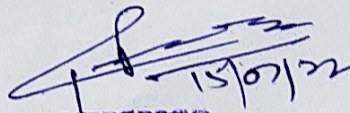


Syllabus for Entrance Test of M.Sc. (Environmental Sciences)

(Multiple choice questions from the following syllabus of graduation level)

- 1. Biological sciences:** Plant and Animal kingdom-classification, characteristics of various groups, morphology, anatomy, adaptations, Ecology.
Cell biology, molecular biology, structure and functions of biomolecules, genetics, microbiology and biotechnology.
Physiology and biochemical processes - Photosynthesis, respiration, nitrogen metabolism, protein synthesis, growth hormones, enzymes.
Structural and functional aspects of digestive, respiratory, circulatory, muscular, excretory, reproductive, endocrine and nervous system of animals.
Economic botany and plant diseases.
- 2. Chemistry:** Inorganic chemistry-Periodic table, s, p, d and f block elements, metallurgy, acids and bases, industrial chemistry, coordination chemistry.
Organic chemistry-Isomerism, nomenclature, name reactions, mechanism of organic reactions, hybridization, chemical bonding, aromatic compounds, chemical synthesis, phytochemistry. Environmental chemistry. Recent advances in chemistry. Applications of organic compounds in daily use, fertilizers and pesticides .
Physical chemistry – Chemical equilibrium, chemical thermodynamics, chemical kinetics, solutions, colligative properties, surface chemistry, catalysis, enzyme kinetics, nuclear chemistry.
- 3. Physics:** Mechanics, gravitational force, heat and energy, nuclear physics, semi conductor, optics, electromagnetic waves, sound.
- 4. Mathematics and Statistics-** Matrix, logarithms, differential and integral calculus, trigonometry, sequence and series, probability.
Mean, mode and median, standard deviation, correlation, regression.
- 5. Environmental Studies:** Natural resources- water, soil, food, energy, for minerals; biodiversity, pollution, global environmental problems, social issues related to environment


15/07/22
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