Unit I
Introduction to different dosage forms. Their classification with examples – their relative applications, familiarization with new drug delivery systems. Introduction to pharmacopoeias with special reference to the Indian pharmacopoeia. Systems of weights and measures; basic Pharmaceutical Calculations including conversion from one to another system, percentage calculation and adjustment of products, use of allegation method in calculations and isotonic solutions. Objectives and factors influencing the various pharmaceutical unit operations including sterilization. Hospitals – Definition, Function, Classifications based on Various criteria, Organisation. Management and health delivery system in India.

Unit II

Unit III
Brief chemistry and role of proteins, polypeptides, carbohydrates and amino acids, vitamins and coenzymes. Classifications, Qualitative tests, Biological value and Deficiency diseases related to metabolosim. Role of minerals and water in life processes. Enzymes: Brief concept of enzymatic action, factors affecting it, therapeutic and pharmaceutical importance. Introduction to pathology of blood and urine. Abnormal constituents of Urine and their significance in diseases.
**Unit IV**

Elementary tissues of the body, structure and function of skeleton, classification of joints, their functions and Joint disorders. Composition of blood, brief information regarding disorders of blood. Names of various parts of physiological systems and their functions, such as respiratory, digestive, CVS, CNS, ANS, reproductive, urinary etc., physiology of muscle, Elementary knowledge of structure and functions of the organs of taste, smell, ear, eye and skin. Endocrine glands and Hormones - Location of the glands, their hormones and functions. Concept of health, nutrition and health – Classification of foods, requirements, diseases induced due to deficiency of proteins, vitamins and minerals; treatments and prevention. Demography and family planning; Environment and health; Fundamental principles of microbiology -Classification of microbes, isolation, staining techniques of organisms of common diseases. Causative agents, mode of transmission and preventions of communicable and non communicable diseases. Brief knowledge of epidemiology and its significance.

**Unit V**

Unit VI

General discussion on the following inorganic compounds including important physical and chemical properties, medicinal and pharmaceutical uses, storage conditions and chemical incompatibility of Gastrointestinal agents - Antacids – Sodium bicarbonate, Aluminium hydroxide gel, Aluminium phosphate, Calcium carbonate, Magnesium carbonate, Magnesium trisilicate, Magnesium oxide, Combinations of antacid preparations; Topical Agents-Antimicrobials and Astringents – Hydrogen peroxide, Potassium permanganate, Chlorinated lime, Iodine, Solutions of Iodine, Povidone Iodine, Boric acid, Borax, Silver nitrate, Mild silver protein, Mercury, Yellow mercuric oxide, Ammoniated mercury Dental Products — Sodium chloride, stannous fluoride, calcium carbonate, sodium metaphosphate, Dicalcium phosphate, Strontium chloride, Zinc chloride; Expectorants and Emetics - Ammonium chloride, Potassium iodide, Antimony potassium tartrate; Quality control of Drugs and Pharmaceuticals – Importance of quality control, significant errors, Methods used for quality control, sources of impurities in pharmaceuticals. Limits tests of arsenic, chloride, sulphate, iron and heavy metals.

Unit VII

Unit VIII


Unit IX


Unit X

Drug House management – Selection of site, space layout and legal requirements. Importance and objectives of purchasing, selection of suppliers, credit information, tenders, contracts and price determination and legal requirements thereto. Codification handling of drug stores and other hospital supplies. Inventory control objectives and