

Q1

ANS

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. The 4 orders of nature are :-

1) MATERIAL ORDER

Units : Fossil fuels, water, etc.

Activity : composition / decomposition is the activity of all units in material order.

Natural characteristic : Composition / Decomposition is the natural characteristic of all units in material order.

Innateness : 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 ~~exists~~ material, the fundamental particles of coal, have 'cease to exist' or 'disappeared' from existence. They may not be visible to the eye at that moment, but they continue to exist in some form of the other. We cannot destroy matter, we can only convert it from one form to the other. We cannot separate the 'existence' of a thing from the thing itself.

Inheritance :- Inheritance for all units in material order is constitution based

2) ANIMAL ORDER

Units : Animals, Birds, etc.

Activity : (composition / decomposition, respiration)
in body and selection in 'I' are the activities of all the units in Animal order

Innateness: Both animals and birds have the innateness of 'existence and growth' in body which is physio-chemical in nature. An animal or bird cannot be stopped from growing, one way to stop from growing is killing, which leads to going in material order. Thus it inherits innateness of existence from previous order. Thus, every unit in animal order has innateness of growth and existence in body. In addition all units in the order have the "will to live" in I, no unit can be separated from this. It is innate to every unit in this order.

Inheritance: Inheritance for all units in animal order is breed based.

The remaining two orders are :-

- 3) Pranic Order
- 4) Human Order

Pollution is maximum during this age with the increasing vehicular emissions, increasing

3) PRANIC ORDER

Units : grass / tree / shrubs

Activity : Composition / decomposition / respiration.

Natural characteristic : composition / decomposition

nurture / worsen. A plant

conforms to the seed or has seed-

conformances. This is the mechanism

by which continuity of plant
species is maintained.

Innateness : 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 e.g., 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.

Inheritance : Inheritance for every unit in pranic
order is seed based.

4) HUMAN ORDER

Unit : Human Being.

Activities : [Composition / decomposition, respiration] in body +
[selection / thought / desire] in 'I' are the activities
of every unit in human order.

Natural characteristics: [composition / decomposition, nurture / worsen] in body + [perseverence, bravery, generosity] in 'I' are natural characteristics of every unit in human body.

Inheritance: Inheritance for every unit in human order is Education - sanskar based.

Humans learn to pick things from what they have learnt from their parents, family or environment.

Innateness: As human beings are development of animal order, innateness of existence and growth from animal order are inherited. coming to the level of 'I' we inherit from animal order the will to live but we add happiness and we innate 'will to live with happiness' which cannot be separated from human beings. Thus innateness of growth and existence in body and will to live with happiness in I is innate to every unit in human order.

There is relationship of mutual fulfillment amongst all. First 3 are mutually fulfilling each other as well as humans. It is naturally acceptable to humans to be fulfilling others but they aren't able to fulfill ~~themselves~~. Humans need to mutually fulfill the other 3 orders as well.

Pollution is the biggest threat to everyone and every order in nature. Pranic order mutually fulfills the human order needs of pure and fresh air. but human order is not able to fulfill the pranic order as we cut thousands of trees without planting one. Water in material order is polluted by the human order. Thus material order unit water fulfills our thirst but we don't fulfill the material order and make it dirty and polluted. Resource depletion is again lack of mutual fulfillment by human order with the material order. We don't utilize our resources properly and are wasting them.

My observation says that humans need to understand and mutually fulfill the other orders by our natural acceptance if we don't then entire ecosystem would be disturbed and human life ~~will~~ will be endangered.

Q2

ANS There are various environmental problems in my neighbourhood as well as the entire world. One of the major environmental issue is air pollution which is leading to global warming and climate change. The major causes of this are vehicular air pollution and industrial air pollution.

As I live in Mumbai, the financial capital of India, there are a lot of automobiles always around me that are continuously emitting harmful gases which cause air pollution and then lead to global warming. There aren't many industries around my house but there are multiple near the ~~near~~ outskirts of Mumbai. These industries do contribute to the increasing AQI of Mumbai. This air pollution leads to various health disorders in people around me. Some people feel breathlessness and some people suffer from respiratory diseases like asthma. The climate is affected by this, every year the summers are getting hotter than ever and we read in the news that highest recorded temperature in 'x' years.

As an individual, what I can do to prevent harmful effects of air pollution is planting more trees in my locality and

inspire others to do the same. On a community level we can increase the use of public transport and the government can boost the usage of electric vehicles by building more charging stations and reducing taxes on these vehicles. The industries can increase the height of the chimney's and by treating their harmful gases before releasing them in air.

According to me, any sustainable recovery is not possible without substantial effort for right understanding and right feeling in every human being. It is our duty as individuals that we make our environment sustainable. If we don't take ~~meas~~ appropriate measures now then a day in the future would come when our existence as a species would be threatened. Thus it is very important to have right understanding and feeling for environmental recovery.

TUTORIAL 4B

Q1. List the four orders in nature with examples of units in each order. What is the basis of this classification.

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, say regulation among all these units.
 There are four orders of nature :-

1. 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 minerals below, the dense gases and fossil fuels deep below the surface of the earth - all fall into the material order or padartha avastha.
2. 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 this is the plant/bio order or prana avastha.

3. ANIMAL ORDER : Animals and birds form the third largest order and we call them the animal order or jiva avastha. Here we see that the plant/bio order is far greater in quantity than the animal order.

4. HUMAN ORDER : Humans are the smallest order and they are referred to as human order or gyana avastha. Animals are far greater in quantity as compared to their human order.

The four orders can be distinctly recognized 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 + (bravery, perseverance, generosity) in 'I'

2 Processes in nature are cyclic and mutually enriching.
Explain this statement with three examples.

ANS There are several cyclical processes that we can see in nature. For example the cycle of water, evaporating, condensing and precipitating back of 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 take 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 inhumane practices have led to disproportionate numbers of men and women. These two characteristics namely, cyclical nature and self-regulation provides us of some clues of harmony that is in nature.

A third example would be a subset of life cycle as water^{of material order} is consumed by plants,

and plants are consumed by animals or human order who in turn die and decompose back to the material state

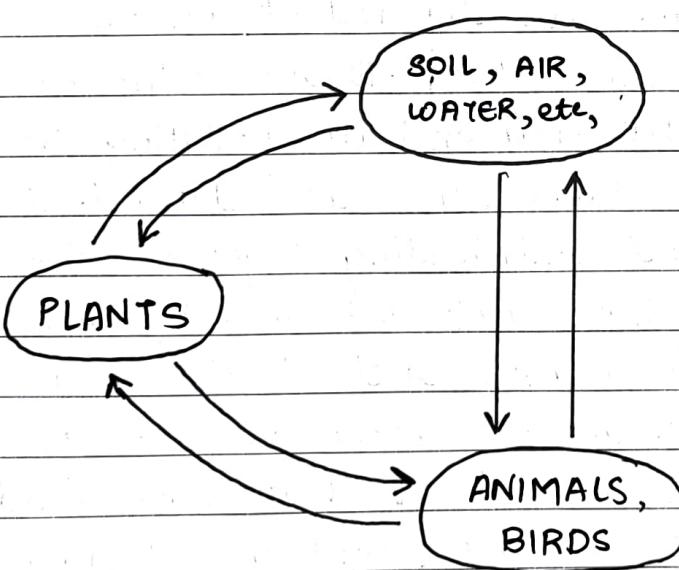
3. Describe the abundance in the nature. How is human order dependent on the other three orders?

ANS

Various resources are available in nature. The three orders material, pranic and animal orders are connected to each other and are fulfilling all these resources available in nature such as precious metals, minerals, elements, air, water, food and medical resources provided by trees are available in abundance only if we use them wisely. We need to understand that unless we use these resources only as per our need, we deplete them. We need to limit our usage of these resources only as per our requirements. This will ensure that these resources are available in the future as well.

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 fulfillment in the following diagram:

MATERIAL ORDER: The material order provides the nutrients AND PLANT ORDER 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. 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.



We can easily see that they are interconnected. The relationship between these orders is in such a way that they all fulfill each other and coexist with each other.

MATERIAL ORDER,
PLANT 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 these 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,
PRANIC ORDER,
ANIMAL ORDER,
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 fulfillment. 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 fulfillment in all the orders of nature except human

order. we need to work on this

