2. Molecular Cell Biology, Lodish, Berk et al., 1996.

OPEN ELECTIVE FOR OTHER DISCIPLINES

BCE 508: HEALTH AND DISEASE: SOFTCORE

Lecture hours: 36 Total Credits: 03

Course objectives

- To study the basic concept on health, hygiene and dimension of health
- To study the communicable, non-communicable and lifestyle diseases and disorders
- · Drug abuse, oral hygiene, chain of infections and infection control

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Unit I 12 hrs.

Introduction to health and diseases: WHO definition of health, Health and hygiene, General health care, Factors affecting health, Indices and evaluation of health, Disease patterns in developed and developing world; Classification of diseases - Endemic, Epidemic, Pandemic; Professional Health hazards. Disease condition: Acute disease, Chronic disease, Incurable disease, Terminal disease, Illness, disorders, Syndrome, Pre-disease. Treatment: Psychotherapy, medications, surgery, medical devices, and self-care. Dimensions of Health: physical, mental, social, spiritual, emotional, vocational, political, cultural, socioeconomic, environmental, philosophical, educational, nutritive, curative and preventive.

Unit II 12 hrs.

Communicable and life style diseases - Tuberculosis, Cholera, Typhoid, Conjunctivitis. Sexually Transmitted diseases (STD), Information, statistics, and treatment guidelines for STD, Prevention: Syphilis, Gonorrhea, AIDS etc. Non-communicable diseases- Malnutrition- Under nutrition, Over nutrition, Nutritional deficiencies; Anemia, Stroke, Rheumatic heart disease, Coronary heart disease, Cancer, blindness, accidents, mental illness, Iodine deficiency, Fluorosis, Epilepsy, Asthma. Genetic disorders- Down's syndrome, Klinefelter's syndrome, Turner's syndrome. Life style disorders- Obesity, Liver cirrhosis, Diabetes mellitus, Hypertension (Causative agents, symptoms, diagnosis, treatment, prognosis, prevention)

Unit III 12 hrs.

Health promotion: Preventing drug abuse, Oral health promotion by tobacco control. **Mental Hygiene** and Mental Health - Concepts of mental hygiene and mental health Characteristics of mentally healthy person - Warning signs of poor mental health - Promotive and preventive mental health - strategies and services - Ego defense mechanisms and implications - Personal and social adjustments - Guidance and Counseling. **Infection control** - Nature of infection - Chain of infection transmission - Defenses against infection transmission

Course outcome

- The student understands the basic principles of genetics, gene linkage and X-linked inheritance and cytoplasmic inheritance
- · Various causes of mutation and their repair mechanism
- Diseases associated with changes in chromosome number and structures.

References:

- 1. Modern Nutritionin Health and Disease. 10th Edition by Maurice E.Shils, Moshe Shike, A Catharine Ross.
- Krause's Food and Nutrition Therapy. 12th Edition by Janice L. Raymond, L. Kathleen Mahan, Sylvia Escott Stump.
- 3. Diagnostic Microbiology and Infectious Disease by Mark Holodniy (2016).
- 4. Health and Disease by Sarah Levete
- 5. Health and Disease by Adam Hook
- 6. Public Health and Private Wealth by Sarah Hodges & Mohan Rao