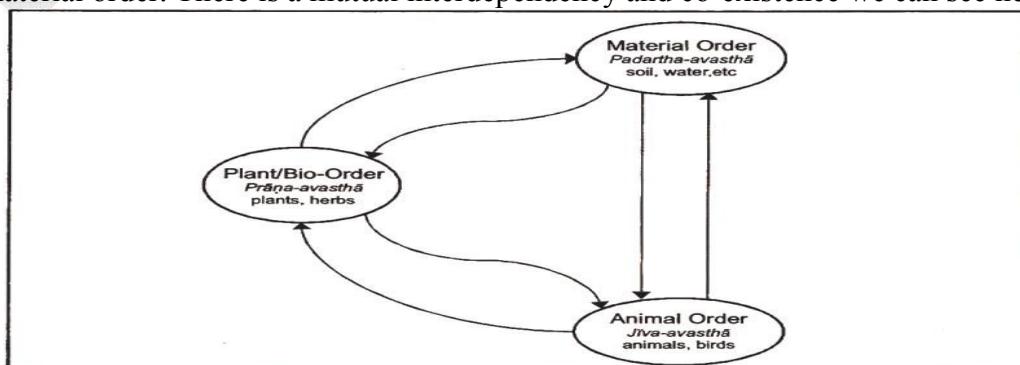
What are the four orders in nature? How can the human order be responsible to the other three orders? (MTU 2010 – 11)

Critically examine the attitude of humans today towards the other three orders of nature. Try to make a proper evaluation of human efforts. (MTU 2010 – 11)

How is the human order related to the other three orders in nature? How does this understanding help in choosing the production activity for a human being? (MTU 2011 – 12)

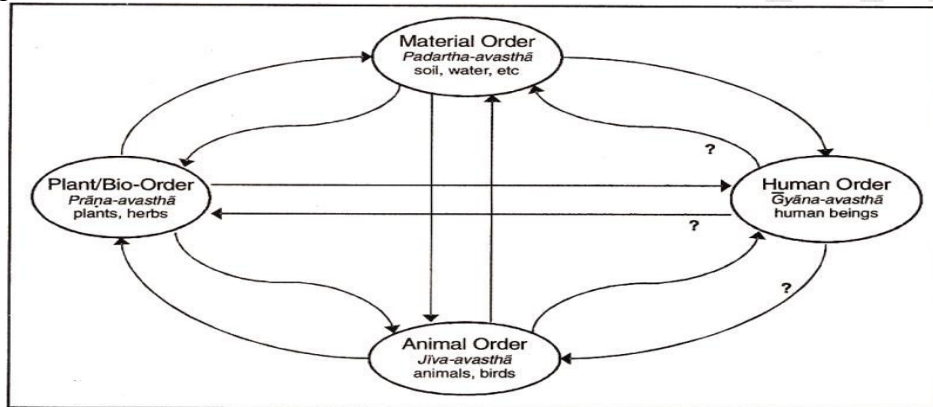
ANS. In the nature, all the units are connected to each other and fulfilling each other. Human being is related to all other human beings. On this basis, we have feelings and emotions for everyone. Human being is connected to all the material units in the existence and gets aware of it as he starts exploring it. We can see this interconnectedness and mutual fulfilment in the following diagram:

Material Order and Plant/Bio-Order: The material order provides the nutrients to the plant/bio order in the form of soil, minerals, etc while the plant/ bio order decays and forms more nutrients, thus enriching the soil. The plant/bio order also decays to substances like oil and coal, which are stored deep within the earth as protection against the heat from the molten core inside the earth as well as the heat from the sun (*today, this is the material we are removing and using as fuel*). Plants help move the nutrients through the various layers of the soil. The roots of the plants hold the soil together and prevent the soil from erosion. Plants produce oxygen/ carbon dioxide and thus help in the movement of the material order. There is a mutual interdependency and co-existence we can see here.



Material Order, Plant/Bio- Order and Animal Order: The material order provides the basis for movement of all animals, birds and fishes. Water, oxygen and other gases are necessities for both plants and animals. At the same time, the animal order helps enrich the soil with its excreta and this excreta helps the plants with nutrients. The plant/bio order provides food for animals, birds and fishes. The animal Order helps in pollination of the flowers of the pranic order.

Material Order, Plant/Bio- Order, Animal Order and Human Order: We humans also have a natural acceptance to be mutually fulfilling to these three orders. However, **we are not able to ensure this mutual fulfilment.** We are dependent on the material order for soil and minerals and metals, but only end up polluting the soil and depleting the fossil fuels; we are dependent on plants for our food and holding together the larger ecosystem, but we have destroyed forests and destroyed multiple species of plants and herbs; we are dependent on animals to carry out our production and transportation activities, but have made many species of animals extinct, and are today known for our cruelty towards animals. We can see that there is interconnectedness and mutual fulfilment in all the orders of nature except human order. We have to work on this.



Q 16. Explain how there is recyclability and self regulation in nature.

Write a short note on the recyclability and self-regulation in nature.

Explain the recyclability in nature with any two examples. (UPTU 2009-10)

There is recyclability in nature. Explain this statement with any two examples. How does it help in production activity? (UPTU 2011 - 12)

Explain the recyclability of any two units in nature with examples. How is it useful for sustainable production activities? (UPTU 2010 – 11)

ANS. There are several cyclical processes that we can see in nature. For example the cycle of water, evaporating, condensing and precipitating back to water giving the weather phenomena. The cycles keep these materials self-regulated on the earth. Breeds of plants and animals are similarly self-regulated in their environment. In a forest, the growth of trees takes place in a way so that the amount of soil, plants and animals remains conserved. It never happens that the number of trees shoots up and there is a lack of soil for the trees. The appropriateness of the conditions for growth of both plants and animals are self-regulated in nature keeping the population proportions naturally maintained. This phenomenon is termed as self-regulation. In a single breed of animals, the number of males and females generated through procreation is such that the continuity of species is ensured by itself. This happens with humans too, but inhuman practices have led to disproportionate numbers of men and women. These two characteristics namely, cyclical nature and self-regulation provide us with some clues of the harmony that is in nature.

Q 17. What do you mean by ‘conformance’? Explain the conformance in the four orders.

ANS. Each unit conforms through the principle of conformance or anusangita. It means how the continuity of the fundamental nature of the unit is preserved.

Order	Material order	Pranic order	Animal order	Human order
Things	Soil, water, metals, etc.	Plants and trees	Animals and birds	Human beings
Conformance	Constitution conformance	Seed conformance	Breed conformance	Right values / sanskara conformance

Material order → The continuity of the fundamental nature of the material unit is preserved through the physical and chemical processes. Take iron for example. Each atom of iron conforms to the constitutional structure of 'Iron'. There is no atom of iron that will be unlike the other atom of iron, if it were, we would not call it iron. We call this 'constitution conformance'. The material order exhibits constitution conformance. We can verify this for all things in the material order. For example, oxygen, nitrogen, other gasses, gold, silver, aluminium... all of them *conform to* and are *always according to* the *constitution* of their kind. Hence, we say that **any matter conforms to its constitution or has 'constitution conformance'**.

Plant/bio order → A neem seed will always sprout a neem plant. All of us know this. Its fruits, its leaves, the taste of the leaves, the colour of the leaves, all this information, this basic information of every neem plant is stored in the seed. Thus, we say the plant is always as the seed, or we can say, 'as the seed, thus the plant'. Hence, we say that **a plant conforms to the seed, or has 'seed conformance'**. This 'seed conformance' method is the mechanism by means of which the continuity of a plant species is mentained in nature/existence.

Animal order → We see that a cow is always like a cow, and a dog is always like a dog. Animals conform to their lineage. How animals are, their behaviour, is according to their lineage they belong to, the lineage they come from. Hence, we say that **an animal conforms to its breed, or has 'breed conformance'**. This breed conformance method is the mechanism by means of which the continuity of an animal species is mentained in nature/existence.

Human (knowledge) order → We can see that we humans are not according to our lineage or race, as in animals. We may pick up something from our parents as we grow up, but we are usually very different in many ways from them. We humans are according to our *imagination*; according to our desires, thoughts and selection in 'I'. the desires, thoughts and selections we have in 'I' can come from anywhere. It can come from past memories, it can come from our parents, the environment, the media, anywhere. In the case of humans, we can say 'as the education, so the human'. We are according to our desires, thoughts and selections. Together, we call these 'sanskara'. Hence, we say that **a human being conforms to his or her sanskar or has 'sanskaar conformance'**.

Q 18. How is the activity in human order is different with that of animal and plant order?

ANS. An activity means something that 'has motion' and /or 'has a result'. The material order is active in multiple ways, and the same with the plant order or animal order or human order. We are sitting in a room. But we are active. We are thinking, desiring, the body has breath running, heart throbbing. The air in the room is blowing. The wall standing constantly also have activity. The chair in the room is also active. It may not be very visible to our eyes but the chair is still active.

We can understand this activity in two ways:

- Things that we see are 'visibly moving', through the naked eyes, such as a spinning top, a moving bus, a running man, are active, and
- All things that are 'visibly stationery', are not moving, are also active. Like a stationary chair. The activity of chair is that the wood of the chair is interacting with the environment and as a result it decays with time.

All units around us, including ourselves, are active, all the time. They are interacting with the environment. In the activity, there is a state or configuration and motion simultaneously. This remains all the time.

Order	Things	Activity
Material order	Soil, water, metals, etc.	Composition / decomposition
Pranic order	Plants and trees	Composition / decomposition + respiration
Animal order	Animals and birds	(Composition / decomposition, respiration) in body + selection in 'I'
Human order	Human beings	(Composition / decomposition, respiration) in body + (selection, thought, desire) in 'I'

Material order → All material things (i.e. units in the material order) can be understood as an activity of 'units' coming together to form a bigger unit. We call this 'composition'. For example, the chair is

made of smaller pieces of wood. Bigger units can also separate from each other to form smaller units and we call this 'decomposition'. Like a wooden chair can decay after a few years. Thus any unit in the material order can be understood as an 'activity of 'composition/decomposition'.

Plant/bio order → When we look at all the units that make up the plant/bio order we will find that they can be understood in terms of composition/ decomposition and respiration. Not only do plants compose (following new plants) and decompose (decaying), they are also breathing, or pulsating, which we call respiration.

Animal order → We can understand the activities of animal order in two aspects:

- **Body In Animals – Physico-Chemical Activities** → The body displays the same activities that we see the plant. The body displays respiration, or breathing, or pulsating, as we call it. The body is also formed at one point in time and keeps building cells as well, i.e. there is composition in the body. Hence, the activities in the body are the same as that in the plant/bio order, which are: composition/ decomposition and respiration. Hence, we say that the body belongs to plant/bio order.
- **'I' In Animals – Conscious Activities** → The activities in 'I' are fundamentally different from those in the body. **'I' is a unit that has the ability or capacity of assuming.** Animals make assumptions. If you have a dog and some strangers comes into the house, the dog may start barking at him. If this person stays at your house, the dog may stop barking at him, but will continue to bark at other strangers. What has happened here is that the dog's 'assumption' about this person has changed, due to which, the way in which it responds to the person has changed. We call this assuming.

It is important to note that **this consciousness or faculty of assuming is not in the body.** The body belongs to the plant/bio order, and is physico-chemical in nature. It just responds to physico-chemical inputs. **Human (knowledge) order** → The activities in human body are similar to that in the animal body, and we have seen this in detail as: composition/ decomposition and respiration. When it comes to consciousness or 'I', however, the human displays more than just an ability to 'select' or make choices as animals do.

Thus, in human beings, 'I' has the activities of desiring, thinking, and selecting/tasting, with a possibility or need for understanding and realization. Only humans have this need to know and that is why it is called gyana avastha – the knowledge order.

Q 19. Explain the basic activity in the four orders in nature.

ANS.

Order	Things	Basic Activity
Material order	Soil, water, metals, etc.	Recognising, fulfillment
Pranic order	Plants and trees	Recognising, fulfillment
Animal order	Animals and birds	(Recognising, fulfillment) in body + (assuming, recognising, fulfillment) in 'I'
Human order	Human beings	Recognising, fulfillment in body + (knowing, assuming, recognising, fulfillment) in 'I'

In the material and pranic order, there is only recognizing and fulfillment. Such units do not have the activities of assuming and knowing. Take for example, hydrogen and oxygen recognise the relation to each other, and combine to form water. A brick and the other brick have a definite relation, recognise it and get arranged to form a building. A plant recognises the relation with sun and water, and fulfils it by acting accordingly. Such activities take place in a similar way all the time, there is no selection involved here. A plant does not choose to turn or not to turn to sun, absorb or not to absorb water. Similarly, the fan in your room does not choose to rotate clockwise or anti-clockwise. It turns as per the winding in the motor. No choice.

When we look at the animals and humans, we find selection taking place.

Q 20. Define 'units' and 'space'.

ANS. There are two kinds of realities in existence: units and space. Unit is something that is limited in size. Like a small blade of human hair to the biggest planets we know of, they are all limited in size i.e. bounded on six sides. So all the things we have been studying so far: the human beings, animals, lumps of matter as well as various atoms and molecules, are all units. We can recognize them as such, they are countable.

Whereas, space is not a unit but it exists, as a reality. We can't touch it, smell it. We normally just see through it. It exists everywhere. In other words the empty area all around the nature is space.

Q 21. Comment on the statement: "Nature is limited and space is unlimited."

ANS. Nature has four orders and there are units in each order. **Each unit is limited in size.** The size ranges from being really small (atom) to really big (galaxies). Each and every unit is finite and limited in size, be it the smallest particle or the biggest galaxies. Space, on the other hand is unlimited. **Space has no 'size'**, unlike units, it is not bounded. So, there is no beginning or end to space, as there is to units. For example, when we take a book, we know that it starts and finishes. We say the book is 'limited' in size. When we take space, there is no such thing. There is space behind us, inside us, between us and the book, between the book and the earth, in the book, in every page of it, inside the page, and beyond the earth... *all the way till we can imagine.* We find that **space pervades; it is all-pervading.** Units, on the other hand are not all-pervading. This is how we recognize them as units.

Q 22. How can we say that 'nature is Self Organized and in space Self-Organization Is Available.'

ANS. Every unit is an organization. A unit recognizes other units and combines to form a bigger organization. Starting from the atom, to the big galaxy, this organization goes on, as a self-organization. At every level, we get a self-organization. Sub atomic particles recognize each other and come together to form atoms. Cells recognize each other and form organizations like organs and a body. Planetary bodies, solar systems, galaxies are still bigger organizations. We are not organizing it. We are not supplying it organization from outside.

When we look at humans, we see that we are self-organized at the level of the body. We are not organizing the body. We *are not doing anything for the coordination* between the heart, kidneys, lungs, eyes, brain, hands, legs, etc. All these are functioning together. Our input is needed only to provide the required nutrition, and to assist the body when we fall sick/get injured. At the level of 'I', we are not self-organized, but being in space, self-organization is available to the self ('I'). That's why we are in pursuit of happiness, which is essentially being in harmony. Whenever we are not in harmony, we are unhappy.

All the units of four orders are self-organized. No one is organizing them from outside. No one is supplying this organization. This self-organization is available to units being in space. Hence, for space, we say 'self organization is available'.

Q 23. Define existence? Show that existence is in a form of co-existence.

Existence is co-existence of mutually interacting units in all-pervasive space. Explain. (UPTU 2010–11)

"Existence = Nature submerged in space" – Elaborate this point.

Short notes on Co-existence of units in space.

Differentiate between units and space. How are units self-organized in space?

What do you mean by co-existence? How are units in co-existence being in space?

How do unit and space co-exist?

What are the various attributes of units and space? Explain each.

Write a short note on 'nature (units) submerged in space'. Explain the meaning of submerged here. (UPTU 2011 - 12)

'Existence is co-existence'. Give your opinion. (UPTU 2011 – 12)

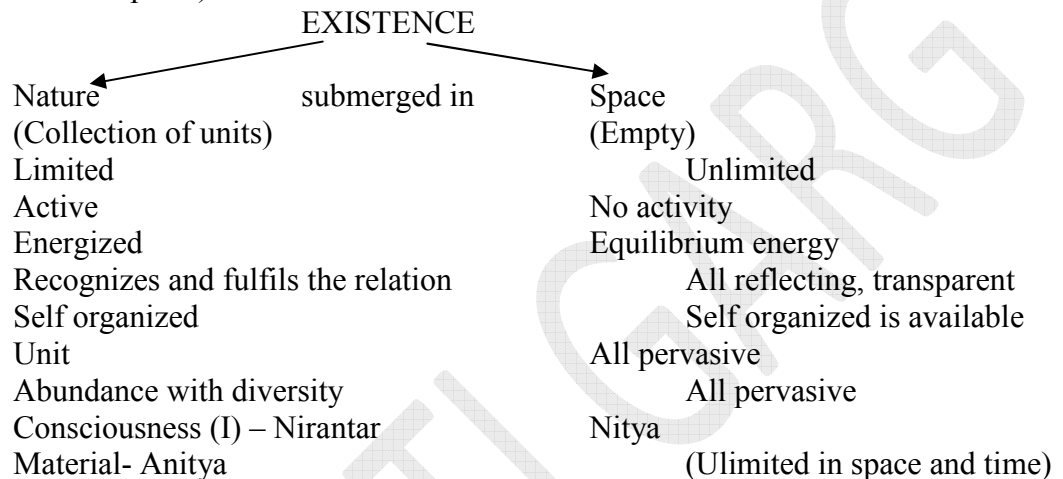
ANS. All the units together constitute nature. All the units of nature exist in space which is an important reality to understand. **Existence is nothing but the nature in space.**

Existence	=	Exist	+	Essence,	whatever exists.
		↓		↓	
		To be		harmony	

We define unit as something that is limited in size. Like a small blade of human hair to the biggest planets we know of, they are all limited in size, i.e. bounded on six sides. So, all the 'things' we have been studying so far: the human beings, animals, lumps of matter as well as various atoms and molecules, are all 'units'. We can recognize them as such, **they are countable.**

But there is another ‘reality’ called ‘space’. We normally don’t pay attention to this ‘reality’, because it’s not a ‘unit’. We can’t ‘touch it’, smell it. We normally just ‘see through it’. But the fact is because we can’t ‘touch it’ or ‘see it’ as we would see a unit like our body, our friends, or a piece of rock, doesn’t mean it does not exist. **Space exists everywhere. Co-existence is a state in which two or more groups are living together while respecting their differences and resolving their conflicts non-violently.** Co-existence has been defined in numerous ways:

1. To exist together (in time or space) and to exist in mutual tolerance.
2. To learn to recognize and live with difference.
3. To have a relationship between persons or groups in which none of the parties is trying to destroy the other.
4. To exist together (in time or place) and to exist in mutual tolerance.



(Niranatar: Limited in space, Unlimited in time, Anitya: Limited in space and time)

When we look at the existence around, the first thing we see is space. And then we see the units in space. Between every two units there is a space. **The units exist in space.** If we were to define this, we would say that there are two kinds of realities in existence and these are: space and units (in space). So we say,

Existence = space + units (in space)

Since nature consists of the four orders we have been discussing, we can say,

“Existence = Nature submerged in space”.

Nature = Four orders (Material, Plant/Bio or Pranic, Animal and Human Order)

Q 24. Explain the concept of holistic perception of harmony in existence.

ANS. The existence is units in space. Space is the empty area all around. The units are of two types: material (insentient) and conscious (the sentient ‘I’). The **material units are transformable, and their composition keeps on changing**, hence these are **gathansheel**. The other category of units, **the sentient ‘I’, does not transform and are complete in composition**, hence **gathanpurna**. The material units are changeful (with activities of recognizing and fulfilment only) while the other kinds of units are continuous (with activities of knowing, assuming, recognizing and fulfilment). The material units are available in two orders – material order and pranic order. In the material order, an atom combines with another atom to form a molecule; a molecule similarly forms a molecular structure. Molecular structures are found in two forms: lumps and fluids. Fluids give nutrition to pranic order. In pranic order, the smallest units are plant cells which combine with other cells to form plants, animal bodies and human bodies.

The co-existence of ‘I’ with the animal body becomes the animal order, and the co-existence of ‘I’ with the human body becomes the human order. Completion of right understanding in human being is called **kriyapurnata** and ability to live with complete understanding is called **acharanpurnata**.

If we look at the left side of the chart, the transformation keeps taking place and the transformation is cyclic in nature. But on the right hand side, the transitions are acyclic. This implies that what we have understood continues to stay with us. We will never miss it. This is a transition in one direction. This is actually called development (vikas).

So, Existence is in the form of co-existence. It is in Harmony. We don't have to *create* this harmony, it already exists. We only have to *understand* it to be in it. This means that having the knowledge of self ('I') gives me the knowledge of humane conduct (how to live in existence, with the four orders). With this knowledge, I can live with humane conduct. This is the pending task we have to complete.

Q 25. Explain energized and energy in equilibrium.

ANS. What we normally call or consider as energy today, is the 'transfer of energy'. For example, when you place water in a vessel on the stove, we say the heat energy from the flame was transferred to the water in the vessel. Anything that is a unit, has activity, **anything that has activity, is energized**. All the particles in the water and the metal stove are active, very active and energized. Hence we don't say that space is energized but we say **'space is energy in equilibrium' or it is 'constant energy'**. All units are energized in space.

This energy is available to all units. In other words, space is equilibrium energy, all units are in space; all units are energized and active being in space.

UNIT 5

Q 1. What is ethical human conduct? OR How does right understanding provide the basis for ethical human conduct? Give two examples.

ANS. The right understanding gained through self-exploration enables us to identify the definitiveness of human conduct which may also be called the **ethical human conduct**. It is the same for all human beings. So we are also able to understand the universality of ethical human conduct which is in consonance with the universal human values. **Unless we have the right understanding, we are not able to identify the definitiveness of ethical human conduct.**

Q 2. What is ethical human conduct? Explain in terms of values, policies and character with appropriate examples.

ANS. The right understanding gained through self-exploration also enables us to identify the definitiveness of human conduct which may also be called the **ethical human conduct**. It is the same for all human beings. So we are also able to understand the universality of ethical human conduct which is in consonance with the universal human values. **Unless we have the right understanding, we are not able to identify the definitiveness of ethical human conduct.** It can be understood in terms of the following:

1. Values (Mulya):
2. Policy (Niti):
3. Character (Charitra):

1. Values (Mulya): Competence of living in accordance with universal human values or the participation of a unit in the larger order- its natural characteristics or svabhava. The values of a human being can be enumerated as thirty, which are listed below:

A) Values in self (Jivan Mulya):

Happiness (Sukha): Definiteness of expectation (selecting/ tasting) based on definiteness of thought manifests as happiness.

Peace (Shanti): Definiteness of thought based on definiteness of desire manifests as peace.

Satisfaction (Santosh): Definiteness of desire based on understanding manifests as satisfaction.

Bliss (Ananda): Understanding based on realization manifests as bliss.

B) Values in Human – Human Relationship (Sambandh Mulya):

	Established – Values	Expressed – Values	
1	Visvasa (Trust)	Saujanyata (Complementariness)	10
2	Sammana (Respect)	Sauhardra (Compliance)	11
3	Sneha (Affection)	Nistha (Commitment)	12
4	Mamta (Care)	Udarata (Generosity)	13