

**Syllabus for Competitive Examination for the post of
Environmental Engineer**

1. GENERAL

- Global Environmental concerns
- Global conventions for environment protection
- Types of Pollution- Natural and Man made
- Effects of Pollution
- Environmental laws of India

2. WATER

- Standards for water quality- Surface and Ground Water
- Water treatment methods

3. WATER POLLUTION

- Sewage Pollution-sources and effects
- Sewage treatment methods
- Design of UGD system /Water Supply
- Design of Sewage Treatment Plant (STP)
- Operation and Maintenance of STP
- Objective & salient features of Water (Prevention & Control of Pollution) Act, 1974

4. INDUSTRIAL EFFLUENT

- Source and effects
- Effluents treatment methods
- Design of Treatment plants
- Operation and Maintenance of ETP

5. AIR POLLUTION

- Air Pollution-Source and effects.
- Ambient Air Quality Standards
- Air Pollution Controls Systems
- Design of Pollution control Equipments
- Operation & Maintenance of Air Pollution Control
- Objective & salient features of Air (Prevention & Control of Pollution) Act 1981

6. SOLID WASTE

- Municipal Solid Waste
 - Source , Composition and effects
 - Solid Waste Management measures including treatment methods
 - Objective and salient features of Municipal Solid Waste (Management & Handling) Rules , 2000
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7. HAZARDOUS WASTE

- Definition , Classification and Characteristics of Hazardous Waste
- Hazardous Waste Management
- Objective and Salient features of Hazardous Waste (Management & Handling) Rules , 1989

8. NOISE

- Sources and their effects.
- Ambient Noise Standards
- Noise Control measures
- Objective and salient features of the Noise Pollution (Regulation & Control) Rules , 2000

9. HOSPITAL WASTES

- Types of Biomedical Waste generated in Hospitals.
- Treatment and disposal of Bio-medical waste
- Objective and salient features of Bio-medical waste (Management & Handling) Rules , 1998

10. PLASTICS

- Plastic waste source and effects.
- Steps to minimize the problem
- Objectives and salient features of Plastic Rules 1999

11. LAKES

- Importance of lakes and the need for protection
- Lake conservation measures.

12. CLEANER PRODUCTION

- Recycle , reuse and recover concept

13. EIA

- Need and uses of EIA
- Objective and salient features of EIA

14. ISO 14000 Series Environmental Management Standards

- Types of Standards and their uses.