

CORE COURSE II – EPIDEMIOLOGY

Objective: To apply the tools of Epidemiology for the prevention of diseases the promotion of Health & the formation of social relevance. To use epidemiological research to detect association between modifiable hereditary, social & environmental factors and specific disease prevention.

Contents:

Unit-1

Epidemiology: Basic Concepts – Definition & Back Ground – Design Strategies in epidemiological research – statistical association & cause. Types of epidemiological studies – descriptive studies – case control studies – control cohort studies – intervention studies.

Unit-2

Fundamental measures of disease frequency (prevalence, cumulative incidence, incidence density) and of risk factors – disease association (risk, relative risk, attribute risk, odd's ratio)- applied measures of disease frequency.

Unit-3

Epidemiology of communicable diseases – Classification of communicable diseases – agents – vectors – disinfection – surveillance – investigation- containment – control – eradication.

Unit-4

Epidemiological approach to diseases – Malaria, Filariasis, Cholera, Chicken Pox, Mumps, HIV/AIDS, Hepatitis. Screening methods – Evaluation of screening programs.

Unit-5

Description and analysis of epidemiological data – prevention and summarization of data – evaluating the role of Chance – evaluating the role of Bias.

References:

Park K: Textbook of Preventive & Social Medicine. M/S Bhanarasidas, Jabalpur.

Robert L. Healt: Principles of Epidemiology - A self teaching guide. Academic Press London.

Morris J.N. :Uses of epidemiology, Churchill Livingstone London.

Benham S.A.S : Control of communicable disease in man American PH Association NY.