

**Course Outcomes: B.Pharm.**

ORIENTAL EDUCATION SOCIETY'S

**ORIENTAL COLLEGE OF PHARMACY**

(Approved by AICTE, PCI, D.T.E., Affiliated to University of Mumbai &amp; Certified by ISO 9001:2008)

**F.Y.B.Pharm. Course Outcomes Semester I**

BP101T	The students should be able to:	
<b>HUMAN ANATOMY AND PHYSIOLOGY I</b>	BP101T.1	Explain the gross morphology, structure, and functions of various organs of the human body
	BP101T.2	Describe the various homeostatic mechanisms and their imbalances
	BP101T.3	Identify the various tissues and organs of different systems of the human body
	BP101T.4	Understand the coordinated working pattern of special senses and the nervous system
	BP101T.5	Appreciate coordinated working pattern of different organs of each system
BP102T	The students should be able to:	
<b>PHARMACEUTICAL ANALYSIS-I</b>	BP102T.1	Understand the principles of volumetric and electro chemical analysis
	BP102T.2	Carry out various volumetric and electrochemical titrations.
	BP102T.3	Develop analytical skills
BP103T	The students should be able to:	
<b>PHARMACEUTICS-I</b>	BP103T.1	Know the history of the profession of pharmacy
	BP103T.2	Understand the basics of different dosage forms, pharmaceutical incompatibilities and pharmaceutical calculations
	BP103T.3	Understand the professional way of handling the prescription
	BP103T.4	Preparation of various conventional dosage forms
BP104T	The students should be able to:	
<b>PHARMACEUTICAL INORGANIC CHEMISTRY</b>	BP104T.1	Know the sources of impurities and methods to determine the impurities in inorganic drugs and pharmaceuticals
	BP104T.2	Understand the medicinal and pharmaceutical importance of inorganic compounds
	BP104T.3	Know the assays of inorganic compounds having pharmaceutical importance
	BP104T.4	Perform calculations for tonicity adjustments for different formulations
	BP104T.5	Know about pharmaceutical application of radioactive substances, properties of different radiations and measurement of radioactivity
BP105T	The students should be able to:	
<b>COMMUNICATION SKILLS</b>	BP105T.1	Understand the behavioral needs for a Pharmacist to function effectively in the areas of pharmaceutical operation
	BP105T.2	Communicate effectively (Verbal and Non-Verbal)
	BP105T.3	Effectively manage the team as a team player
	BP105T.4	Develop interview skills
	BP105T.5	Develop Leadership qualities and essentials
BP106TRB	Remedial Biology/ Remedial Maths	

Dr. (Mrs.) Sudha Rathod  
Principal  
Oriental College of Pharmacy  
Plot No. 3, 4 & 5, Sector-2,  
Sanpada, Navi Mumbai.





ORIENTAL EDUCATION SOCIETY'S

**ORIENTAL COLLEGE OF PHARMACY**

(Approved by AICTE, PCI, D.T.E., Affiliated to University of Mumbai &amp; Certified by ISO 9001:2008)

**F.Y.B.Pharm. Course Outcomes Semester I**

BP107L	The students should be able to:	
<b>HUMAN ANATOMY AND PHYSIOLOGY LAB</b>	BP107L.1	Understand the parts, working and care of Microscope
	BP107L.2	Understand the organization and functions of the skeletal system and tissues
	BP107L.3	Understand estimation, interpretation and principals involved in blood experiments
	BP107L.4	Interpret the methods of measurement of blood pressure and heart rate
BP108L	The students should be able to:	
<b>PHARMACEUTICAL ANALYSIS-I LAB</b>	BP108LL.1	Understand the principles of volumetric and electro chemical analysis
	BP108LL.2	Carryout various volumetric and electrochemical titrations.
	BP108LL.3	Develop analytical skills
BP109L	The students should be able to:	
<b>PHARMACEUTICS-I LAB</b>	BP109L.1	Possess practical knowledge of formulation and evaluation of Monophasic liquid dosage forms like Syrups, Elixirs, Linctus, Gargles, Mouth washes and Solutions & understands their stability, safety and efficacy
	BP109L.2	Possess practical knowledge of formulation and evaluation of Biphasic dosage forms like Suspensions & Emulsions and understands their stability, safety and efficacy.
	BP109L.3	Possess practical knowledge of formulation and evaluation of Solid dosage forms like Powders & Granules, Suppositories and understands their stability, safety and efficacy
	BP109L.4	Possess practical knowledge of formulation and evaluation of Semesterisolid dosage forms like Ointment & Gels and understands their stability, safety and efficacy.
	BP109L.5	Apply scientific and analytical ability in calculating ingredients requirements for actual quantity to be manufactured of various dosage forms.
	BP109L.6	Possess hands on knowledge for labeling and preserving various dosage forms as per statutory requirements and for effective communication to healthcare stakeholders
BP110 L	The students should be able to:	
<b>PHARMACEUTICAL INORGANIC CHEMISTRY</b>	BP110L.1	Perform Limit tests for inorganic ions
	BP110L.2	Perform Identification test for various inorganic salts
	BP110L.3	Determine purity of inorganic substances using pharmacopoeial methods
	BP110L.4	Prepare inorganic pharmaceuticals
BP111L	The students should be able to:	
<b>COMMUNICATION SKILLS LAB</b>	BP111L.1	Understand the behavioral needs for a Pharmacist to function effectively in the areas of pharmaceutical operation
	BP111L.2	Communicate effectively (Verbal and Non Verbal)
	BP111L.3	Develop interview skill and Develop Leadership qualities and essentials

**Dr. (Mrs.) Sudha Rathod**  
Principal  
Oriental College of Pharmacy  
Plot No. 3, 4 & 5, Sector-2,  
Sarpada, Navi Mumbai





**F.Y.B.Pharm. Course Outcomes Semester II**

BP201T	The students should be able to:	
<b>HUMAN ANATOMY AND PHYSIOLOGY-II</b>	BP201T.1	Explain the gross morphology, structure and functions of various organs of the human body.
	BP201T.2	Describe the various homeostatic mechanisms and their imbalances
	BP201T.3	Identify the various tissues and organs of different systems of human body
	BP201T.4	Perform the hematological tests like blood cell counts, haemoglobin estimation, bleeding/clotting time etc and also record blood pressure, heart rate, pulse and respiratory volume
	BP201T.5	Appreciate coordinated working pattern of different organs of each system
	BP201T.6	Appreciate the interlinked mechanisms in the maintenance of normal functioning (homeostasis) of human body
BP202T	The students should be able to:	
<b>PHARMACEUTICAL ORGANIC CHEMISTRY I – THEORY</b>	BP202T.1	write the structure, name and the type of isomerism of the organic compound
	BP202T.2	write the reaction, name the reaction and orientation of reactions
	BP202T.3	account for reactivity/stability of compounds,
	BP202T.4	identify/confirm the identification of organic compound
BP203T	The students should be able to:	
<b>BIOCHEMISTRY</b>	BP203T.1	Understand the catalytic role of enzymes, importance of enzyme inhibitors in design of new drugs, therapeutic and diagnostic applications of enzymes.
	BP203T.2	Understand the metabolism of nutrient molecules in physiological and pathological conditions.
	BP203T.3	Understand the genetic organization of mammalian genome and functions of DNA in the synthesis of RNAs and proteins.
BP204T	The students should be able to:	
<b>PATHOPHYSIOLOGY</b>	BP204T.1	Describe the etiology and pathogenesis of the selected disease states
	BP204T.2	Name the signs and symptoms of the diseases;
	BP204T.3	Mention the complications of the diseases.
BP205T	The students should be able to:	
<b>COMPUTER APPLICATIONS IN PHARMACY</b>	BP205T.1	know the various types of applications of computers in pharmacy
	BP205T.2	know the various types of databases
	BP205T.3	know the various applications of databases in pharmacy

*S. Rathod*  
**Dr. (Mrs.) Sudha Rathod**  
 Principal  
 Oriental College of Pharmacy  
 Plot No. 3, 4 & 5, Sector-2,  
 Sanpada, Navi Mumbai.



**F.Y.B.Pharm. Course Outcomes Semester II**

BP206T	The students should be able to:	
<b>ENVIRONMENTAL SCIENCES</b>	BP206T.1	Create the awareness about environmental problems among learners
	BP206T.2	Impart basic knowledge about the environment and its allied problems
	BP206T.3	Develop an attitude of concern for the environment.
	BP206T.4	Motivate learner to participate in environment protection and environment improvement
	BP206T.5	Acquire skills to help the concerned individuals in identifying and solving environmental problems.
	BP206T.6	Strive to attain harmony with Nature
	BP206T.7	Acquire skills to help the concerned individuals in identifying and solving environmental problems
BP207L	The students should be able to:	
<b>Human Anatomy and Physiology-II</b>	BP207L.1	Explain the gross morphology, structure and functions of various organs of the human body.
	BP207L.2	Describe the various homeostatic mechanisms and their imbalances
	BP207L.3	Perform the hematological tests like blood cell counts, haemoglobin estimation, bleeding/clotting time etc and also record blood pressure, heart rate, pulse and respiratory volume.
BP208L	The students should be able to	
<b>PHARMACEUTICAL ORGANIC CHEMISTRY-I</b>	BP208L.1	write the structure, name and the type of isomerism of the organic compound
	BP208L.2	write the reaction, name the reaction and orientation of reactions
	BP208L.3	account for reactivity/stability of compounds,
	BP208L.4	identify/confirm the identification of organic compound

*S. Rathod*

**Dr. (Mrs.) Sudha Rathod**  
Principal  
Oriental College of Pharmacy  
Plot No. 3, 4 & 5, Sector-2,  
Sanpada, Navi Mumbai.



**S.Y.B.Pharm. Course Outcomes Semester III**

BP301T	The students should be able to:	
PHARMACEUTICAL ORGANIC CHEMISTRY-II	BP301.1	write the structure, name and the type of isomerism of the organic compound
	BP301.2	write the reaction, name the reaction and orientation of reactions
	BP301.3	account for reactivity/stability of compounds,
	BP301.4	prepare organic compounds
BP302T	The students should be able to:	
PHYSICAL PHARMACEUTICS-I	BP302T.1	Understand various physicochemical properties of drug molecules in the designing the dosage forms
	BP302T.2	Know the principles of chemical kinetics & to use them for stability testing and determination of expiry date of formulations
	BP302T.3	Demonstrate use of physicochemical properties in the formulation development and evaluation of dosage forms.
BP303T	The students should be able to:	
PHARMACEUTICAL MICROBIOLOGY	BP303T.1	Understand methods of identification, cultivation and preservation of various microorganisms
	BP303T.2	To understand the importance and implementation of sterilization in pharmaceutical processing and industry
	BP303T.3	Learn sterility testing of pharmaceutical products.
	BP303T.4	Carry out microbiological standardization of Pharmaceuticals.
	BP303T.5	Understand the cell culture technology and its applications in pharmaceutical industries
BP304T	The students should be able to:	
PHARMACEUTICAL ENGINEERING	BP304T.1	To know various unit operations used in Pharmaceutical industries.
	BP304T.2	To understand the material handling techniques.
	BP304T.3	To perform various processes involved in pharmaceutical manufacturing process.
	BP304T.4	To carry out various test to prevent environmental pollution.
	BP304T.5	To appreciate and comprehend significance of plant lay out design for optimum use of resources
	BP304T.6	To appreciate the various preventive methods used for corrosion control in Pharmaceutical industries



**S.Y.B.Pharm. Course Outcomes Semester III**

BP305L	The students should be able to:	
PHARMACEUTICAL ORGANIC CHEMISTRY LAB-II	BP305L.1	write the structure, name and the type of isomerism of the organic compound
	BP305L.2	write the reaction, name the reaction and orientation of reactions
	BP305L.3	account for reactivity/stability of compounds,
	BP305L.4	prepare organic compounds
BP306L	The students should be able to:	
PHYSICAL PHARMACEUTICS LAB-I	BP306L.1	Understand various physicochemical properties of drug molecules in the designing the dosage forms
	BP306L.2	Know the principles of chemical kinetics & to use them for stability testing and determination of expiry date of formulations
	BP306L.3	Demonstrate use of physicochemical properties in the formulation development and evaluation of dosage forms
	BP306L.4	Learn the Rheological properties of pharmaceutical dosage form.
BP307L	The students should be able to:	
PHARMACEUTICAL MICROBIOLOGY	BP307L.1	Understand methods of identification, cultivation and preservation of various microorganisms
	BP307L.2	Understand methods of identification, cultivation and preservation of various microorganisms
	BP307L.3	Learn sterility testing of pharmaceutical products.
	BP307L.4	Carry out microbiological standardization of Pharmaceuticals.
BP308L	The students should be able to:	
PHARMACEUTICAL ENGINEERING	BP308L.1	To perform unit operations like drying, filtration and evaporation used in pharmaceutical industries.
	BP308L.2	To demonstrate and understand the factors affecting these unit operations.
	BP308L.3	To understand principle, construction, working and applications of pharmaceutical machinery
	BP308L.4	To relate applications and use of pharmaceutical machinery

*S. Rathod*





ORIENTAL EDUCATION SOCIETY'S

**ORIENTAL COLLEGE OF PHARMACY**

(Approved by AICTE, PCI, D.T.E., Affiliated to University of Mumbai &amp; Certified by ISO 9001:2008)

**S.Y.B.Pharm. Course Outcomes Semester IV**

<b>BP401T</b>	The students should be able to:	
<b>PHARMACEUTICAL ORGANIC CHEMISTRY -III</b>	<b>BP401T.1</b>	understand the methods of preparation and properties of organic compounds
	<b>BP401T.2</b>	explain the stereo chemical aspects of organic compounds and stereo chemical reactions
	<b>BP401T.3</b>	know the medicinal uses and other applications of organic compounds
<b>BP401T</b>	The students should be able to:	
<b>MEDICINAL CHEMISTRY-I</b>	<b>BP401T.1</b>	understand the chemistry of drugs with respect to their pharmacological activity
	<b>BP401T.2</b>	understand the drug metabolic pathways, adverse effect and therapeutic value of drugs
	<b>BP401T.3</b>	know the Structural Activity Relationship (SAR) of different class of drugs
	<b>BP401T.4</b>	write the chemical synthesis of some drugs
<b>BP403T</b>	The students should be able to:	
<b>PHYSICAL PHARMACEUTICS-II</b>	<b>BP403T.1</b>	Understand various physicochemical properties of drug molecules in the designing the dosage forms
	<b>BP403T.2</b>	Know the principles of chemical kinetics & to use them for stability testing and determination of expiry date of formulations
	<b>BP403T.3</b>	Demonstrate use of physicochemical properties in the formulation development and evaluation of dosage forms
<b>BP404T</b>	The students should be able to:	
<b>PHARMACOLOGY-I</b>	<b>BP404T.1</b>	Understand the pharmacological actions of different categories of drugs
	<b>BP404T.2</b>	Explain the mechanism of drug action at organ system/sub cellular/ macromolecular levels.
	<b>BP404T.3</b>	Apply the basic pharmacological knowledge in the prevention and treatment of various diseases.
	<b>BP404T.4</b>	Observe the effect of drugs on animals by simulated experiments
	<b>BP404T.5</b>	Appreciate correlation of pharmacology with other bio medical sciences

*S.Rathod*  
**Dr. (Mrs.) Sudha Rathod**  
 Principal  
 Oriental College of Pharmacy  
 Plot No. 3, 4 & 5, Sector-2,  
 Sanpada, Navi Mumbai.







BP405T		The students should be able to:
<b>PHARMACOGNOSY AND PHYTOCHEMISTRY I</b>	BP405T.1	To know the techniques in the cultivation and production of crude drugs
	BP405T.2	To know the crude drugs, their uses and chemical nature
	BP405T.3	Know the evaluation techniques for the herbal drugs
	BP405T.4	To carry out the microscopic and morphological evaluation of crude drugs
BP406P		The students should be able to:
<b>MEDICINAL CHEMISTRY I – PRACTICAL 2</b>	BP406L.1	Remember the traditional and/or newer knowledge, and methods in experimentation.
	BP406L.2	Understand concepts and ideas in experimentation.
	BP406L.3	Apply practical skills in experimentation.
	BP406L.4	Illustrate the ability to plan experiments with proper time management and demonstrate oral & written communication skills.
BP407P		The students should be able to:
<b>PHYSICAL PHARMACEUTICS II – PRACTICAL</b>	BP407P.1	To learn the techniques for evaluation of physical properties of drugs
	BP407P.2	To find rate of reaction by applying the principles of chemical kinetics
	BP407P.3	To plan & conduct stability testing and determine shelf life of formulations
BP408P		The students should be able to:
<b>PHARMACOLOGY I – PRACTICAL</b>	BP408P.1	Students would Introduced to experimental pharmacology , Commonly used instruments and common laboratory animals in experimental pharmacology
	BP408P.2	Students would have observed the effect of drugs on animals by simulated experiments.
	BP408P.3	Students would got an idea about correlation of pharmacology with other bio medical sciences.
	BP408P.4	Students would be trained with Common laboratory techniques. Blood withdrawal, serum and plasma separation, anesthetics and euthanasia used for animal studies.
	BP408P.5	Students would got an idea about different routes of drugs administration.
	BP408P.6	Students would have study about various animal models used for ANS and CNS studies.
BP409P		The students should be able to:
<b>PHARMACOGNOSY AND PHYTOCHEMISTRY I – PRACTICAL</b>	BP409L.1	Carry out the chemical tests for crude drugs
	BP409L.2	Determine the leaf constants of herbal drugs
	BP409L.3	Measure the length and width of various cells
	BP409L.4	Undertake the evaluation techniques for the herbal drugs

*S. Rathod*

Dr. (Mrs.) Sudha Rathod  
Principal  
Oriental College of Pharmacy  
Plot No. 3, 4 & 5, Sector-2,  
Sarnade, Mumbai



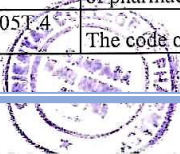


**T.Y.B.Pharm. Course Outcomes Semester V**

BP501T	The students should be able to:	
MEDICINAL CHEMISTRY – II	BP501T.1	Understand the chemistry of drugs with respect to their pharmacological activity
	BP501T.2	Understand the drug metabolic pathways, adverse effect and therapeutic value of drugs
	BP501T.3	Know the Structural Activity Relationship of different class of drugs
	BP501T.4	Study the chemical synthesis of selected drugs
BP502T	The students should be able to:	
INDUSTRIAL PHARMACY I	BP502T.1	Know the various pharmaceutical dosage forms and their manufacturing techniques.
	BP502T.2	Know various considerations in development of pharmaceutical dosage forms
	BP502T.3	Formulate solid, liquid and Semisolid dosage forms and evaluate them for their quality
BP503T	The students should be able to:	
PHARMACOLOGY-II	BP503T.1	Understand the mechanism of drug action and its relevance in the treatment of different diseases.
	BP503T.2	Demonstrate isolation of different organs/tissues from the laboratory animals by simulated experiments
	BP503T.3	Demonstrate the various receptor actions using isolated tissue preparation
	BP503T.4	Appreciate correlation of pharmacology with related medical sciences
BP504T	The students should be able to:	
PHARMACOGNOSY AND PHYTOCHEMISTRY II	BP504T.1	To know the modern extraction techniques, characterization and identification of the herbal drugs and phytoconstituents
	BP504T.2	To understand the preparation and development of herbal formulation.
	BP504T.3	To understand the herbal drug interactions
	BP504T.4	To carryout isolation and identification of phytoconstituents
BP505T	The students should be able to:	
PHARMACEUTICAL JURISPRUDENCE	BP505T.1	The Pharmaceutical legislations and their implications in the development and marketing of pharmaceuticals
	BP505T.2	Various Indian pharmaceutical Acts and Laws
	BP505T.3	The regulatory authorities and agencies governing the manufacture and sale of pharmaceuticals
	BP505T.4	The code of ethics during the pharmaceutical practice

Dr. (Mrs.) Sudha Rathod  
Principal  
Oriental College of Pharmacy

Plot No. 3, 4 & 5, Sector-2,  
Sanpada, Navi Mumbai.





ORIENTAL EDUCATION SOCIETY'S

**ORIENTAL COLLEGE OF PHARMACY**

(Approved by AICTE, PCI, D.T.E., Affiliated to University of Mumbai &amp; Certified by ISO 9001:2008)

**T.Y.B.Pharm. Course Outcomes Semester V**

BP506P	The students should be able to:	
INDUSTRIAL PHARMACY I – PRACTICAL	BP506P.1	To carry out preformulation studies of a given drug substance
	BP506P.2	To formulate various solid and Semisolid pharmaceutical dosage forms like tablets, capsules and creams
	BP506P.3	To evaluate the pharmaceutical dosage forms as per the official compendia
	BP506P.4	To understand the practical considerations of sterile dosage forms- parenterals and ophthalmics
BP507P	The students should be able to:	
PHARMACOLOGY II – PRACTICAL	BP507P.1	Demonstrate isolation of different organs/tissues from the laboratory animals by simulated experiments
	BP507P.2	To study different effect of drugs on various isolated tissue preparations
	BP507P.3	To perform bioassay of physiological chemicals by various methods
BP508P	The students should be able to:	
PHARMACOGNOSY AND PHYTOCHEMISTRY II	BP508P.1	To know the modern extraction techniques, characterization and identification of the herbal drugs and phytoconstituents
	BP508P.2	To analyse the herbal drugs by different methods
	BP508P.3	To carryout isolation and identification of phytoconstituents

Dr. (Mrs.) Sudha Rathod  
Principal  
Oriental College of Pharmacy  
Plot No. 3, 4 & 5, Sector-2,  
Sanpada, Navi Mumbai.





**T.Y.B.Pharm. Course Outcomes Semester VI**

BP601T	The students should be able to:	
MEDICINAL CHEMISTRY – III	BP601T.1	Understand the importance of drug design and different techniques of drug design.
	BP601T.2	Understand the chemistry of drugs with respect to their biological activity.
	BP601T.3	Know the metabolism, adverse effects and therapeutic value of drugs
	BP601T.4	Know the importance of SAR of drugs.
BP602T	The students should be able to:	
PHARMACOLOGY-III	BP602T.1	understand the mechanism of drug action and its relevance in the treatment of different infectious diseases
	BP602T.2	comprehend the principles of toxicology and treatment of various poisonings.
	BP602T.3	appreciate correlation of pharmacology with related medical sciences
BP603T	The students should be able to:	
HERBAL DRUG TECHNOLOGY	BP603T.1	Understand raw material as source of herbal drugs from cultivation to herbal drug product
	BP603T.2	Know the WHO and ICH guidelines for evaluation of herbal drugs
	BP603T.3	Learn the herbal cosmetics, natural sweeteners, nutraceuticals
	BP603T.4	Appreciate patenting of herbal drugs, GMP
BP604T	The students should be able to:	
BIOPHARMACEUTICS AND PHARMACOKINETICS	BP604T.1	Understand the basic concepts in biopharmaceutics and pharmacokinetics and their significance.
	BP604T.2	Use of plasma drug concentration-time data to calculate the pharmacokinetic parameters to describe the kinetics of drug absorption, distribution, metabolism, excretion, elimination.
	BP604T.3	To understand the concepts of bioavailability and bioequivalence of drug products and their significance.
	BP604T.4	Understand various pharmacokinetic parameters, their significance & applications
BP605T	The students should be able to:	
PHARMACEUTICAL BIOTECHNOLOGY	BP605T.1	Understanding the importance of Immobilized enzymes in Pharmaceutical Industries
	BP605T.2	Genetic engineering applications in relation to production of pharmaceuticals
	BP605T.3	Importance of Monoclonal antibodies in Industries
	BP605T.4	Appreciate the use of microorganisms in fermentation technology

Dr. (Mrs.) Sudha Rathod  
Principal  
Oriental College of Pharmacy

Plot No. 3, 4 & 5, Senior-2,  
Sanpada, Navi Mumbai





ORIENTAL EDUCATION SOCIETY'S

**ORIENTAL COLLEGE OF PHARMACY**

(Approved by AICTE, PCI, D.T.E., Affiliated to University of Mumbai &amp; Certified by ISO 9001:2008)

**T.Y.B.Pharm. Course Outcomes Semester VI**

BP606	The students should be able to:	
PHARMACEUTICAL QUALITY ASSURANCE	BP606T.1	understand the cGMP aspects in a pharmaceutical industry
	BP606T.2	appreciate the importance of documentation
	BP606T.3	understand the scope of quality certifications applicable to pharmaceutical industries
	BP606T.4	understand the responsibilities of QA & QC departments
BP607P	The students should be able to:	
MED. CHEM. LAB	BP607.1	Understand how to make correct use of various equipment & take safety measures while working in a medicinal chemistry laboratory.
	BP607.2	Synthesize, and understand reaction mechanisms involved in the synthesis of medicinally important compounds and perform the Assay of drugs.
	BP607.3	To study the interpretation of UV spectra of unknown drugs.
	BP607.4	Comprehend the techniques of microwave-assisted synthesis and explain applications of microwave-assisted synthesis in pharmaceutical research.
	BP607.5	Able to draw structures and reactions using Chem draw.
	BP607.6	Purify Synthesized compounds using various procedures like recrystallization.
BP608P	The students should be able to:	
PHARMACOLOGY LAB	C608P.1	Students would be trained with isolation of different organs/tissues from the laboratory animals by simulated experiments
	C608P.2	Students would have Dose calculation in pharmacological experiments
	C608P.3	Students would have Determination of acute oral toxicity (LD50) of a drug from a given data
	C608P.4	Students would be trained with Calculation of pharmacokinetic parameters from a given data
	C608P.5	Students would be trained with Biostatistics methods in experimental pharmacology
	C608P.6	Students would have Calculation of pharmacokinetic parameters from a given data

*S. K. Rathod*





ORIENTAL EDUCATION SOCIETY'S

## ORIENTAL COLLEGE OF PHARMACY

(Approved by PCI, D.T.E., Affiliated to University of Mumbai & Certified by ISO 9001:2015)

NAAC ACCREDITATION WITH 'A' GRADE



19

ORIENTAL EDUCATION SOCIETY'S

## ORIENTAL COLLEGE OF PHARMACY

(Approved by AICTE, PCI, D.T.E., Affiliated to University of Mumbai & Certified by ISO 9001:2008)



### T.Y.B.Pharm. Course Outcomes Semester VI

BP609P	The students should be able to:	
HDT LAB	BP609P.1	Perform preliminary phytochemical screening of crude drugs
	BP609P.2	Formulate herbal creams, lotions, shampoos, syrups, mixtures and tablets
	BP609P.3	Evaluate creams, lotions, shampoos, syrups, mixtures and tablets
	BP609P.4	Analyse herbal drugs from recent Pharmacopoeias
	BP609P.5	Find Aldehyde content, Phenol and Alkaloid content

*S. Rathod*

Dr. (Mrs.) Sudha Rathod  
Principal  
Oriental College of Pharmacy  
Plot No. 3, 4 & 5, Sector-2,  
Sanpada, Navi Mumbai.



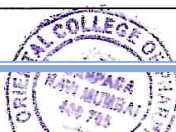


(Approved by AICTE, PCI, D.T.E., Affiliated to University of Mumbai & Certified by ISO 9001:2008)



BP701T	The students should be able to:	
INSTRUMENTAL METHODS OF ANALYSIS	BP701T.1	Understand the interaction of matter with electromagnetic radiations and its applications in drug analysis
	BP701T.2	Understand the chromatographic separation and analysis of drugs.
	BP701T.3	Perform quantitative & qualitative analysis of drugs using various analytical instruments.
BP702T	The students should be able to:	
INDUSTRIAL PHARMACY II	BP702T.1	Know the process of pilot plant and scale up of pharmaceutical dosage forms
	BP702T.2	Understand the process of technology transfer from lab scale to commercial batch
	BP702T.3	Know different Laws and Acts that regulate pharmaceutical industry
	BP702T.4	Understand the approval process and regulatory requirements for drug products
BP703T	The students should be able to:	
PHARMACY PRACTICE	BP703T.1	know various drug distribution methods in a hospital
	BP703T.2	appreciate the pharmacy stores management and inventory control
	BP703T.3	monitor drug therapy of patient through medication chart review and clinical review
	BP703T.4	obtain medication history interview and counsel the patients
	BP703T.5	identify drug related problems
	BP703T.6	detect and assess adverse drug reactions
	BP703T.7	interpret selected laboratory results (as monitoring parameters in therapeutics) of specific disease states
	BP703T.8	know pharmaceutical care services
	BP703T.9	do patient counselling in community pharmacy;
	BP703T.10	appreciate the concept of Rational drug therapy.

Dr. (Mrs.) Sushma Dabhad

Principal  
Oriental College of Pharmacy





**Final Year B.Pharm. Course Outcomes Semester VII**

BP704T	The students should be able to:	
NOVEL DRUG DELIVERY SYSTEMS	BP704T.1	To understand various approaches for development of novel drug delivery systems.
	BP704T.2	To understand the criteria for selection of drugs and polymers for the development of Novel drug delivery systems, their formulation and evaluation
BP705P	The students should be able to:	
IMA practical		Understand the principles of Spectroscopic and Chromatographic analysis
	BP705P.1	
	BP705P.2	Carryout various spectroscopic and chromatographic analysis
	BP705P.3	Develop analytical skills
	BP705P.4	Interpret selected laboratory results of spectroscopic data
	BP705P.5	Understand the chromatographic separation and analysis of drugs.

*S. Rathod*

**Dr. (Mrs.) Sudha Rathod**  
Principal  
Oriental College of Pharmacy  
Plot No. 3, 4 & 5, Sector-2,  
Sanpada, Navi Mumbai.



**Final Year B.Pharm. Course Outcomes Semester VIII**

BP801T	The students should be able to:	
BIOSTATISTICS AND RESEARCH METHODOLOGY	BP801T.1	Know the operation of M.S. Excel, SPSS, R and MINITAB®, DoE (Design of Experiment)
	BP801T.2	Know the various statistical techniques to solve statistical problems
	BP801T.3	Appreciate statistical techniques in solving the problems
BP802T	The students should be able to:	
SOCIAL AND PREVENTIVE PHARMACY	BP802T.1	Acquire high consciousness/realization of current issues related to health and pharmaceutical problems within the country and worldwide.
	BP802T.2	Have a critical way of thinking based on current healthcare development.
	BP802T.3	Evaluate alternative ways of solving problems related to health and pharmaceutical issues
BP804 ET	The students should be able to:	
PHARMACEUTICAL REGULATORY SCIENCE	BP804 ET.1	Know about the process of drug discovery and development
	BP804 ET.2	Know the regulatory authorities and agencies governing the manufacture and sale of pharmaceuticals
	BP804 ET.3	Know the regulatory approval process and their registration in Indian and international markets
BP805 ET	The students should be able to:	
PHARMACOVIGILANCE	BP805 ET.1	Importance of drug safety monitoring
	BP805 ET.2	History and development of pharmacovigilance
	BP805 ET.3	National and international scenario of pharmacovigilance
	BP805 ET.4	Dictionaries, coding and terminologies used in pharmacovigilance

*S. Rathod*  
**Dr. (Mrs.) Sudha Rathod**  
 Principal  
 Oriental College of Pharmacy  
 Plot No. 3, 4 & 5, Sector-2,  
 Sanpada, Navi Mumbai

