

सत्रीय कार्य / Assignment Work – 2014-15

M.Sc. Environment Science (Final)

Max Marks – 30

Min Marks-12

निर्देश : सत्रीय कार्य के प्रत्येक विषय में कुल 30 अंक हैं। सभी प्रश्नों के अंक समान होंगे। सभी प्रश्न हल कीजिए। (Assignment Work of each paper carries 30 Marks. All questions carry equal marks. Attempt all questions.)

ENVIRONMENTAL TOXICOLOGY - I

1. Explain the Respiratory, Gastrointestinal tract, Dermal and Systemic effect of Chemical Contaminants.
2. Explain the toxicological and carcinogenic properties of disinfectants and disinfectant by-products.
3. Write a note on the toxicity of Benzene, Secondhand Smoke and Lead Compounds.
4. Write short notes on: (i) Biomagnification; and (ii) Effect of UV Radiation on special populations.
5. Explain the toxicological effects of Pesticides on Human Health.

ENVIRONMENTAL MICROBIOLOGY AND BIOTECHNOLOGY - II

1. Explain the mechanism of Biogas production in detail.
2. Write short notes on: (i) Small Scale Sewage Treatment; and (ii) BOD and COD.
3. Write short notes on: (i) Role of microorganisms in recycling of Nitrogen; and (ii) Role of Thiobacilli in Bioleaching.
4. Give a detailed account on Biofuels.
5. Write a note on the biodegradation of Xenobiotic Compounds.

ENVIRONMENT LAW AND SUSTAINABLE DEVELOPMENT - III

1. Write short notes on: (i) Rio Conference (UNCED) (1992); and (ii) Montreal Protocol.
2. Explain the powers and functions of CPCB (Central Pollution Control Board) and SPCB (State Pollution Control Board).
3. Write short notes on: (i) National Forest Policy, 1988; (ii) Provisions in IPC for environmental protection; and (iii) Sustainable Development.
4. Give a detailed account on Biodiversity (Protection) Act, 2002.
5. Write short notes on: (i) Need of Public Interest Litigation (PIL); and (ii) Public Liability Insurance Act.

POLLUTION MONITORING AND BIOREMEDIATION - IV

1. Write a detailed note on Air Pollution Monitoring devices.
2. Explain the process of microbiological analyses of water in detail.
3. Define Water Quality Standard. Explain the WHO Guidelines for acceptability aspects of Drinking Water.
4. Explain the Bioremediation process of Hydrocarbon polluted soil.
5. Write short notes on the following: (i) Biodegradation of MTBE ((Methyl tert-butyl ether); (ii) Phytoremediation; (iii) Flame Photometric analyses of Water.

ENVIRONMENTAL IMPACT ASSESSMENT AND AUDITING - V

1. What do you mean by EIA (Environmental Impact Assessment)? Explain its scope and objectives.
2. Explain the process of EIA in detail.
3. Write short notes on: (i) ICID Check-list; and (ii) Network Diagram.
4. Write a note on the human health issues associated with irrigation and drainage projects.
5. Define SEA (Strategic Environmental Assessment). Mention its basic principles and explain the main differences between SEA and EIA.