## 7.1.2

### Query 1.

a. We have not alternate energy sources.

## b. We manage diverse categories of degradable and non-degradable waste.

Navjivan science college have two types of Dustbins for Waste Management

### 1. Degradable Waste Bins

- Color: Blue
- **Purpose:** To collect organic waste like food scraps, yard waste, and biodegradable paper.
- Features:
  - **Ventilation:** Ensure proper airflow to reduce odours.
  - **Compostable Bags:** Use biodegradable liners to facilitate composting.
  - **Clear Signage:** Labels and images to indicate acceptable materials (e.g., fruits, vegetables, yard waste).

#### 2. Non-Degradable Waste Bins

- Color: Red
- **Purpose:** For materials that cannot break down, such as plastics, metals, and certain glass items.
- Features:
  - **Durability:** Made of strong materials to withstand wear and tear.
  - **Clear Signage:** Indicate what can be placed inside (e.g., cans, bottles, plastic wrappers).
  - Accessibility: Easy to open for all users, including those with disabilities.



#### "Disabled-friendly, barrier free environment"

Creating a barrier-free environment involves designing spaces that are accessible to everyone, regardless of their physical abilities.

#### Ramps

- 1. **Slope:** Ensure ramps have a gentle slope (typically a 1:12 ratio) to make them manageable for wheelchair users.
- 2. Width: Ramps should be wide enough (at least 36 inches) to accommodate wheelchairs and scooters.
- 3. Surface: Use non-slip materials to prevent accidents, especially in wet conditions.
- 4. Handrails: Install handrails on both sides for support, especially on longer ramps.
- 5. Landing Areas: Provide flat landing areas at the top and bottom of the ramp for safety.



#### Chairs

- 1. **Design:** Use chairs that have armrests and are at a height that makes it easy to sit down and stand up.
- 2. Space: Ensure there is enough space around chairs for wheelchair access and movement.
- 3. **Durability:** Choose materials that are sturdy and easy to clean, as well as comfortable for users.
- 4. **Mobility:** Consider adding options for movable chairs to create flexible seating arrangements.



Creating disabled-friendly washrooms is essential for ensuring accessibility and comfort for all users.

## Key Features of Disabled-Friendly Washrooms

- 1. Accessibility:
  - **Wide Doorways:** Doors should be at least 32 inches wide to accommodate wheelchairs.
  - **Clear Space:** Ensure there's enough maneuvering space (at least 60 inches) for wheelchair users.

### 2. Stall Design:

- Accessible Stalls: Stalls should be large enough (at least 60 inches wide) to allow for easy transfer from a wheelchair.
- **Grab Bars:** Install grab bars near the toilet, positioned at the right height (33-36 inches) for support.

## 3. Toilet Height:

• **Comfort Height Toilets:** Use toilets that are 17-19 inches high to make transfers easier.

### 4. Sinks and Counters:

- Accessible Sinks: Sinks should be mounted at a height that allows wheelchair users to roll under (about 29 inches) with lever faucets for easy use.
- **Soap and Towel Dispensers:** Place these within easy reach and ensure they are accessible from a seated position.

### 5. Flooring:

 Non-Slip Surfaces: Use non-slip flooring materials to prevent falls, especially when wet.

### 6. Lighting:

• **Adequate Lighting:** Ensure good visibility with bright, even lighting for convenience.









Restroom is not available

Query 2:

We have not alternative source of energy.

Query 3:

We have contract with the third party named Zulfiqar Computers Shop who repairs and discards the e-waste and solid waste.

COMPUTERS PRINTERS PERIPHERALS 2/3/4, Galaxy Complex, Opp. Bus Stand, DAHOD. 389151 (Gujarat) NETWORKING e-mail: zulfiqarcomputers@gmail.com (M) 9898778605, 9898069786 **CCTV CAMERA** ZULFIQAR TO, THE PRINCIPAL NAVJIVAN SCIENCE COLLEGE, DAHOD SUBJECT: An agreement to disposal E- Waste Dear Sir, We are agree to pick up E- waste like ( computers monitor, printers, CPU and other electronics items) from your institute and shall arrange to dispose them as per prevailing norms. Thanks (intel Canon ( SAMSUNG (

# Query 4:

# Rain harvesting tank

Dimensions of the tank in meter: 3.38 × 2.51 m







Dahod, Gujarat, India V64V+7RJ, Chhapri, Dahod, Gujarat 389151, India Lat 22.85628° Long 74.244452° 26/04/23 11:10 AM GMT +05:30





Rainwater harvesting in a college setting can be a highly effective way to conserve water, reduce water bills, and promote environmental sustainability among students and staff. Here's a step-by-step guide to implementing a rainwater harvesting system in a college:

#### 1. Assessment of Water Needs

- Identify water usage areas: Consider areas where non-potable water can be used, such as in gardens, cleaning, toilets, and sports fields. This will help in deciding how much water is needed.

- Estimate the amount of water that can be collected: This depends on the roof area of the college buildings, local rainfall patterns, and the storage capacity.

#### 2. System Design

The basic components of a rainwater harvesting system include:

- Catchment area: The rooftops of college buildings serve as the catchment area where rainwater is collected.

- Gutters and downspouts: These channels direct rainwater from the rooftop to a storage facility. Gutters need to be properly designed to handle large volumes of rainwater.

- Filtration system: Water passes through a filter to remove debris, leaves, and dirt. There are various filtration systems like sand filters, mesh filters, or first flush devices.

- Storage tank: The collected water is stored in tanks. These tanks can be underground or aboveground. They must be of sufficient size to store enough water to meet non-potable needs.

- Distribution system: Pipes distribute the harvested water to places where it can be used, such as irrigation systems, toilets, and cleaning areas.

3. Implementation Process

- Survey the campus: Analyse the roof surface areas, rainfall data, and the potential water needs of the college.

- Design the system: Based on the collected data, design a system with proper storage capacity and filtration.

- Install the infrastructure: This includes setting up the gutters, filters, and storage tanks.

- Educate and involve students: Students can be engaged through workshops and involvement in setting up the system. This will also raise awareness about water conservation.

#### 4. Maintenance

- Regular cleaning of filters, gutters, and tanks is essential to maintain the quality of the harvested water.

- Periodic checks of the entire system should be scheduled to ensure it is functioning effectively.

5. Benefits of Rainwater Harvesting in College

- Water conservation: It helps reduce the demand on the local water supply system, especially in areas facing water scarcity.

- Cost savings: It can lower water bills, as harvested rainwater can be used for many non-drinking purposes.

- Educational impact: It serves as a live example of sustainability for students, promoting awareness of environmental issues.

- Stormwater management: Helps reduce flooding by managing runoff during heavy rains.