

**1. Write short notes on any two:**

**(a) Etiquettes**

Etiquette refers to the customary code of polite behavior in society or among members of a particular profession or group. It comprises a set of unwritten rules governing how individuals should interact with each other in various social and professional settings to show respect, consideration, and professionalism. Good etiquette facilitates smooth communication, fosters positive relationships, and creates a comfortable environment for everyone. Examples include table manners, showing courtesy to elders, respecting personal space, using polite language ("please," "thank you"), dressing appropriately for occasions, and being punctual. Adhering to proper etiquette reflects an individual's upbringing, self-awareness, and respect for societal norms, contributing to harmonious social interactions.

**(b) Water Conservation**

Water conservation involves the efficient management and preservation of water resources to ensure their sustainable availability for current and future generations. It encompasses reducing water waste, preventing pollution, and developing new ways to use water more efficiently. The importance of water conservation stems from the finite nature of fresh water, increasing global population, climate change impacts (droughts, erratic rainfall), and rising demand from agriculture and industry. Measures include fixing leaks, using water-efficient appliances (e.g., low-flow showerheads, dual-flush toilets), rainwater harvesting, drip irrigation in agriculture, wastewater recycling, and promoting public awareness about

responsible water use. Effective water conservation is crucial for ecological balance, food security, public health, and economic sustainability.

### **(c) Natural Disasters**

Natural disasters are major adverse events resulting from natural processes of the Earth, which cause significant loss of life, property damage, and widespread disruption to human society. Unlike human-made disasters, their primary causes are geological, meteorological, or hydrological phenomena. Common types of natural disasters include:

- **Geological:** Earthquakes, volcanic eruptions, tsunamis, landslides, avalanches.
- **Meteorological/Hydrological:** Floods, droughts, hurricanes/cyclones/typhoons, tornadoes, blizzards, heatwaves, wildfires. These events can trigger secondary disasters and have profound long-term socio-economic and environmental impacts, necessitating robust disaster preparedness, mitigation, and response strategies.

## **2. Describe different Energy conservation measures.**

Energy conservation refers to reducing the amount of energy consumed by utilizing less energy for the same tasks or eliminating wasteful energy use. It's crucial for mitigating climate change, preserving natural resources, and reducing energy costs. Measures can be broadly categorized:

### **1. Residential/Commercial Sector Measures:**

- **Improving Insulation:** Insulating walls, roofs, and windows (e.g., double-pane) significantly reduces heat loss in winter and heat gain in summer, lowering heating and cooling demands.
- **Energy-Efficient Appliances:** Replacing old appliances (refrigerators, washing machines, air conditioners, water heaters) with energy-rated models (e.g., BEE star ratings in India) that consume less power.
- **LED Lighting:** Switching from incandescent or fluorescent bulbs to Light Emitting Diodes (LEDs) drastically reduces electricity consumption for lighting.
- **Smart Thermostats & Controls:** Programmable thermostats optimize heating/cooling schedules. Occupancy sensors and dimmers reduce lighting use when not needed.
- **Passive Solar Design:** Incorporating architectural features that maximize natural light and regulate indoor temperature (e.g., strategic window placement, shading devices).
- **Unplugging Electronics:** Reducing "vampire power" by unplugging devices or using power strips that cut power when devices are off.

## 2. Transportation Sector Measures:

- **Promoting Public Transport:** Encouraging the use of buses, trains, and metros reduces individual vehicle reliance.
- **Cycling and Walking:** Promoting non-motorized transport for short distances.
- **Fuel-Efficient Vehicles:** Developing and incentivizing the purchase of vehicles with higher mileage or hybrid/electric powertrains.

- **Carpooling/Ride-sharing:** Sharing rides reduces the number of vehicles on the road.
- **Optimized Logistics:** Efficient route planning and logistics for freight transport to minimize fuel consumption.

### 3. Industrial Sector Measures:

- **Process Optimization:** Improving industrial processes to reduce energy input per unit of output (e.g., waste heat recovery, efficient motor drives).
- **Cogeneration (CHP):** Producing electricity and useful heat simultaneously from a single fuel source.
- **Regular Maintenance:** Ensuring machinery and equipment are well-maintained to operate at peak energy efficiency.
- **Energy Audits:** Conducting regular audits to identify areas of energy waste and implement corrective actions.

### 4. Behavioral Changes:

- **Conscious Usage:** Turning off lights/fans when leaving a room, minimizing water heater usage, and full loads for washing machines.
- **Awareness Campaigns:** Educating the public about the importance of energy conservation and simple daily habits.

Implementing a mix of these technological upgrades, policy changes, and behavioral shifts is essential for comprehensive energy conservation.

### 3. What are basic principles of Time Management? Explain any two.

Time management involves organizing and planning how to divide your time between specific activities. Effective time management enables

individuals to work smarter, not harder, leading to increased productivity, reduced stress, and greater accomplishment. Basic principles include goal setting, prioritization, planning, avoiding procrastination, delegating, focusing, and regular review. Let's explain two:

### 1. **Prioritization (Focus on Important, Not Just Urgent):**

- **Principle:** This principle emphasizes distinguishing between tasks that are urgent (require immediate attention) and those that are important (contribute to long-term goals and values). Often, urgent tasks are not necessarily important, and focusing solely on them can lead to neglecting crucial long-term objectives. The most effective time managers spend most of their time on important but not yet urgent tasks, preventing them from becoming urgent crises.
- **Explanation:** A common tool for this is the **Eisenhower Matrix**, which categorizes tasks into four quadrants:
  - **Urgent & Important (Do first):** Crises, deadlines.
  - **Important & Not Urgent (Schedule):** Planning, prevention, relationship building, personal growth. This is where productive work happens.
  - **Urgent & Not Important (Delegate):** Interruptions, some emails/calls, minor requests.
  - **Not Urgent & Not Important (Eliminate):** Time wasters, busywork.
- **Example:** For a student, studying for a major exam is "Important & Not Urgent" for weeks. If neglected, it becomes "Urgent & Important" the night before, leading to stress.

Prioritizing studying regularly avoids this crisis. For an employee, planning a strategic project (Important, Not Urgent) should take precedence over responding to every non-critical email immediately (Urgent, Not Important).

## 2. Goal Setting (Clarity of Purpose):

- **Principle:** Before managing time, one must first define what they want to achieve. Clear, specific, and measurable goals provide direction and motivation. Without well-defined goals, time management lacks purpose, and efforts can become scattered. Goals act as the compass, guiding where time should be allocated.
- **Explanation:** Goals should be SMART:
  - **Specific:** Clearly defined.
  - **Measurable:** Quantifiable progress.
  - **Achievable:** Realistic.
  - **Relevant:** Aligned with broader objectives.
  - **Time-bound:** Have a deadline.
- **Example:** Instead of a vague goal like "get fit," a SMART goal would be "run 30 minutes, 4 times a week, for the next 3 months to improve cardiovascular health." This clear goal allows one to allocate specific time slots for running, track progress, and stay motivated. In a professional context, setting a goal like "Complete the Q3 sales report by July 15th" enables one to block out necessary time and resources, making the task manageable and the effort purposeful.

By applying these principles, individuals can gain control over their time, achieve more meaningful outcomes, and reduce the feeling of being overwhelmed.

#### **4. Enlist 5 Do's and Don'ts instructions to be followed by NCC Cadets performing disaster related tasks.**

NCC Cadets play a crucial supportive role during disaster relief. To ensure their safety and effectiveness, specific instructions must be followed:

#### **5 DO's for NCC Cadets during Disaster Related Tasks:**

1. **DO prioritize personal safety and the safety of others.** Always assess the situation for immediate dangers before acting and never put yourself or others at unnecessary risk. Your primary task is to support, not to become a casualty.
2. **DO follow all instructions from authorized disaster management personnel.** Work under the direct supervision of experienced officials (NDMA, civil administration, police, army) and strictly adhere to their directives, as they have the overall plan and expertise.
3. **DO maintain discipline, teamwork, and a calm demeanor.** Work cohesively as a unit, support your fellow cadets, and project a sense of calm and order to the affected population. Panic is contagious and counterproductive.
4. **DO focus on assigned tasks diligently and efficiently.** Whether it's providing first aid, distributing relief material, or assisting in communication, execute your specific duties with utmost dedication and precision.

5. **DO communicate clearly and report accurate information.**

Provide precise updates to your seniors and the authorities about the situation on the ground, observed needs, or any emerging hazards.

Avoid spreading rumors or unverified information.

**5 DON'Ts for NCC Cadets during Disaster Related Tasks:**

1. **DON'T act alone or deviate from assigned roles.** Never venture into hazardous areas independently or take initiatives outside your training and assigned duties. You are part of a larger coordinated effort.

2. **DON'T endanger yourself or others through reckless actions.** Avoid heroic but unsafe gestures. Do not enter unstable structures, contaminated areas, or swift waters without proper training and equipment.

3. **DON'T spread rumors, misinformation, or create panic.** In chaotic situations, misinformation can be more damaging than the disaster itself. Rely only on official sources for information.

4. **DON'T prioritize personal belongings or collect souvenirs from affected areas.** Your focus must be entirely on relief and assistance. Looting or taking items, even seemingly abandoned ones, is unethical and illegal.

5. **DON'T neglect your own basic needs (rest, hydration, food) or emotional well-being.** Disaster work is physically and mentally taxing. Take designated breaks, stay hydrated, and report if you are feeling overwhelmed or distressed. A burnt-out helper is no help.