

NOTICE

It is hereby informed to all students of B. Pharm 4th semester (Admission batch 2023) that they have to submit the Assignment under continuous mode of Internal Assessment as per the topic mentioned below following the guidelines given below. The assignment shall be submitted at Laboratory on or before the end of 2nd sessional examination.

Roll No.	Ph. Org. Chem.-II (BP401T)	Medicinal Chem.-I (BP402T)	Physical Pharm-II (BP403T)	Pharmacology-I (BP404T)	Pharmacogn. & Phytochem. (BP405T)
23148001	Stereo isomerism	Drug discovery & development	Colloidal dispersion & its classification	Introduction of pharmacology	Definition and History of Pharmacognosy
23148002	Optical isomerism	Drug design	Optical properties of colloids	Source of drug	Scope and Importance of Pharmacognosy
23148003	Enantiomerism	Stereochemistry	Kinetic properties of colloids(Sedimentation)	Essential drugs concept	Sources of crude drugs – Plant sources
23148004	Diastereoisomerism	Physio chemical properties & drug action	Electrical properties of colloids(E.D.L)	Route of drug administration	Sources of crude drugs – Animal sources
23148005	Mesocompounds	Biosteric replacement	Effect of electrolytes in lyophilic colloids	Competitive and non-competitive	Sources of crude drugs – Marine sources
23148006	DL system of nomenclature of optical isomers	Drug-receptor bonding	Stabilisation of colloids	Spare receptors	Sources of crude drugs – Mineral sources
23148007	RS system of nomenclature of optical isomers	Agonist & Antagonist	Protective action of colloids	Drug addiction	Sources of crude drugs – Biotechnology and tissue culture
23148008	resolution of racemic mixture	Covalent & non-covalent bonding with respect to drug action	Application of colloids	Drug tolerance	Classification of crude drugs – Alphabetical classification
23148009	Geometrical isomerism	G. protein coupled Receptors	Types of viscosity and their utility in Rheology	Drug dependence	Classification of crude drugs – Taxonomical classification
23148010	Methods of determination of configuration of geometrical isomers	Drug metabolism	Newtonian flow	Drug allergy	Classification of crude drugs – Morphological classification
23148011	Atropisomerism	Pro drugs	Plastic flow	Membrane transport(pharmacokinetic)	Classification of crude drugs – Pharmacological classification
23148012	Stereospecific and stereoselective reactions	QSAR	Pseudo-plastic flow	Drug absorption	Classification of crude drugs – Chemical classification



23148013	Conformational isomerism in Ethane	Pharmacophore based drug design	Thixotropy	Drug distribution	Classification of crude drugs – Chemotaxonomical classification
23148014	Conformational isomerism in n-Butane	General anesthetics & stages of anesthetis	Capillary viscometer	Drug metabolism	Quality control of crude drugs – Introduction
23148015	Conformational isomerism in Cyclohexane.	Inhalation anesthetics	Falling sphere viscometer	Excretion of drugs	Adulteration of crude drugs – Definition and types
23148016	Classification of Heterocyclic compounds	Intravenous anesthetics	Cup and Bob viscometer	Enzyme inhibition	Evaluation of crude drugs – Organoleptic evaluation
23148017	Nomenclature of Heterocyclic compounds	History &development of medicinal chemistry	Cone and Plate viscometer	Kinetics of elimination	Evaluation of crude drugs – Microscopic evaluation
23148018	Synthesis of pyrrole	Optical isomerism & drug action	Elastic deformation	Introduction of pharmacodynamics	Evaluation of crude drugs – Physical evaluation
23148019	Synthesis of furan	Biosynthesis & catabolism of catecholamines	Elastic modulus	Principles and mechanisms of drug action (pharmacodynamics)	Evaluation of crude drugs – Chemical evaluation
23148021	Synthesis thiophene	SAR of sympathomimetics	Interfacial properties of suspended particles	Receptor theories	Evaluation of crude drugs – Biological evaluation
23148022	Reactions of pyrrole	Direct acting sympathomimetics	Formulation of flocculated suspensions	Classification of receptors	Plant tissue culture – Introduction and importance
23148023	Reactions of furan	Indirect acting sympathomimetics	Settling in suspensions	Regulation of receptors	Techniques of plant tissue culture
23148024	Reactions of thiophene	α -adrenergic blockers (nonspecific)	Formulation of deflocculated suspensions	Drug receptors interaction	Applications of plant tissue culture in pharmacognosy
23148025	Relative aromaticity and reactivity of Pyrrole	β - adrenergic blockers (nonspecific)	Theories of emulsification	Signal transduction mechanism	Marine pharmacognosy – Introduction
23148026	Relative aromaticity and reactivity of furan	Biosynthesis & catalysis of acetylcholine	Stability of emulsions	G-protein-coupled receptors	Marine crude drugs – Examples and importance
23148027	Relative aromaticity and reactivity of thiophene	Muscarinic receptors & agonist	HLB method for formulation of emulsion	Ion channel receptors	Biotechnology in production of secondary metabolites
23148028	Medicinal uses of furan	Nicotinic receptors & agonist	Rheological properties of emulsion and its preservation	Trans membrane enzyme linked receptors	Immobilized plant cell systems
23148029	Medicinal uses of pyrrole	SAR of parasympathomimetic agents	Particle size importance in micromeritics	Trans membrane JAK-START binding receptor	Study of crude drugs containing carbohydrates – Introduction

23148030	Medicinal uses of thiophene	Reversible cholinesterase inhibitors	Particle size distribution in micromeritics	Receptors that regulate transcription factors	Mucilage – Sources, chemical nature and uses
23148031	Basicity of pyridine	Irreversible cholinesterase inhibitors	Particle shape in micromeritics	Dose response relationship	Gums – Sources, chemical nature and uses
23148032	Synthesis, reactions and medicinal uses pyrazole	Cholinergic blocking agents	Optical microscopy for particle size determination	Therapeutic index	Pectin – Sources, chemical nature and uses
23148033	Synthesis, reactions and medicinal uses imidazole	Solanaceous alkaloids as drug	Sieving method for particle size determination	Combined effect of drugs and Factors modifying drug action	Agar – Sources, chemical nature and uses
23148034	Synthesis, reactions and medicinal uses oxazole	Synthetic cholinergic blocking agents	Sedimentation method for particle size determination	Adverse drug reaction	Honey – Sources, chemical nature and uses
23148035	Synthesis, reactions and medicinal uses thiazole	Benzodiazepine as sedative & hypnotics	Air permeability method for determining surface area	Drug interaction(pharmacokinetic and pharmacodynamics)	Study of crude drugs containing lipids – Introduction
23148036	Synthesis, reactions and medicinal uses pyridine	Barbiturates used as sedatives and hypnotics	Adsorption method for determining surface area	Drug discovery	Fixed oils – Sources, chemical nature and uses
23148037	Synthesis, reactions and medicinal uses quinoline	Phenothiazines as anti-psychiatrics	Derived properties of powders(porosity and packing arrangement)	Clinical evaluation of new drugs	Fats – Sources, chemical nature and uses
23148038	Synthesis, reactions and medicinal uses isoquinoline	Synthesis of phenothiazines	Derived properties of powders(Densities of particles)	Drug discovery phase	Waxes – Sources, chemical nature and uses
23148039	Synthesis, reactions and medicinal uses acridine	Synthesis of barbiturates	Flow properties of powders	Pre-clinical evaluation phase	Study of crude drugs containing proteins and enzymes – Introduction
23148040	Synthesis, reactions and medicinal uses indole	Ring analogue of phenothiazines	Reaction kinetics(zero and pseudo-zero order)	Clinical trial phase	Gelatin – Sources and uses
23148041	Synthesis and medicinal uses of Pyrimidine	Anti-convulsant drugs	Reaction kinetics(first and pseudo-first order)	Phase of clinical trials and pharmacovigilance	Casein – Sources and uses
23148042	Synthesis and medicinal uses of Purine	Narcotic drugs	Reaction kinetics(second order)	Organization and function of ANS	Enzymes – Introduction and applications
23148043	Synthesis and medicinal uses of azepines	SAR of morphine	Reaction kinetics(zero and pseudo-zero order)	Neurohumoral transmission	Diastase – Sources and applications
23148044	Claisen-Schmidt condensation reaction	Narcotic antagonists	Determination of reaction order	Co-transmission	Papain – Sources and applications
23148045	Beckmanns rearrangement and Schmidt rearrangement reactions	Anti-inflammatory agents	Physical factors influencing degradation of pharmaceutical product	Classification of neurotransmitters	Bromelain – Sources and applications
23148046	Oppenauer-oxidation and Dakin reaction	Anti-cholinesterase	chemical factors influencing degradation of pharmaceutical product	parasympathomimetics	Pepsin – Sources and applications

23148047	Birch reduction, Wolff Kishner reduction	β_1 adrenergic antagonist	Physical factors influencing degradation of pharmaceutical product	Parasympatholytics	Study of fibers – Introduction
23148048	Metal hydride reduction (NaBH4 and LiAlH4), Clemmensen reduction	β_2 adrenergic antagonist	Stabilization of medicinal agents against oxidation reactions	Sympathomimetics	Cotton – Sources and uses
23148049	Optical activity	α_1 adrenergic antagonist	Stabilization of medicinal agents against hydrolysis reactions	Sympatholytic	Jute – Sources and uses
23148050	Cis-trans isomerism	α_2 adrenergic antagonist	Photolytic degradation and its prevention	Neuromuscular blocking agents	Silk – Sources and uses
23148051	Applications of stereoisomerism	SAR of Benzodiazepines and antagonist	Limitations accelerated stability study	Skeletal muscle relaxants	Wool – Sources and uses
23148052	Applications of geometric isomerism	Anxiolytic agents	Accelerated stability testing in expiration dating	Local anaesthetic agents	Study of herbal excipients – Introduction
23148053	Introduction to heterocyclic compound	SAR of anticonvulsants	Accelerated stability study	Drug used in Parkinson's disease	Acacia – Source and pharmaceutical uses
23148054	4 membered heterocyclic compound	Hydantoins & their synthesis	Particle size distribution	Alcohol and disulfiram	Tragacanth – Source and pharmaceutical uses
23148055	5 membered heterocyclic compound	GABA Analogues	Effect of electrolytes in lyophobic colloids	Sedative, hypnotics and centrally acting muscle relaxants	Guar gum – Source and pharmaceutical uses
23148056	6 membered heterocyclic compound	SAR of phenothiazines	Electrical properties of colloids(N. and Zeta potential)	Anti-epileptics	Sodium alginate – Source and pharmaceutical uses
23148057	3 membered heterocyclic compound	SAR of Phenyl piperidines	Electrical properties of colloids(D.M.E.)	General anaesthetics and pre-anaesthetics	Agar (excipient role) – Source and uses
23148058	Aromaticity of heterocyclic compound	SAR of diphenyl heptanones	Kinetic properties of colloids(B. motion and diffusion)	Drug used in Alzheimer disease	Gelatin (excipient role) – Source and uses
23148059	Racemization and its applications	Synthesis of benzocaine derivatives	Coulter counter used for particles size determination	Opioid analgesics and antagonist	Starch – Source and pharmaceutical uses
23148060	Condensed heterocyclic compound	Bio-synthesis of eicosanoids	Heckel equation and its application in deformation	CNS stimulants and nootropics	Cellulose – Source and pharmaceutical uses

Guidelines: Assignment must be 4 to 5 pages minimum (one side) self- hand written in A4 paper, with good and sufficient information. The Title page must be colour printing. Self-full signed in last page. For guidance student can meet the subject teachers. The assignment topic and its content must be same with the notified topic.

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