Subject Code: ECNDE

ELECTIVE V (EC): ENVIRONMENTAL AND OCCUPATIONAL HEALTH

UNIT 1:

Environmental factors in health - health and diseases. Physical, chemical and Biological factors that affect, health, socio cultural factors - Sanitation occupations. Home environment. Water and Health: Chemical factors in waters that affect health, Fluoride, iodine, Nitrates and Metals. Biological factors, water borne diseases - typhoid, cholera, dysentery etc.

UNIT 2:

Air and Health: Chemical factors in air-air - borne diseases. Modes of air borne infection. Vectors and Health: Vector borne diseases. Role of secondary hosts. Mosquitoes, flies, cockroaches and rat borne diseases. Environmental influence on vectors.

UNIT 3:

Chemical in our life and health: Food additives, food preservatives, detergents, drugs and antibiotics. Health and Working Environment: Definitions - Occupational Hygiene - Occupational Health - Occupational hazards, occupational diseases, classification of occupational hazards, examples of occupational diseases, classification of occupational hazards, examples of occupational diseases.

UNIT 4:

Role of occupational hygiene in occupational health services, occupational hygienists, occupational hygiene surveys. Threshold limits Value (TLV). Physical Environment at work, Health effects: Thermal stress, noise, electromagnetic radiations, vibrations, pressure, ventilation and illumination. Construction & planning of the industrial home with all basic amenities. Threshold limit values and control measures.

UNIT 5:

Chemical and Biological Environment at Work: Chemical nature, particle size concentration, duration and exposure, mode of entry, fibrigenic, toxic, allergic, dermatitis and carcinogenic health effect. Control measures, infection and allergy at work environment. Personal protection devices. Basic control Measures: Substitution, discontinuation of operation, General ventilation, illumination, Local ventilation, enclosures, Isolation, Mechanization of processes, Wet methods, storage labeling and handling and handling, personal protection, administrative control measure.

REFERENCES

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- 2. Howe, G.M. and Loraine J.A (Ed) 1973. Environmental Medicine, Wm Heineman Medical books, London.
- 3. Hunter D. 1975. The Diseases of occupation 5th ed. English University Press.

- 4. J.E. Park and K, Park. Preventive and Social Medicine.
- 5. John Lenihan and William, W. Fletcher (Ed) 1977, The Chemical Environment and series, Academic press, New York.
- 6. John Lenihan and William, W.Flecher (Ed) 1976, Health and Environment and man series, Academic press, New York.
- 7. M.A.O. Khan and John, P. Bederka J (1974). Survival in Toxic environments, Academic press, New York.
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