Value Based Questions

Q. 1. Achal's teacher is teaching their class about fuels today. She tells them 'Always turn off the engine of your car at red lights'. The next day Achal's father drives him to school. At the red light he does not turn the engine off. When Achal asks him to do so he says that the light is of short duration and this won't save the fuel.

Based on the above statement, answer the following questions.

- (i) Which type of fuel is used in vehicles? Is it renewable or non-renewable?
- (ii) How can you contribute towards saving these fuels at your level?
- (iii) What values are being neglected by Achal's father?

Ans. (i) Fossil fuel - non-renewable.

- (ii) (a) Travelling in public transport; arranging for car pools.
- (b) Opting for CNG as a motor fuel instead of petrol and diesel.
- (iii) Concern for environment, judicious use of non-renewable sources of energy.
- Q. 2. You observe that a gardener working in the park near your house collects the dry leaves from the garden and burns it. He also uses synthetic fertilisers for growth of plants.

Answer the following questions based on the above information:

- (i) Which environmental values is the gardener disrespecting?
- (ii) How can the first activity be changed to make it environmental friendly?
- (iii) How can the second activity be changed to promote environmental health?
- (iv) Suggest one activity to inculcate such environmental values in students.
- **Ans.** (i) Environmental concern/Environmental health.
- (ii) The leaves may be buried in the soil to produce manure.
- (iii) Organic manure may be used in place of synthetic fertilisers.
- (iv) By creating proper awareness about the ill environmental impact from existing practices and benefits from changed practices. Group discussions/Debates/ Community service.
- Q. 3. You are walking by a store along with your friend. Both of you see a poster on the wall saying 'Say No To Plastics'. Your friend disagrees with the content of the poster and recounts the uses and advantages of plastic. You contradict him saying that plastics are harmful to the environment.

Answer the following questions based on the above information:

- (i) Which values are being disrespected by your friend by not agreeing with you?
- (ii) How will you convince him that plastics are harmful to the environment?

- (ii) Government has banned the use of plastics and has asked to use paper bags or jute bags instead. How will you get the decision implemented effectively?
- Ans. (i) Environmental protection, reducing environmental pollution, concern for life.
- (ii) Plastics are non-biodegradable. If they are eaten by animals they block their digestive system and if they get buried in soil it would become infertile.
- (iii) (a) Totally avoid using plastics though personal action.
- (b) Organise mass campaigns with the help of friends and family members.
- Q. 4. Plastic production is increasing day by day in spite of the fact that plastic is harmful for the environment.

Based on the above statement answer the following.

- (i) What are the harmful effects of plastic usage?
- (ii) In our day to day situation what are the alternatives that we can use instead of plastics.
- **Ans.** (i) (a) Environmental pollution.
- (b) Burning plastics can cause pollution.
- (c) Plastic cause harm to the cattle/animals if enter inside their alimentary canal.
- (ii) Paper bags/jute bags can be used instead of plastic bags.
- Q. 5. Write any three characteristics of a food chain. Dharmesh always treated the chemical effluent before disposing it in the water body. Mention any three moral values possessed by Dharmesh.

Ans. Characteristics of a food chain:

- (i) Unidirectional
- (ii) Helps in understanding the food relationship and interaction among various organisms in an ecosystem
- (iii) Helps to understand movement of toxic substances and the problem of their biological magnification

Moral values possessed by Dharmesh:

- (i) Sensitive towards environment
- (ii) Possesses knowledge about biological magnification
- (iii) Scientific temperament
- (iv) Conscious (Any three)

Short Answer Type Questions – I [2 marks]

Q. 1. What are natural resources? State two factors that work against an equitable distribution of these resources.

Ans. Natural resources are the stocks of nature whether living or non-living, such as air, water, soil, animals and plants which are useful to the mankind.

Two factors that work against an equitable distribution of these resources are:

- (i) money and (ii) power.
- Q 2. What is meant by three types of 'R' (3-R's) to save the environment? Explain with examples how would you follow the 3-R's in your school to save the environment.

Ans. The three types of 'R' are Reduce, Reuse, Recycle. The 3-R's can be followed in the following ways:

- -Switch off the fans and bulbs when not in use,
- -Reuse of paper, polythene bags, etc.,
- -Reduce the wastage of water/paper or any other item.

Q. 3. Write two advantages of sustainable management of natural resources. Out of the two - reuse and recycle -which is better and why?

Ans. Advantages:

- (i) Provides the resources for the present generation.
- (ii) Preserves the resources for the future generation as well.

Reuse is better than recycling because it does not involve use of energy.

Q. 4. Prepare a list of five items that you use daily in the school. Identify from the list such items that can be recycled.

Ans. Paper, rexine bag, blade, pen, plastic box, scale, eraser, compass and dividers (metallic), steel lunch box and steel spoon are used in the school. Paper, blade, plastic box, eraser, compass, steel lunch box and steel spoon can be recycled.

Q. 5. "The prejudice against the traditional use of forest areas have no basis". Explain.

Ans. The great Himalayan National park contains alpine meadows within its reserved areas. These meadows were grazed by sheep in summer. But after the formation of national park, this practice was stopped. Due to this, the grass first grows very tall and then falls over preventing fresh growth from below.

Q. 6. What legislative measures are taken in India to conserve wildlife?

Ans. In India, several laws and acts have been passed from time to time in order to protect the degrading wildlife. Out of all, the Wildlife Protection Act of 1972 has been the most effective.

Under this Act, possession, trapping, shooting of wild animals alive or dead; serving their meat for eating in houses, using them as transport, etc, are completely under strict control or prohibited.

Q. 7. Mention two ways in which water harvesting can be undertaken.

Ans. The two ways by which water harvesting can be undertaken are:

- (i) Capturing run-off water from roof tops.
- (ii) Capturing run-off water from local catchments.

Q. 8. What is the impact of excessive irrigation and intensification of agriculture?

Ans. It has resulted in environmental degradation and creation of few waste lands. Water logging has ultimately caused development of saline soil.

Q. 9. Building of big dams gives rise to some problems. List three main problems that may arise. Suggest a solution to any one of these problems.

Ans. (i) Social problems

- (ii) Environmental problems
- (iii) Economic problems.

Solution to these problems would be adequate rehabilitation, compensation to the displaced persons and afforestation.

Q. 10. What measures would you take to conserve electricity in your house?

Ans. (a) Put off the fans and lights when they are not required.

- (b) Maximum use of solar radiation.
- (c) Use of solar water heating system during winters.
- (d) Use of fluorescent tubes or CFL.

Q. 11. What is Narmada Bachao Andolan?

Ans. Narmada Bachao Andolan (Save the Narmada Movement) is a movement to protest about the height of Sardar Sarovar Dam on the river Narmada, thereby criticising large dams for addressing problems.

- Q. 12. (a) Why do we need to manage our resources carefully?
- (b) Why management of natural resources requires a long term perspective?
- **Ans. (a)** The resources are limited and with a tremendous increase in human population, the demand for resources is increasing at an exponential rate. Therefore, we need to manage them carefully.
- **(b)** Long term perspective is required to meet the needs of the present as well as for the generations to come.
- Q. 13. Name any two endangered plant and animal species.
- Ans. Endangered plant species-Nepenthes khasiana (Pitcher plant) and Snow orchid.

Endangered animal species-Indian Wild Ass and Great Indian Rhinoceros.

- Q. 14. Name the river with which the following dams are associated.
- (i) Tehri dam, (ii) Sardar Sarovar dam.
- Ans. (i) Tehri dam on the river Ganga
- (ii) Sardar Sarovar dam on the river Narmada.

Q. 15. Although coal and petroleum are produced by degradation of biomass, yet we need to conserve them. Why?

Ans. Both the energy sources, coal and petroleum, take millions of years for their formation. As these resources are being utilised at a much faster rate than their formation, they will be exhausted in the near future. Hence, they need to be conserved.

Q. 16. Name a greenhouse gas produced due to combustion of fossil fuels. Mention its bad effect to the environment.

Ans. The greenhouse gases produced are CO₂ and oxides of nitrogen and sulphur. These cause global warming.

Q. 17. List two problems that may arise by planting trees of single variety over vast tracts of a forest.

Ans. (i) Loss of biodiversity

- (ii) Varied needs of the local people can no longer be met.
- (iii) Degradation of soil.

Q. 18. What is water harvesting? How can this technique help in the conservation of water?

Ans. Water harvesting is a technique of capturing rain water when it falls and taking measures to keep the water clean.

This water is stored underground that remains unpolluted, it recharges wells and provides moisture for vegetation over a wide area.

Q. 19. List two advantages associated with harvesting at the community level.

Ans. Advantages of water harvesting at community level:

- (i) Recharges ground water
- (ii) Mitigates floods and droughts.
- (iii) Brings rivers and wells back to life and makes more water available.

Q. 20. List any two advantages associated with water stored in the ground.

Ans. Advantages of water stored in ground:

- (i) Recharges the ground water
- (ii) Prevents evaporation of water
- (iii) Prevents breeding of mosquitoes
- (iv) Prevents contamination
- (v) Mitigates flood and drought

Q. 21. What is meant by "sustainable management"? Why is reuse considered better than recycling?

Ans. A type of management which encourages utilisation of resources that meet current basic human needs while preserving the resources for the needs of future generations is called sustainable management.

Reuse is better as it does not consume energy.

Q. 22. List any two causes for the failure of sustained availability of ground water.

Ans. (i) Loss of vegetation cover.

- (ii) Diversion for high water demanding crops.
- (iii) Pollution from industrial effluents.
- (iv) Dumping of urban waste. (Any two)

Short Answer Type Questions – II [3 marks]

- Q. 1. (a) Distinguish between renewable and non-renewable sources of energy.
- (b) Choose the renewable sources of energy from the following list:

Coal, biogas, sun, natural gas

Ans. (a)

Renewable Sources of Energy	Non-renewable Sources of Energy
1. Those sources of energy which are being produced continuously in nature and are inexhaustible are called renewable sources of energy.	1. Those sources of energy which have been accumulated in nature over a long time and cannot be quickly replaced if once exhausted are called non-renewable sources of energy.
2. Renewable sources of energy are available in unlimited quantities.	2. Non-renewable sources of energy are available in limited quantity.
Example: Air, water, solar radiation, etc.	Example: Coal, petroleum, natural gas, etc.

- **(b)** Renewable sources of energy from the above list are Sun and biogas.
- Q. 2. Why are forests considered "biodiversity hot spots"? List two ways in which an individual can contribute effectively to the management of forests and wildlife.

Ans. Forests are considered 'biodiversity hot spots' because large number of life forms (such as bacteria, fungi, fern, nematodes, insects, birds, reptiles, mammals, gymnosperms and angiosperms) are found there. These are the regions with large biodiversity of endangered species, many of them being highly endemic. Such regions are being subjected to large scale destruction and hence are called 'hot spots' by ecologists.

Ways in which an individual can contribute:

- (i) Not allowing cutting of trees.
- (ii) To promote or to make people aware about the importance of forests and wildlife.
- (iii) Not using wildlife products like fur coat or any other named product.
- Q. 3. List four measures that can be taken to conserve forests.

Ans. Measures need to be taken to conserve forests:

- (i) Reforestation of the deforested areas as soon as possible.
- (ii) Ban on the indiscriminate cutting of trees.
- (iii) Felling of trees for fuel and wood should be avoided.
- (iv) Overgrazing in forests should be discouraged.

Q. 4. Why is replenishment of forest necessary? State four reasons.

Ans. The replenishment of forest is necessary because of the following reasons:

- (i) It is used to conserve soil
- (ii) It provides shelter to wild animals.
- (iii) It reduces atmospheric pollution.
- (iv) It controls flood and increases frequency of rainfall.

Q. 5. Every one of us can do something to reduce our personal consumption of various natural resources. List four such activities based on 3-R approach.

Ans. Four activities to reduce consumption of natural resources:

- (i) Reduce excessive use of natural resources like water, fossil fuels, etc.
- (ii) Reuse of some resources instead of wasting (throwing) them, like empty bottles.
- (iii) Recycle the materials like paper to reduce the pressure on existing natural resources.
- (iv) Changes in lifestyle, personal attitudes and practices.

Q. 6. Explain giving example where active involvement of local people lead to efficient management of forest.

Ans. In West Bengal, the Sal forests had been very badly degraded. A forest officer involved villagers in protection of Sal forest and gave them employment in silviculture and harvesting operations. Villagers were allowed to collect firewood and fodder on a nominal payment. Within a period of 10 years the previously worthless forests became valuable.

Q. 7. What are the causes of pollution of river Ganga?

Ans. The causes of pollution of river Ganga are as follows:

- (i) Dumping of garbage and untreated sewage from all the towns and cities on the banks of the river.
- (ii) Millions of people bathe and wash their clothes, animals and vehicles in the river water.

- (iii) Releasing chemical effluents from industries directly into the river water.
- (iv) Immersion of ashes or even dead bodies in the river, performed as a ritual.

(Any two)

Q 8. List two main causes of the pollution of water of the river Ganga. State how pollution and contamination of river water prove harmful for the health of the people of neighbouring areas.

Ans. Causes for pollution of water of river Ganga:

- (i) Dumping of untreated sewage
- (ii) Industrial wastes

Effects:

- (a) Growth of disease-causing microorganisms in the river water
- (b) The river water becomes more acidic which makes the soil acidic and affects the productivity of crops.

Q. 9. Why must we conserve our forests? List any two causes for deforestation taking place.

- **Ans.** (a) We must conserve our forests for the following reasons:
- (i) Forests produce a large number of products of commercial use such as timber, raw materials For the manufacture of paper, bidi leaves, gums, resins, essential oils. Thus, forests helps in economic development.
- (ii) One of the main aims of conservations is to try and preserve the biodiversity we have inherited because loss of biodiversity may lead to a loss of ecological stability.
- (b) Two causes of deforestation are:
- (i) Indiscriminate felling (i. e., cutting) of trees for the purpose of timber, fuel and individual demand of wood.
- (ii) Overgrazing by a large livestock population.

Q. 10. List any four measures for conserving forests.

- **Ans.** (i) Replenish the trees cut down for timber by planting more trees so that there is no scarcity.
- (ii) Consumption of wood and charcoal should be discouraged. Instead, use conventional sources of energy such as biogas.
- (iii) Deforestation should either be stopped or reduced to minimum and should be followed by reforestation.

(iv) Acute participation of local people need to be taken for the conservation of forests.

Q. 11. Explain the role of forests in conserving the environment. How do the forests get depleted? What are its consequences?

Ans. Role of forests in conservation of environment:

- (i) Prevent soil erosion and help in maintaining fertility of soil.
- (ii) They provide shelter to wild animals and are areas that sustain biodiversity
- (iii) They reduce atmospheric pollution.
- (iv) They increase humidity and frequency of rainfall.

The forests get depleted due to forest fires, urbanisation, industrialisation, overgrazing by animals, etc. The consequences of deforestation will be:

- (i) Change in climate and global warming.
- (ii) Soil erosion and floods.
- (iii) Extinction of wildlife, etc.

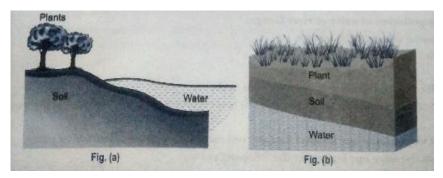
Q. 12. Suggest a few measures for controlling carbon dioxide levels in the atmosphere.

Ans. (a) Reduce the consumption of petrol in the automobiles.

- (b) Use of CNG or clean fuel.
- (c) Instead of burning litter prepare manure out of it.
- (d) Treatment of smoke to remove harmful gases before discharging into the atmosphere.
- (e) Plant more trees.

Q. 13. (a) Locate and name the water reservoirs in Figure (a) and (b).

(b) Which has an advantage over the other and why?



Ans. (a) The water reservoir is a pond in Figure (a) and underground water body in Figure (b).

- (b) Figure (b) has more advantage than Figure (a) because the advantages of water stored in the ground is more than water stored in a pond. For example:
- (i) It does not evaporate.
- (ii) It spreads out to recharge wells.
- (iii) Provides moisture for vegetation over a wide area.
- (iv) It is protected from contamination by animal and human wastes.
- (v) It prevents breeding of insects.
- Q. 14. List four stakeholders which may be helpful in the conservation of forests.

Ans. The four stakeholders are:

- (i) Local people living in villages near the forest.
- (ii) Industrialists who use forest produce as raw materials
- (iii) Wild life and nature enthusiasts.
- (iv) Forest department of the government.
- Q. 15. List any four changes you would like to incorporate in your lifestyle in a move towards a sustainable use of available resources in our country.
- **Ans.** (i) Save electricity by switching off unnecessary lights and fans.
- (ii) Reuse of used envelopes, plastic bottles.
- (iii) Opt for carpool.
- (iv) Cycling to school.
- Q. 16. In a village in Karnataka, people started cultivating crops all around a lake which was always filled with water. They added fertilisers to their field in order to enhance the yield. Soon they discovered that the water body was completely covered with green floating plants and fishes started dying in large numbers. Analyse the situation and give reasons for excessive growth of plants and death of fish in the lake.

Ans. Since people used excessive fertilisers in the fields, they were carried down to the lake during rains. As many fertilisers contain phosphates and nitrates, the water body became enriched with these chemicals. These chemicals promote excessive growth of aquatic plants and the surface of water was completely covered with plants (eutrophication).

Depletion of light in the water body and insufficient availability of dissolved oxygen and nutrients resulted in the death of fish.

Q. 17. We often observe domestic waste decomposing in the bylanes of our homes. List four ways to make the residents aware that the improper disposal of wastes is harmful to the environment and also for their own health.

Ans. Residents can be made aware by spreading awareness by different ways:

- (i) Organising street plays,
- (ii) distributing pamphlets to the residents,
- (iii) reuse/recycle of the waste products,
- (iv) calling meeting of residents, welfare society/association of the locality,
- (v) advertisements through TV/radio,
- (vi) putting posters/hoardings,
- (vii) segregation of the wastes as per the nature of the waste.

Q. 18. Why is sustainable management of natural resources necessary? Out of the two-reuse and recycle-which, in your opinion, is better to practise? Give reason.

Ans. Sustainable management of natural resources is necessary to sustain the resources for future generation and current basic needs of the population.

Reuse is a better practice because it can be done at household level with no expense of energy. It does not cause pollution and is an ecofriendly practice.

Q. 19. List any four advantages of water harvesting.

Ans. Four advantages of water harvesting:

- (i) Water collected in ground does not evaporate, but spreads out to recharge wells and provides moisture for vegetation over a wide area.
- (ii) The groundwater is also relatively protected from contamination by human and animal waste.
- (iii) It provides year round supply of drinking water.
- (iv) It does not provide breeding grounds for mosquitoes like stagnant water collected in ponds or artificial lakes.

Q. 20. "What was Chipko Andolan"? How did this Andolan ultimately benefit the local people and the environment?

Ans. 'Chipko Andolan (Hug the Trees Movement) was a movement started by women of Reni village in Garhwal, who hugged the tree trunks preventing the contractors from felling the trees.

This Andolan quickly spread to other parts of the country and forced the government to
rethink their priorities in the use of forest produce. Consequently, the local people were benefitted. The environment was saved from permanent damage. It affected the quality of soil and the sources of water were affected in a good way.

Long Answer Type Questions [5 Marks]

Q. 1. Prepare a list of five activities that you perform daily in which natural resources can be conserved or energy utilisation can be minimised.

- Ans. (i) Unused water in the water bottle may be used for watering plants.
- (ii) Close all the taps before you go to sleep.
- (iii) Avoid using a hose pipe for watering plants and instead use a mug.
- (iv) Wash vehicles only when they are dirty.
- (v) Use fan and light only when required.
- (vi) Use solar water heating devices.
- (vii) Use CFL in place of conventional bulbs/tubes.

Q.2. What is the importance of forest as a resource?

Ans. Forests are renewable resources which

- (i) provide habitat, food and protection to wildlife.
- (ii) help in balancing CO₂ and O₂ of atmosphere.
- (iii) improve water holding capacity of soil.
- (iv) regulate water cycle.
- (v) are the source for all essential commodities like fuel wood, timber, pulp and paper, etc., for human beings.
- (vi) provide useful products like fruits, resins, gums, essential oils, bidi wrapper, etc.

Q. 3. Suggest a few useful ways of utilising waste water.

Ans. Waste water can be used for the following ways:

- (i) For recharging the ground water.
- (ii) Can be used for irrigation.
- (iii) Treated municipal water can be used for washing cars or watering the gardens.
- (iv) Certain pollutants in sewage water can become fertiliser for various crops.

Q. 4. Explain some harmful effects of agricultural practices on the environment.

Ans. (i) Excessive use of fertilisers changes	the chemistry of soil and kills usefu
microhes	

- (ii) Excessive use of non-biodegradable chemical pesticides leads to biological magnification.
- (iii) Extensive cropping causes loss of soil fertility.
- (iv) Damage to natural ecosystem or habitat.
- (v) Excessive use of ground water for agriculture lowers the water table.

HOTS (Higher Order Thinking Skills)

Q.1. What is the slogan of Chipko Movement?

Ans. The slogan of Chipko movement is five Fs – Food, fodder, fuel, fibre and fertiliser.

Q.2. List any four changes you would like to incorporate in your lifestyle in a move towards a sustainable use of available resources in our country.

Ans. Four changes I would like to incorporate in our lifestyle in a move towards a sustainable use of available resources are:

- (i) I will collect plastic, paper, glass and metal items and recycle them to use again
- (ii) I will save electricity by switching off unnecessary lights and fans.
- (iii) I will prefer walking or cycling than using vehicles
- (iv) I will use potable water for drinking purpose only.

Q.3. Prejudice against traditional use of forest areas has no basis. Explain giving an example.

Ans. In many forests, the local population may not be allowed to use forests in the manner they have been using them for generations.

This may sometimes be harmful for the sustainability of forests.

When the nomadic shepherds were not allowed in the alpine meadows of the great Himalaya National Park to graze their sheep, it had an adverse effect on the growth of grass. Without regular grazing by sheep, the grass grew very tall and then fell over preventing fresh growth.

Q.4. Why are local needs and local knowledge of forest dwellers important for maintaining forests?

Ans. Needs and knowledge of the local people needs to be given due consideration for maintaining When vast area of forest land was converted to monocultures of pine, teak, eucalyptus, etc. a large amount of biodiversity was destroyed and needs of local people (leaves for fodder, herbs for medicines, fruits and nuts for food) could no longer be met from such forests.

Q.5. Is water conservation necessary? Give reasons.

Ans. The total amount of fresh water is more than enough to meet the needs of human beings. But its uneven distribution, wide seasonal as well as yearly fluctuation in rainfalls and water shortage are chronic problems in most parts of the world.

Q.6. Why are the Arabari forests of Bengal known to be a good example of conserved forest?

Ans. The forest department developed a strategy in which the villagers were involved in the protection of the forest. In return for the labour, the villagers were paid and also had some benefit in harvesting operations. They were allowed to collect wood and fodder on payment of nominal fee. In this way, by the active and willing participation of the local people, the sal forests of Arabari were conserved.

Q.7. "Reuse is better than recycling of materials". Give reason to justify this statement.

Ans. Reuse refers to the use of the same material again and again. In reuse of materials no energy is consumed and the resources are saved. In recycling certain used materials are converted into other useful materials. In recycling of materials, energy is consumed and the resources may be wasted. Thus, it can be said that reuse is better than recycling.

Value Based Questions

Q. 1. Chipko movement was stared in 1970s in a small village of Garhwal high up in Himalayas. Villagers stood against greedy contractors. Women folk hugged the trees. The Chipko movement (as it was called) spread slowly to all nearby areas under the leadership of shri sunder Lal Bahuguna.

Answer the following questions based on the above information:

- (i) Do you feel inspired by this movement which prevented felling of trees? Who do you think are the real stakeholders?
- (ii) Which old belief has been challenged by Chipko movement?
- (iii) What values does Chipko movement invoke?

Ans. (i) Yes. The local people are the real stakeholders.

- (ii) Chipko movement has challenged the old belief that forests are meant only for timber. Gift of trees to us is soil, water, oxygen.
- (iii) Environmental protection, motivation for tree plantation.
- Q. 2. There are certain NGOs which motivate the general public to donate clothes, books, toys, stationary items, utensils, etc. to them. These NGOs further segregate and distribute these items to the needy.

Answer the following questions based on the above information:

- (i) In your opinion what objective/objectives are fulfilled by this initiative?
- (ii) What values do they promote?
- **Ans.** (i) (a) Good initiative approach of reuse.
- (b) Sensitising general public towards community.
- (ii) Invoking social responsibility among citizens by contributing their share towards much generous acts of society towards their under privileged fellows.
- Q. 3. Reena is a student of Class X of a Government School. She is a member of "Eco club" of her school.

Answer the following questions based on the above information:

- (i) What suggestions would you like to give Reena to improve the environment in her school?
- (ii) What values are promoted by Reena?

Ans. (i) (a) Growing plants and trees in the open area in the school.

- (b) Arrangement for water harvesting.
- (c) Reporting any kind of water leakage in the school.
- (ii) Environmental protection.
- Q. 4. 'Saving for the rainy day' is a popular proverb which means saving something for the times when it may not be available. Examine the practice of 'Rain water harvesting'.

Answer the following questions based on the above situation:

- (i) Explain briefly the term 'Rain water harvesting'.
- (ii) Which values are promoted through the practice of rain water harvesting?
- (iii) Suggest two activities on the part of the school to promote this practice. How can these activities promote environmental values in the community?
- Ans. (i) To collect and conserve rainwater during time when it is available in plenty and use it later.
- (ii) Conservation of natural resources/Ecological balance.
- (iii) Undertaking projects in the school for water harvesting practice/Spreading awareness in the community and promoting this practice amongst masses.
- Q. 5. Few years back, disposable plastic cups were used for serving tea in trains. The impact caused by the disposal of millions of these cups on a daily basis caused a serious environment concern and disposable kulhads, made of clay, were used instead. However, this resulted in loss of the fertile top-soil and hence was discontinued and has now been replaced by disposable paper cups.

Answer the following questions based on above information:

- (i) What is the advantage of using disposable paper-cups over disposable plastic cup?
- (ii) Which values are promoted by using disposable and 'paper cups'.
- (iii) Can such practices be followed at domestic level also? Give reasons.
- Ans. (i) Paper cups are biodegradable whereas plastic is non-biodegradable and hence they latter is more environmental friendly.
- (ii) Environmental care; recycling of natural resources, hygiene.
- (iii) Better hygienic care practices can be followed at home and hence same utensils/materials can be used again and again resulting in judicious use of materials.
- Q. 6. My sister is in habit of keeping the tap open while brushing her teeth. She loves to bathe under shower. My neighbour uses hosepipe attached to drinking water supply pipe for washing his scooter and car. According to me their way of handling the most precious source water is absolutely wrong.

On the basis of the above information answer the following questions.

- (i) Do you agree with me or not?
- (ii) What changes in the above situation can be done to conserve water.
- (iii) What values are promoted by me?

Ans. (i) Agreed.

(ii) One should minimise use of water, should not keep the taps open when not in use, should use bucket of water for cleaning purpose, for taking bath, as these

practices consume less water.

- (iii) Judicious use of resources, environmental friendly nature.
- Q. 7. Sheha and Sugandha are friends. Sneha belongs to a rich family and she believes in throwing and discarding the things after use while Sugandha does not like wastage and she reuses the things.

On the basis of the above information answer the following questions.

- (i) How does reusing the things avoid wastage?
- (ii) List any two examples where you can reuse the things.
- (iii) What change can you make in your habits to become more eco-friendly.
- (iv) What values are showed by Sugandha?
- Ans. (i) Reusing means using the things again and again, thus without wastage of any energy we can use the things.
- (ii) Old envelopes can be reused; old newspapers can be used to make cards, pots, decorative pieces, etc.
- (iii) By adopting the principles of three R's we can make our selves eco-friendly.
- (iv) Concern for environment, social concern.
- Q. 8. Sartaj, a Class-X student, is a resident of Srinagar. He sees tourists roaming around throughout the year. He likes to see new people in his native place but one thing disturbs him. They throw plastic covers, bottles and other litter here and there. He picks up the waste and throws it in the dustbins whenever he can.

On the basis of the above information answer the following question.

- (i) As a responsible citizen of the country what two precautions you would take while visiting tourist place.
- (ii) What values are promoted by Sartaj?
- Ans. (a) While visiting to tourist places we should not throw garbage and waste materials.
- (b) We should not try to temper with the natural beauty of that place.
- (ii) Environmental protection, cleanliness.
- Q. 9. Some residents of your colony are planning to cut trees to create a place for parking vehicles. You are upset by knowing all this and wanted to do something to create awareness about the important of trees.
- (i) List any three reasons that you will use to convince residents of your colony not to cut the existing trees.
- (ii) List any three values that would be inculcated amongst them with such approach.
- Ans. (i) Importance of green plants, reducing air pollution, reducing noise levels, aesthetic value, sapling distribution, giving potted plants in place of bouquet, creating awareness. (Any three)

(ii) To protect and improve the natural environment, social awareness, environmental conservation, eco-friendly approach value for life. (Any three)