# 20. Sanitation and Solid Waste Management

## **Very Short Answer**

#### 1. Question

Why is cleanliness required for humanity?

#### Answer

The term cleanliness means the absence of dust, garbage, foul smell, stain, dirt, etc. Cleanliness is an important part of our life. It is the most important practice for a clean and healthy environment. It includes both personal and public hygiene. Keeping our mind, body, soul, and intellect pure is an important practice in human life. It is very important to keep our household, workplace and the environment in general very clean. Any negligence in this regard can cause diseases and have many other harmful effects.

#### 2. Question

When was the cleanliness educations provided?

#### Answer

According to the Indian philosophy, firstly the sacrifice rituals were taught. Following this, the cleanliness ritual and its importance were explained.

## 3. Question

Why is the problem of the densely populated area more suffering?

#### Answer

The densely populated area are suffering greatly with the problem of cleanliness. The weaker group of society along with the children and the old, who have poor resistance are suffering from diseases. The main reason behind polluting the environment is the poor control of waste. This is because the people in these areas do not have proper access to the waste disposal system. This has led to the contamination of drinking water, food chain, and the water used for bathing and other purposes.

## 4. Question

Name the insects that transmit disease.

#### Answer

The diseases can be spread by a number of insects such as fly, mosquito, fleas, bed bugs can transmit various infectious diseases such as yellow fever, dengue, chikungunya, etc.

## 5. Question

What is the limitation of solid waste management?

#### Answer

Solid waste management means to manage the process of treatment, salvage, reuse, re-rotation change of energy without affecting the environment and the public health in this system the state has the responsibility to provide training, suggestion, and resources to the local bodies of Urban and rural areas for solid waste management. In this system cleaning workers are employed on a regular or contractual basis to bring garbage from the houses hospitals and other establishment and gather it at the garbage collection center. From this center, it is taken to the garbage disposal center through different means of transportation like trucks, tractors, etc. At the disposal center, the garbage is divided into different categories and then disposed of accordingly. Although there are many benefits to this system, it also has certain limitations. The municipal waste management team of indisposed the waste in an improper manual creating a heap of waste. This type of dumping of waste material sources the biodegradable material tourist and decompose in unhygienic conditions. After a few days, it becomes the breeding ground of different types of diseases causing insects and other infectious organisms.

## 6. Question

What is a domestic waste?

## Answer

Domestic waste is the waste that is generated due to the day to day use of a domestic premise. It is taken from the premise by the person who generated it or by somebody on his behalf. It can also be collected by the local government as a part of waste collection and disposal system. For example the solid waste of garbage such as bottles, cans, newspapers, food packaging, disposals, etc.

# 7. Question

What is hazardous waste?

## Answer

Hazardous waste is a waste that is a potential threat to public health. There are 4 types of hazardous waste:1. Toxic- poisonous in nature2. Corrosive - rustic in nature3. Igniting - flammable in nature4. Reactive - explosive in natureFor example batteries, paint, pesticides, solvents, etc.

# 8. Question

What is called organic manure?

## Answer

Organic manure is a fertilizer which is obtained from animal matter, animal excreta, human excreta and vegetable matter such as compost and crop residue. The most common type peat, animal waste from the slaughterhouse, plant waste from agriculture and treated sewage waste. They are considered to be better than chemical fertilizers because they help to improve the structure of the soil and increase its ability to hold water and nutrients for a longer time. There is no risk of toxic build up in the plants. They are renewable, sustainable, biodegradable and environment-friendly.

#### **Long Answer**

#### 1. Question

Why is the importance of cleanliness in human life?

#### Answer

Cleanliness is an important part of our life. It is the most important practice for a clean and healthy environment. It includes both personal and public hygiene. The term cleanliness means the absence of dust, garbage, foul smell, stain, dirt, etc. It is extremely important to learn about hygiene and sanitation so that we can keep our self away from diseases. It is the prime role of the government to create awareness on this matter. Usually, cleanliness is understood in relation to health care, but its importance in the field of education, food service, hospitality, etc are often ignored. The importance of cleanliness can be understood under various heads mentioned below:1. Cleanliness for health: Effective cleaning should be a part of a lifestyle to create a healthier indoor environment by complete elimination of the contaminants that can make the people sick. The working group of the country usually spend a significant time in their workplace. So it is extremely important for both the employer and the employees to work dedicatedly in cleaning the environment workplace would create a welcome atmosphere for the staff.2. Cleanliness for safety: Proper methods of cleanliness should be employed for the safety of the people. It can prevent fire hazards and lower the exposure of the workers to hazardous substances like dust, which may cause allergies and asthmatic reaction.3. Cleanliness for buildings: It is usually observed that the owners of the building considered investment in health as a liability rather than an asset. The owner must have a proper cleaning program with an efficient staff member for the same. A clean building attracts occupancy as well as business. On the other hand, a building with poor maintenance and infrastructure can have a negative effect on potential buyers.4. Cleanliness in our homes: Needless to say cleanliness must also be maintained in our own personal environment. It would help to keep our mind and spirit very clean.5. Cleanliness for tourism: Clean environment can also attract tourist. No one would want to visit a foul land with garbage all over.6. Cleanliness for fitness: People should realise the importance of cleanliness as it can help them to be free from diseases like swine flu, chicken pox, malaria, etc.Both the government and the citizens of the country should undertake integrated and dedicated efforts to spread awareness regarding cleanliness. The government must organize awareness programs in schools, colleges, building a society, etc. They must be given the knowledge as to how to apply it in daily life. Such programs can be very effective in schools

through a variety of activities like paper presentations, painting competition, essay writing, etc.

# 2. Question

According to the World Health Organization, Clarify the meaning of cleanliness.

# Answer

World Health Organisation or WHO is a specialised agency of the United Nations that is related to the international public health. Its main aim is to act as a directing and coordinating force of all matters of international health work. According to WHO, cleanliness has been described in the following way:1. The people have to take measures to clean the toilet and the contaminated water for sanitation.2. The general purpose of cleanliness is to provide those provisions, facility, and services which secured salvage of human seminal urine and garbage, etc.3. Many large businessmen have agreed that cleanliness is a major concern. This includes the following:i. Safe storage, treatment, disposal and reuse of solid waste.ii. Management of recycling and reuse of solid waste.iii. Removal of family contaminate measure for reuse and recycle.iv. The drainage system of stormwaterv. Collection and disposal of Industrial waste management.vi. Collection and disposal management of hazardous waste such as chemical waste, hospital waste, radioactive waste, etc.

# 3. Question

How many types of hygiene are there?

# Answer

Hygiene and sanitation refer to the public health conditions and adequate treatment of disposal. There are mainly 6 types of sanitation:1. Communityled total sanitation/CLST: In the case of community sanitation the most common negligence is defecating in the open. The rural people have to get acquainted with the donated facilities to stop this practice. 2. Dry sanitation: It includes the additional facilities like setting up of dry toilets and urinals.3. Ecological sanitation: It is related to safe following measures in cleanliness. It advocates the use of nonirradiation in the production of nutritious food and organic crops.4. Environmental sanitation: It includes the control of environmental factors that can cause diseases resources. For example sustainable waste management, treatment of water and contaminated water, noise pollution, and industrial waste treatment.5. Improved and unimproved sanitation: It includes the man urinary abstinence control at home level, and taking care of cleanliness and water supply.6. Lack of cleanliness: It is related to the lack of toilets in rural areas. The absence of hygiene leads to excretion in the open areas.7. Sustainable sanitation: It includes all the forms of sanitation including ways of transport, treatment, sewage, contaminated water.

# 4. Question

What is the objective of the Solid Waste Management Program?

#### Answer

Solid waste management means to manage the process of treatment, salvage, reuse, re-rotation change of energy without affecting the environment and the public health in this system the state has the responsibility to provide training, suggestion, and resources to the local bodies of Urban and rural areas for solid waste management. In this system cleaning workers are employed on a regular or contractual basis to bring garbage from the houses hospitals and other establishment and gather it at the garbage collection center. From this center, it is taken to the garbage disposal center through different means of transportation like trucks, tractors, etc. At the disposal center, the garbage is divided into different categories and then disposed of accordingly.

The main objectives of the solid waste management system are the following:1. To ensure a proper waste disposal system that protects the environment and public health.2. Reduce the volume of waste generated3. Provide an efficient and economical method of disposal4. Ensure proper disposal of the hazardous materials5. To promote environmental management and conservation of resources6. Minimize the consumption of natural resources7. Reduce, reuse, recycle and recover waste8. Preventing ecological degradation9. Create awareness among the people regarding the impact of waste on their health and the environment10. Securing the ecological development while promoting social developmentThese are the general and primary objectives of the solid waste management system. Apart from these, there are certain specific measures that are employed by the municipal corporation of each area. This includes the waste disposal scheme, standard for waste management, target for waste reduction, etc

## 5. Question

Which measures have been taken for solid waste management?

## Answer

Solid waste management means to manage the process of treatment, salvage, reuse, re-rotation change of energy without affecting the environment and the public health in this system the state has the responsibility to provide training, suggestion, and resources to the local bodies of Urban and rural areas for solid waste management. In this system cleaning workers are employed on a regular or contractual basis to bring garbage from the houses hospitals and other establishment and gather it at the garbage collection center. From this center, it is taken to the garbage disposal center through different means of transportation like trucks, tractors, etc. At the disposal center, the garbage is divided into different categories and then disposed of accordingly.

**The measures that have been taken for solid waste management are** 1. <u>Waste reduction and reuse:</u> Remedial measures like reduction and reuse of waste are taken. Reduction of waste means encouraging the Producers and Consumers to produce less waste such as reduction in packing, using bags and

covers made of cloth or recycled material. Reusing of waste means encouraging the public to purchase reusable goods. They are also advised to donate old clothes, utensils, etc to the needy.2. Recycle waste: Recycling means reducing the amount of waste and using the waste generated for some other purpose. There are 3 levels of recycling process: i. Reconstructing the recyclable material and metal from stored waste and collecting them separately, ii. Preparation of raw material from collected metal. iii. Creating a new product from raw material.3. Collection of waste: The local bodies appoint a staff which has the responsibility to collect the waste and recycled waste twice a week. But the waste that is a shelter to the flies or spreading odor has to be collected immediately.4. Treatment and disposal: The new garbage treatment technology has discovered that if the management form is changed, it can help to reduce the amount of waste generated, which would imply a simpler waste disposal method. The waste is disposed on the basis of the amount of waste and type.5. Incineration: In this method, the waste is combusted in the presence of oxygen. After accumulation, the garbage turns into carbon dioxide and water vapor. This method helps to reduce transport cost and the production of methane.6. Gasification and pyrolysis: Both are similar thermal methods. In this method the component of the waste is dissolved at high temperature these are used in low oxygen or nonoxygen field.

#### 6. Question

What are the benefits of solid waste management?

#### Answer

Solid waste management means to manage the process of treatment, salvage, reuse, re-rotation change of energy without affecting the environment and the public health in this system the state has the responsibility to provide training, suggestion, and resources to the local bodies of Urban and rural areas for solid waste management. In this system cleaning workers are employed on a regular or contractual basis to bring garbage from the houses hospitals and other establishment and gather it at the garbage collection center. From this center, it is taken to the garbage disposal center through different means of transportation like trucks, tractors, etc. At the disposal center, the garbage is divided into different categories and then disposed of accordingly.

The benefits of solid waste management are :

1. It helps to control the spread of fire accident, rats, pests and pathogens of infectious diseases2. It helps to control the diseases, and increase the ability to work.3. It helps to keep a control on the water pollution due to the reduction of toxic substance4. It helps to generate electricity at an affordable power generation expenditure5. Raw material will be available which would make the items made of recyclable material6. It helps to provide more employment opportunities due to the increase in the level of work.7. The availability of precious metals will increase.8. It provides an inexpensive and good botanical compost.9. The capacity of Agricultural production will increase, and the yield would also improve.10. It will improve the public health system and reduce the burden of patients on hospitals.