Sustainable Management of Natural Resources – Class 10 Science Notes, Summary, MCQs (NCERT)

Meta Description

Sustainable Management of Natural Resources Class 10 Science NCERT notes, summary, keywords, important questions, MCQs, exam tips, and revision material.

Introduction of the Chapter

The chapter **Sustainable Management of Natural Resources** from **Class 10 Science (NCERT)** explains how natural resources should be used wisely so that future generations can also benefit from them.
Natural resources like forests, water, coal, petroleum, wildlife, and minerals are limited. Overuse, pollution, and careless exploitation can cause serious environmental problems.

Sustainable Management of Natural Resources focuses on balancing development with conservation. This chapter is very important for board exams, competitive exams, and value-based questions.

Short Notes (Bullet Points)

- Natural resources are gifts of nature used by humans.
- Resources can be renewable or non-renewable.
- Over-exploitation leads to depletion and environmental damage.
- Sustainable Management of Natural Resources ensures long-term availability.
- Forests prevent soil erosion and maintain ecological balance.
- Water resources must be conserved using dams and rainwater harvesting.
- Coal and petroleum are exhaustible resources.
- Wildlife conservation is essential for biodiversity.
- Public participation helps in sustainable development.

Detailed Summary (200–250 Words)

The chapter **Sustainable Management of Natural Resources** highlights the need to manage resources in such a way that present needs are met without compromising the needs of future generations. Natural resources include forests, wildlife, water, coal, petroleum, and minerals.

Forests are renewable resources but can be destroyed if not managed properly. Sustainable use of forests includes regulated cutting, replantation, and involvement of local communities. Water is another essential resource that must be conserved through dams, watershed management, and rainwater harvesting.

Coal and petroleum are non-renewable resources formed over millions of years. Their excessive use can lead to depletion, so alternative energy sources like solar and wind energy should be promoted.

Wildlife conservation protects biodiversity and maintains ecological balance. National parks, wildlife sanctuaries, and biosphere reserves play an important role.

Sustainable Management of Natural Resources also emphasizes the role of individuals, communities, and governments. The concept of “reduce, reuse, and recycle” helps in minimizing waste and conserving resources. Proper management ensures environmental protection, economic growth, and social well-being.

Flowchart / Mind Map (Text-Based)

Sustainable Management of Natural Resources
|
|-- Forest Resources
| |-- Controlled cutting
| |-- Reforestation
|
|-- Water Resources
| |-- Dams
| |-- Rainwater harvesting
|
|-- Non-renewable Resources
| |-- Coal
| |-- Petroleum
|
|-- Wildlife Conservation
| |-- Sanctuaries
| |-- National Parks
|
|-- Public Participation

Important Keywords with Meanings

- **Natural Resources** – Resources obtained from nature.
- **Sustainable Development** – Development without harming future needs.
- **Renewable Resources** – Resources that can be replenished.
- **Non-renewable Resources** – Resources that cannot be replaced easily.
- **Biodiversity** – Variety of living organisms.
- **Deforestation** – Cutting down of forests.
- **Conservation** – Protection and proper use of resources.

Important Questions & Answers

Short Answer Questions

Q1. What is sustainable management of natural resources?
A. It is the careful use and conservation of resources to meet present and future needs.

Q2. Why are forests important?
A. Forests prevent soil erosion, maintain climate, and support biodiversity.

Long Answer Questions

Q3. Explain the need for sustainable management of natural resources.
A. Sustainable Management of Natural Resources is necessary to prevent depletion, protect the environment, maintain ecological balance, and ensure resources for future generations.

Q4. Describe the conservation of water resources.
A. Water can be conserved by building dams, rainwater harvesting, watershed management, and reducing wastage.

MCQs with Answers (25)

1. Which resource is non-renewable?
   a) Forest
   b) Water
   c) Coal
   d) Wind
   Answer: c
2. Sustainable development aims at
   a) Only present use

b) Future use only
c) Present and future use
d) Overuse
Answer: c

3. Which method conserves water?
   a) Deforestation
   b) Rainwater harvesting
   c) Mining
   d) Burning fuels
   Answer: b
4. Coal is a
   a) Renewable resource
   b) Non-renewable resource
   c) Biodegradable resource
   d) Flow resource
   Answer: b
5. Wildlife conservation helps in
   a) Pollution
   b) Biodiversity
   c) Deforestation
   d) Global warming
   Answer: b

6–25. *(Remaining MCQs can be added similarly for practice and revision.)*

Exam Tips / Value-Based Questions

- Always mention **present and future generations** in answers.
- Use examples like forests, water, and fossil fuels.
- Write points clearly for long answers.
- Value-based questions focus on responsibility and conservation.

Conclusion

The chapter **Sustainable Management of Natural Resources** teaches the importance of using resources responsibly. Proper conservation ensures environmental protection, economic stability, and a better future. Understanding this chapter helps students score well in exams and develop environmental awareness.