M.Sc (Final) Environmental Sciences Semester IV

Paper I

ENVIRONMENTAL AND OCCUPATIONAL HEALTH

Unit I

Basic principle of environmental health; Environmental factors and human health; Physiological responses of man to relevant stresses in the environment; Disease causing infectious organisms (Virus, bacteria, and parasites), teratogens and mutagens; Detailed account of AIDS and sexually transmitted diseases (STD); causes and consequences of hazardous wastes in soil, water and air with respect to human health; Environmental health management.

Unit II

Air pollution and human health; causes of air pollution and air borne diseases, Soil pollution- Sources and effect on human health; Water pollution- sources and effects on human health; water borne diseases; Risk assessment and preventive measures.

Unit III

Environmental health management in India; Occupational health safety and health administration; Environmental health in tribals- problems and remedies; Environmental protection - Issues and problems

Unit IV

Occupational hazards and associated diseases, silicosis, anthrax and other lung diseases; WHO standards of working conditions; Physical factors effecting occupational health (heat, cold and temperature); prevention of occupational diseases; Various international organizations (WHO, ILO, UNICEF) on human health

Unit V

Nuclear pollution and human health- case studies; Agriculture chemicals and human health; Hazardous wastes- human health and management; Noise pollution and human health hazards; Human health education and awareness. Hazard evaluation in polluted environment with specific emphasis on radiological health.