



CHETANA FOUNDATION
CHETANA COLLEGE OF PHARMACY

Approved by PCI - New Delhi, DTE - Mumbai, Recognized by Govt. of Maharashtra
Affiliated to DBATU-Lonere & MSBTE-Mumbai

|| DTE 16103 | PCI 8418 | MSBTE 22486 ||

Dr. Ganesh Mhaske
Principal

Mr. Somnath Mane
Treasurer

Mr. Vilas Bhosale
Secretary

Mr. Uday Deshpande
President



Ref No: CCOP/2025-26/Aca/

First Year D. Pharm

Subject: Pharmaceutics (Theory) Subject Code: 20111 (T)

Course Objectives: This course will discuss the following aspects of pharmaceutical dosage forms

C20111T.1 Basic concepts, types and need related to Pharmaceutics.

C20111T.2 Advantages and disadvantages, methods of preparation / formulation

C20111T.3 Packaging and labelling requirements

C20111T.4 Basic quality control tests, concepts of quality assurance and good manufacturing Practices.

Subject: Pharmaceutics (Practical) Subject Code: 20111 (P)

Course Objectives: This course will discuss and train the following aspects of preparing and dispensing various pharmaceutical dosage forms

C20111P.1 Calculation of working formula from the official master formula

C20111P.2 Formulation of dosage forms based on working formula

C20111P.3 Appropriate Packaging and labelling requirements

C20111P.4 Methods of basic quality control tests.

Subject: Pharmaceutics Chemistry (Theory) Subject Code: 20112 (T)

Course Objectives: This course will discuss the following aspects of the chemical substances used as drugs and pharmaceuticals for various disease conditions

C20112T.1 Chemical classification, chemical name, chemical structure

C20112T.2 Pharmacological uses, doses, stability and storage conditions

C20112T.3 Different types of formulations / dosage form available and their brand names

C20112T.4 Impurity testing and basic quality control tests.

Subject: Pharmaceutics Chemistry (Practical) Subject Code: 20112 (P)

Course Objectives: This course will provide the hands-on experience on the following aspects of chemical substances used as drugs and pharmaceuticals

C20112P.1 Limit tests and assays of selected chemical substances as per the monograph

C20112P.2 Volumetric analysis of the chemical substances

C20112P.3 Basics of preparatory chemistry and their analysis

C20112P.4 Systematic qualitative analysis for the identification of the chemical drugs.

Subject: Pharmacognosy (Theory) Subject Code: 20113 (T)

Course Objectives: This course will discuss the following aspects of drug substances derived from natural resources.

C20113T.1 Occurrence, distribution, isolation, and identification tests of common



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phytoconstituents

C20113T.2 Therapeutic activity and pharmaceutical applications of various natural drug substances and phytoconstituents.

C20113T.3 Biological source, chemical constituents of selected crude drugs and their therapeutic efficacy in common diseases and ailments

C20113T.4 Basic concepts in quality control of crude drugs and various system of medicines

C20113T.5 Applications of herbs in health foods and cosmetics

Subject: Pharmacognosy (Practical) Subject Code: 20113 (P)

Course Objectives: This course will provide hands-on experiences to the students in

C20113P.1 Identification of the crude drugs based on their morphological characteristics

C20113P.2 Various characteristic anatomical characteristics of the herbal drugs studied through transverse section

C20113P.3 Physical and chemical tests to evaluate the crude drugs

Subject: Human Anatomy And Physiology (Theory) Subject Code: 20114 (T)

Course Objectives: This course will discuss the following

C20114T.1 Structure and functions of the various organ systems and organs of the human body

C20114T.2 Homeostatic mechanisms and their imbalances in the human body.

C20114T.3 Various vital physiological parameters of the human body and their significances.

Subject: Human Anatomy And Physiology (Practical) Subject Code: 20114 (P)

Course Objectives: This course will provide hands-on experience in the following

C20114P.1 General Blood collection techniques and carrying out various haematological assessments and interpreting the results

C20114P.2 Recording and monitoring the vital physiological parameters in human subjects and the basic interpretations of the results

C20114P.3 Microscopic examinations of the various tissues permanently mounted in glass slides

C20114P.4 Discuss the anatomical and physiological characteristics of various organ systems of the body using models, charts and other teaching aids

Subject: Social Pharmacy (Theory) Subject Code: 20115 (T)

Course Objectives: This course will discuss about basic concepts of

C20115T.1 Public health and national health programs

C20115T.2 Preventive healthcare

C20115T.3 Food and nutrition related health issues

C20115T.4 Health education & promotion

C20115T.5 General Roles and responsibilities of pharmacists in public health

Subject: Social Pharmacy (Practical) Subject Code: 20115 (P)

Course Objectives: This course will train the students on various roles of pharmacists in public health and social pharmacy activities in the following areas

C20115P.1 National immunization programs

C20115P.2 Reproductive and child health programs



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C20115P.3 Food and nutrition related health programs
C20115P.4 Health education and promotion
C20115P.5 General Roles and responsibilities of the pharmacists in public health
C20115P.6 First Aid for various emergency conditions including basic life support and cardiopulmonary Resuscitation

Second Year D. Pharm

Subject: Pharmaceutics-II (Theory) Subject Code: 811 (T)

Course learning objectives related to knowledge completion of theory topics, learner should be able to: **and cognitive skills:** Upon the

- C811T.1** Read, judge, interpret, and translate into english any prescription or medication order written in latin or other.
- C811T.2** Apply basic mathematical calculations in the compounding and dispensing.
- C811T.3** Review basic requirements in the compounding and dispensing of pharmaceutical products.
- C811T.4** Generates accurate and appropriate drug information and provides consultation to patients and other health care professionals.
- C811T.5** Defines and describes the physical characteristics of pharmaceutical solution, suspensions, emulsions, semi-solid dosage forms, dental and cosmetic preparations.

Subject: Pharmaceutics-II (Practical) Subject Code: 811 (P)

Course learning objectives related to knowledge, skill and attitude: on completion of laboratory experiments, learner should be able to:

- C811P.1** To understand the prescription and identify the type of formulation
- C811P.2** To understand method of preparation
- C811P.3** To select the suitable container
- C811P.4** To decide the general and special instructions to be given on the label

Subject: Pharmaceutical Chemistry II (Theory) Subject Code: 812 (T)

Course learning objectives related to knowledge completion of theory topics, learner should be able to: **and cognitive skills:** Upon the

- C812T.1** Discuss basic concept of Pharmaceutical Chemistry and Recall the basic concepts of organic chemistry and compounds.
- C812T.2** Introduction to the nomenclature of organic chemical systems with particular reference to Hetero-cyclic system containing up to 3 rings.
- C812T.3** The chemistry of pharmaceutical organic compounds covering their nomenclature, Chemical structure, uses and the important physical and chemical properties, Stability and storage conditions.
- C812T.4** To discuss about stability and storage conditions and pharmaceutical formulations of discussed organic drugs.
- C812T.5** To learn some popular brand names of discussed drugs.



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Subject: Pharmaceutical Chemistry-II (Practical) Subject Code: 812 (P)

Course learning objectives related to knowledge, skill and attitude: on completion of laboratory experiments, learner should be able to:

C812P.1 Discuss introduction to laboratory and determination of physical constants

C812P.2 Explain systematic qualitative analysis of organic drugs.

C812P.3 Discuss identification test of the official drugs included in IP.

C812P.4 Discuss preparation of organic samples.

Subject: Pharmacology and Toxicology (Theory) Subject Code: 813 (T)

Course learning objectives related to knowledge and cognitive skills: Upon the completion of theory topics, learner should be able to:

C813T.1 Recall the basics of Pharmacology including Pharmacokinetics and Pharmacodynamics

C813T.2 Discuss some drugs acting on central nervous system and autonomic nervous system.

C813T.3 Discuss drugs acting on cardiovascular system including respiratory, digestive system, diuretics and eye.

C813T.4 Discuss some chemotherapeutic agents used for various diseases.

Subject: Pharmacology and Toxicology (Practical) Subject Code: 813 (P)

Course learning objectives related to knowledge, skill and attitude: on completion of laboratory experiments, learner should be able to:

C813P.1 Acquired skills of care and handling of laboratory animal including some techniques viz. anesthesia, euthanasia, route of administration and body fluid collection.

C813P.2 Discuss commonly used instrument in experimental pharmacology including some experiments using computer simulated software programme.

C813P.3 To interpret from the graph by observing the effect of some drug on heart rate and force of contraction on isolated heart of a frog by using the CD of MSBTE.

C813P.4 To interpret from the graph by observing the effect of some drugs on ileum and muscle tissue. (using the CD of MSBTE.).

C813P.5 Develop laboratory discipline, organize the work in the laboratory follow the instructions given in the laboratory.

Subject: Pharmaceutical Jurisprudence (Theory) Subject Code: 814 (T)

Course learning objectives related to knowledge and cognitive skills: Upon the completion of theory topics, learner should be able to:

C814T.1 Brief about Origin and nature of pharmaceutical legislation decided by government of India.



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C814T.2 Explain Principles and significance of professional ethics required in pharmaceutical industry.

C814T.3 Discuss Drugs and Cosmetics act which details on regulations on retail and whole sale, distribution of drugs and powers provided to governing body by this act.

C814T.4 Explain various acts detailing Advertisement of medicines, Registration process required in pharma industry along with of introduction to acts guiding on Price control, Medicinal and Toilet preparations and Medical Terminations.

C814T.5 Brief about the punishable offences made by violating the guidelines mentioned by these acts.

Subject: Drug Store & Business Management (Theory) Subject Code: 815 (T)

Course learning objectives related to knowledge and cognitive skills: Upon the completion of theory topics, learner should be able to:

C815T.1 Explain trade, industry and commerce and forms of business organization.

C815T.2 Discuss channels of distribution and space lay-out and legal requirements to start drug store.

C815T.3 Describe importance and objectives of purchasing along with codification.

C815T.4 Explain methods of inventory control and sales promotion techniques.

C815T.5 Describe sales promotion techniques and recruitment and training of pharmacist.

C815T.6 Discuss service and functions of bank and introduction to accounting concepts.

C815T.7 Explain cash book, general ledger, trial balance and profit and loss accounts.

Subject: Hospital and Clinical Pharmacy (Theory) Subject Code: 816 (T)

Course learning objectives related to knowledge completion of theory topics, learner should be able to: and cognitive skills: Upon the

C816T.1 Discuss in detail about Hospital, Hospital pharmacy and determine the role, requirements and abilities of the pharmacist practicing in the hospital

C816T.2 Know various drug distribution systems, manufacturing practices & explain briefly the methods followed dispensing to out- patient & in patient.

C816T.3 Understand Pharmacy Therapeutic Committee and Hospital Formulary system; discuss drug information services and application of computer in hospital and clinical pharmacy.

C816T.4 Demonstrate and explain surgical dressing, surgical equipments and health accessories.

C816T.5 Describe clinical pharmacy, patient counselling and discuss common daily terminology used in the practice of medicines and physiological parameters.

C816T.6 Identify drug interactions, adverse drug reactions, drug dependence and



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drug toxicity; recognize the disease, clinical manifestations,
pathophysiology of selected hospital clinical disorders.

C816T.7 Predict the clinical significance of bioavailability and bioequivalence.

Subject: Hospital and Clinical Pharmacy (Practical) Subject Code: 816 (P)

Course learning objectives related to knowledge, skill and attitude: on completion of laboratory experiments, learner should be able to:

C816P.1 Describe evaluation aspects of raw material and surgical dressings.

C816P.2 Understand the concept of preparation of transfusion fluids.

C816P.3 Demonstration on sterilization of hospital supplies.

C816P.4 Describe handling and uses of data processing equipments.

C816P.5 Understand the role of Pharmacist in first aid treatment, patient counselling and family planning.