DATTA MEGHE INSTITUTE OF MEDICAL SCIENCES (DEEMED TO BE UNIVERSITY) DATTA MEGHE COLLEGE OF PHARMACY Salod(H), Sawangi, Wardha-442002

DIPLOMA IN PHARMACY **CO-PO MAPPING**

Class	Course	Course Code	Course Outcome No.	Course Outcome	P0-1	P0-2	PO-3	PO-4	PO-5	P0-6	P0-7	P0-8	P0-
D.Pharm First	Pharmaceutics I (Theory)	DP101T	DP101T-CO1	Demonstrate understanding of different dosage forms, their classification with examples-their relative applications, and new drug		0	2	2	0	0	0	1	3
Year				delivery system.								├───	<u> </u>
			DP101T-CO2	Explain system of weights and measures, demonstrate understanding of the calculations of conversion from one to another system,	3	0	1	2	2	0	0	0	0
				calculations of percentage and adjustment of products, use of alligation method in calculations. Explain Isotonic solutions.		Ű			-	Ŭ	Ū	Ũ	
			DP101T-CO3	Explain the various packaging materials of pharmaceuticals like glass, plastics and rubber, aerosol packaging. Explain the size	3	3	2	2	0	0	0	3	3
				reduction, objectives, and factors affecting size reduction, methods of size reduction and various mills used in size reduction.	·'							 	_
				Explain size separation by sifting, and grades of powders for pharmaceutical purposes. Describe sedimentation methods of size separation, and explanation of construction and working of Cyclone separator. Explain the mixing of liquid, powder and semisolids by	3	3	2	2	0	0	0	0	
			DF1011-C04	using the different Mixer, mills and homogenizer.	3	3			0	0	0	0	
				Demonstrate understanding of the theory of filtration, Filter media; Filter aids and selection of filters. Explain of different filtration									<u> </u>
			DP101T-C05	equipments.	3	3	2	2	0	0	0	0	
			DP101T-C06	Describe various extraction and heat processes with modifictions and factors affecting, if any, and their applications including ayurvedic	3	1	2	2	0	0	0	0	2
				preparations.	-	1	-		0	Ŭ			<u> </u>
				Demonstrate understanding of the different methods of distillation. prepare purified water I.P. and water for Injection I.P. Explain the					0		0		
			DP101T-C07	concept of sterilization and its differences from disinfection, and different sterilization process. Describe the aseptic techniques and application of sterization process in hospitals.	3	2	2	2	0	0	0		
				Describe the drying process and various dryer used for drying. Explain processing of different types of tablet, their evaluations, and									
			DP101T-C08	defects in tablet.	3	3	2	2	0	0	0	0	2
				Demonstrate understanding of the processing of capsules and special applications of capsules.	3	2	2	2	0	0	0	0	2
			DP101T-C010	Explan different immunological products.	3	1	2	2	0	2	0	0	3
D.Pharm First	Pharmaceutical Chemistry-I	DP102T	DP102T-CO1	Describe physical and chemical properties, medicinal and pharmaceutical uses, storage conditions and chemical incompatibility of Acids,	3	0	2	2	1	3	0	0	
Year	(Theory)			bases and buffers.			_				-	<u> </u>	<u> </u>
			DD102T CO2	Explain Antioxidants, and Gastrointestinal agents with their important physical and chemical properties, medicinal and pharmaceutical	3	0	2	2	1	3	0	0	
			DP102T-CO2	uses, storage conditions and chemical incompatibilities of :- Acidifying agents, Protective and Adsorbents, Saline cathartics	3	0			1	3	0	0	
				Explain Topical Agents such as Protective agents including their important physical and chemical properties, medicinal and									
			DP102T-CO3	pharmaceutical uses, storage conditions and chemical incompatibility	3	0	2	2	1	3	0	0	2
			DP102T-CO4	Explain Antimictrobials and Astringents including their important physical and chemical properties, medicinal and pharmaceutical uses,	3	0	2	2	1	3	0	0	2
			DI 1021-CO4	storage conditions and chemical incompatibility.		0	<u> </u>	2	1	5	0		
				Explain Dental Products, their physical and chemical properties, medicinal and pharmaceutical uses, storage conditions and chemical					1	2	0		
			DP102T-C05	incompatibilities of Dental Products. Define respiratory stimulants and describe their physical and chemical properties, medicinal and pharmaceutical uses, storage conditions.	3	0	2	2	1	3	0	0	
				Describe Expectorants and Emetics including their important physical and chemical properties, medicinal and pharmaceutical uses,								<u> </u>	<u> </u>
			DP102T-CO6	storage conditions and chemical incompatibility	3	0	2	2	1	3	0	0	2
			DP102T-C07	Classify Antidotes and demonstrate understanding of their monographs. Explain preparation, usage, and storage conditions of official	3	0	2	2	1	3	0	0	2
			DF1021-C07	inorganic compounds.	3	0		2	1	3	0	0	
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			DP102T-C08	Describe Major Intra and Extra cellular electrolytes used for replacement therapy, combination of oral electrolyte powders and solutions.	3	0	2	2	0	3	0	0	
				Define radioactivity, types of radiations, and demonstrate understanding of measurement of radio activity, biological effects of	/							<u> </u>	<u> </u>
			DP102T-C09	radiations, Radio isotopes-their uses, Storage and precautions with special reference to the official preparations.	3	2	2	2	0	2	0	0	3
				Explain Importance of quality control of pharmaceuticals. Describe significant errors, methods used for quality control, sources of									
			DP102T-C010	impurities in pharmaceuticals, source and effect of impurities in pharmacopoeia substances. Demonstrate understanding of importance	3	1	2	2	3	2	0	2	3
				of limit test, principle and procedures of Limit tests. Perform identification tests for cations and anions as per IP.	i ,								
).Pharm First	Pharmacognosy-I (Theory)	DP103T							-		<u>^</u>		
Year			DP103T-CO1	Explain plant profile of various crude drugs, indigeneous system of medicines, and classification of crude drugs from natural origin.	3	0		2	0	0	0	0	2
			DP103T-CO2	Describe Adultration of crude drug and its Evaluation.	3	0	2	2	1	1	0	0	2
			DP103T-CO3	Demonstrate understanding of Occurrence, Distribution, Isolation, Identification tests, Therapeutic effects and pharmaceutical	3	0	2	2	0		0	0	3
				application of crude drug.		1					0		+
				Describe the phytochemical Screening technique and identify the phytoconstituent present in various plants/crude drug. Describe the fundamental principles of pharmaceutical aids.	3	1 0	2	22	0	0	0	0	3
).Pharm First	Biochemistry and Clinical	DP104T		Explain the molecular level of chemical processes involved in metoblism Explain metabolism of carbohydrate, lipids, proteins, and their		0			0	0	0		
Year	Pathology (Theory)			role in human body.	3		2	2	0	0	0	0	2
				Explain qualitative and quantitative estimation of biological macromolecules.	3	2	2	2	0	0	0	0	3
				Describe various enzymatic reactions of living cells and factors affecting it.	3	0	2	2	0	1	0	0	$\frac{1}{1}$

			DP104T-C04	Explain metabolic processes of biomolecules in health and diseases.	3	0	2	2	0	0	0	0	2	
			DP104T-C05	Demonstrate understanding of the abnormal biochemical values and their significance in diseases.	3	1		2	0	2	3	0	2	
			DP104T-C06	Explan biochemical principles and application of clinical laboratory methods to diagnosis, treatment, and prevention in illness.	3	2	3	2	0	2	3	0	3	
D.Pharm First	Human Anatomy and	DP105T	DP105T-CO1	Explain the various term used in anatomy and basic structure, and functions of cell and tissues.	3	0	2	2	0	0	0	0	0	
Year	Physiology (Theory)		DP105T-CO-2	Explain part of skeleton sytem with different bones. Explain types of varios joint their locations and disorder of joints.	3	0	2	2	0	0	0	0	0	
			DP105T-CO-3	Explain skeletal muscles, physiology of muscle contraction, types of skeletal muscle and physilogy of neuromuscular junction.	3	0	2	2	0	0	0	0	0	
			DP105T-CO-4	Explain Composition and functions of blood component.	3	0	2	2	0	0	0	0	0	
			DP105T-CO-5	Clarify the anatomy, physiology & disorders of cardiovascular system, lymphatic system, Respiratory system, Urinary system, Digestive	3	0	2	2	0	0	0	0	0	
			DP105T-CO-6	system and Reproductive system. Explain parts of central nervous system and their functions.	3	0	2	2	0	0	0	0	0	
			DP105T-CO-7	Elementry knowledge of sense organs.	3	0	2	2	0	0	0	0	0	
			DP105T-CO-8	Clarify anatomy and physilogy of various endocrine glands and their hormones with functions.	3	0	2	2	0	0	0	0	0	
D.Pharm First Year	Health Education and Community Pharmacy	DP106T	DP106T- CO1	Explain the significance of health education and pharmceutical care practices in current era. Demonstrate understanding of the importance of nutrition in human health and diseases and incorporation of community pharmacy	3	0	2	2	0	0	0	0	0	
	(Theory)		DP106T- CO2	services.	3	0	2	2	2	3	3	0	0	
			DP106T- CO3	Demonstrate understanding of the business and professional practice management skills in community pharmacy.	3	0	3	2	3	2	3	0	2	
			DP106T- CO4	Explain how to respond minor ailments and dispense appropriate medications. Describe the concept of rational drug therapy.	3	0	3	2	3	2	3	0	2	
			DP106T- CO5	Provide patient counselling and health screening services for improved patient care in community pharmacy setup. Explain the significance of basic first aid and emergency care services.	3	0	3	2	3	3	3	0	0	
			DP106T- CO6	Demonstrate understanding of the environment and health and various preventatble measures in illness.	3	0	3	2	3	2	3	3	1	
			DP106T-C07	Describe various communicable and non-communicable disease and their pharmaceutical care practices.	3	0	2	2	0	2	3	0	2	
			DP106T-C08	Explain the immunization practices and principles of disease control and prevention.	3	0	2	2	0	2	3	0	2	
D.Pharm First	Pharmaceutics I (Practical)	DP101P	DP101P-C01	Prepare and evaluate Chloroform Water I.P., Camphor Water I.P., Concentrated Peppermint Water B.P.C.	3	0	2	2	3	1	1	2	2	
Year	,		DP101P-C02	Iodine Solution I.P., Weak Iodine Solution I.P., Compound Sodium Chloride Solution I.P., Surgical Chlorinated Soda Solution B.P.	3	0	2	2	3	1	1	2	1	
			DP101P-C03	Prepare and evaluate spirits, tinctures and extracts.	3	2	2	2	3	1	1	2	1	
			DP101P-C04	Prepare and evaluate creams and cosmetic preparations.	3	2	2	2	3	1	1	2	3	
			DP101P-C05	Prepare and evaluate tablet and capsules	3	3	2	2	3	1	1	2	3	
			DP101P-CO6	Demonstrate understanding of preparations involving aseptic techniques. Prepare and evaluate Sterile Water For Injection I.P., Sodium Chloride Injection I.P., Dextrose Injection I.P.	3	3	2	2	3	1	1	2	3	
			DP101P-C07	Prepare and evaluate opthalmic preparation.	3	2	2	2	3	1	1	2	1	
D.Pharm First	Pharmaceutical Chemistry-I	DP102P	DP102P-C01	Identify inorganic drugs and pharmaceuticals by performing official identification tests.	3	0	2	2	3	1	1	2	0	
Year	(Practical)	DI 1021	DP102P-C02	Define Limit test. Explain the principle involved and reactions for limit test of chloride, sulfate, arsenic, iron and heavy metals.	3	0	2	2	3	1	1	2	0	
	()		DP102P-CO3	Explain the principle and reactions involved in acid-base, redox, precipitation and complexometric titrations. Prepare and standardize primary/secondary standards used in these titrations.	3	1	2	2	3	1	1	2	0	
			DP102P-CO4	Perform assay of inorganic pharmaceuticals involving acid-base, redox, precipitation and complexometric titration.	3	1	2	2	3	1	1	2	0	
D.Pharm First	Pharmacognosy (Practical)	armacognosy (Practical) DP103P	nacognosy (Practical) DP103P DP103P-CO1		Identify drugs by their morphological characters, and by using physical and chemical tests.	3	0	1	2	0	2	0	0	1
Year			DP103P-CO2	Perform Gross Anatomical study of crude drugs (Senna, Datura, cinnamon, cinchona, coriander, fennel , clove, Ginger, Nux-vomica, Ipecacuanha). Explain medicinal use of these drugs.	3	1	2	2	0	2	1	0	2	
			DP103P-CO3	Identify fibres and surgical dressings.	3	0	2	2	0	1	0	0	0	
D.Pharm First	Biochemistry and Clinical	DP104P	DP104P-C01	Relate the theoretical aspects to practical application and acquire laboratory skills.	3	0	2	2	2	0	0	0	3	
Year	Pathology (Practical)		DP104P-C02	Explain the biochemical processes, metabolism of biomolecules, and various enzymes in the field of clinical diagnosis.	3	1	2	2	0	3	3	0	3	
			DP104P-C03	Demonstrate practical knowledge on the identification and detection methods of biomolecules.	3	2	2	3	2	0	1	0	2	
			DP104P-CO4	Demonstrate understanding and handling of microscope and sampling procedures.	3	2	2	3	0	0	0	0	2	
			DP104P-C05	Explain various routes of drug administration and blood samples withdrawl technique.	3	0	0	2	2	0	0	0	2	
D.Pharm First	Human Anatomy and	DP105P	DP105P-C01	Name different bones with types of skeleton	3	0	1	3	0	1	0	0	0	
Year	Physiology (Practical)		DP105P-C02	Explain anatomy and physiology of digestive, respiratory, cardiovascular, urinary and reproductive system, and ear and eyes.	3	0	1	3	0	2	0	0	0	
			DP105P-CO3	Explain the structure and functions of different types of tissues and muscles.	3	1	1	2	0	2	0	0	0	
			DP105P-CO4	Perform determination of TLC, DLC and Malarial parasite.	3	1	1	3	1	2	2	0	0	
			DP105P-C05	Determine RBC, Blood Clotting Time, Erythrocyte Sedimintation Rate and Hemoglobin. Explain its significance.	3	1	1	3	1	2	2	0	0	
		DDOOAT	DP105P-C06	Record body temperature, pulse, heart-rate, blood pressure and ECG. Explain significance of the same.	3	2	1	3	1	2	2	0	3	
Second Year D.Pharm	Pharmaceutics II (Theory)	DP201T	DP201T-CO1	Demonstrate understanding of prescriptions, Latin terms commonly used modern methods of prescribing. Calculate dose of drug adopting of metric system calculations involved in dispensing.	3	0	2	3	0	3	3	0	2	
			DP201T-C02	Explain various types of incompatibilities like physical, chemical and therapeutic.	3	0	2	3	0	2	3	0	3	
			DP201T-CO3	Describe dose and dosage of drugs, factors influencing dose, calculations of doses on the basis of age, sex, surface area.	3	0	2	3	0	3	3	0	2	
			DP201T-CO4	Explain methods of preparation with theoretical and practical aspects, use of appropriate containers and closures, special labeling requirements and storage conditions.	3	0	2	3	0	2	1	0	3	
			DP201T-CO5	Describe types of powders, granules, cachets and tablet triturates and their preparation, advantages and disadvantages. Demonstrate understanding of weighing methods, errors in weighing, and proper usage and care of dispensing balance.	3	0	1	2	0	2	1	0	1	
			DP201T-CO6	Describe theoretical aspects including commonly used vehicles, essential adjuvant like stabilizers, colorants and flavors. Classify and	3	0	1	2	0	2	0	0	1	
			DP201T-C07	explain methods of preparation for monophasic liquid dosage forms.	3	0	1	2	0	2	0	0	1	
			DP201T-C08	Describe suspensions, its types and their preparation and stability. Demonstrate understanding of the adjuvant used in suspensions. Define and classify emulsion, and formulate stable emulsions selecting appropriate excipients	3	0	1	2	0	1	0	0	2	
				Demonstrate understanding of semi-solid dosage form and its types. Formulate stable semi-solid dosage forms viz. ointments, creams,			<u> </u>		0	-				
	1		DP201T-C09	gels, pastes, and suppositories using appropriate excipients and processes.	3	1	ı 1	2	0	1	1	0	1 2	

			DP201T-CO10	Demonstrate understanding of cosmetic preparations viz. dentifrices, facial cosmetics, deodorants, antiperspirants, shampoo, hair dressings and hair removers.	3	0	1	2	0	1	1	0	2
			DP201T-C011	Explain preparation and requirements viz. vehicles, adjuvants, processing, personnel, facilities, and quality control for various parenteral dosage forms.	3	1	1	2	0	1	0	0	2
			DP201T-C012	Describe essential characteristics of different ophthalmic preparations, formulation: additives, special precautions in handling and storage of ophthalmic products.	3	0	1	2	0	1	2	0	2
Second Year	Pharmaceutics II (Practical)	DP201P	DP201P-C01	Demonstrate understanding of Weights and measures involved in dispensing.	3	0	1	2	0	1	0	0	1
D.Pharm		212011	DP201P-C02	Demonstrate understanding of prescription and Latin terms used in prescription	3	0	1	2	0	3	3	0	2
Dir nur m			DP201P-C03	Explain classification of dosage forms and coding of experiments based on dosage forms.	3	0	1	2	0	2	3	0	$\frac{1}{1}$
			DP201P-CO4	Perform Dosage calculations.	3	0	1	3	0	3	3	0	1
			DP201P-C04	Prepare different solid, liquid and semi-solid dosage forms.	3	3		2	1	1	0	3	3
					-	-			0	-	3	0	3
C		DDOOT	DP201P-C06	Identify incompatibility- physical, chemical and therapeutic.	3	0		2	v	3	-	-	
Second Year D.Pharm	Pharmaceutical Chemistry-II (Theory)	DP202T	DP202T-CO1	Demonstrate understaning of nomenclature of heterocyclic compounds containing up to 3 rings. Describe nomenclature, chemical structure, uses and the important physical and chemical properties of Drugs Acting on Autonomous	3	0	0	1	0	0	0	0	0
			DI 2021-C02	Nervous System, Central Nervous System, Cardiovascular System and Diuretic drugs. Demonstrate Understanding of The stability and storage conditions and the different type of pharmaceutical formulations of these drugs and their popular brand names. Describe nomenclature, chemical structure, uses and the important physical and chemical properties of Antiseptics, Disinfectants and		0		5	0	2	L		
			DP202T-CO3	Diagnostic Agents. Demonstrate Understanding of The stability and storage conditions and the different type of pharmaceutical formulations of these drugs and their popular brand names.	3	0	2	3	0	2	2	1	1
			DP202T-CO4	Describe nomenclature, chemical structure, uses and the important physical and chemical properties of sulfonamides, Anti Parasitic and Antibacterial Drugs. Demonstrate Understanding of The stability and storage conditions and the different type of pharmaceutical formulations of these drugs and their popular brand names.	3	0	2	3	0	2	2	1	1
			DP202T-CO5	Describe nomenclature, chemical structure, uses and the important physical and chemical properties of Antibiotics, and Antifungal Drugs. Demonstrate Understanding of The stability and storage conditions and the different type of pharmaceutical formulations of these drugs and their popular brand names.	3	0	2	3	0	2	2	1	1
			DP202T-CO6	Describe nomenclature, chemical structure, uses and the important physical and chemical properties of Analgesics, Antipyretics and Non- steroidal Anti-inflammatory Drugs. Demonstrate Understanding of The stability and storage conditions and the different type of pharmaceutical formulations of these drugs and their popular brand names.	3	0	2	3	0	2	2	1	1
			DP202T-CO7	Describe nomenclature, chemical structure, uses and the important physical and chemical properties of Hypoglycemic Agents, Coagulants and Anti-Coagulants. Demonstrate Understanding of The stability and storage conditions and the different type of pharmaceutical formulations of these drugs and their popular brand names.	3	0	2	3	0	2	2	1	1
			DP202T-CO8	Describe nomenclature, chemical structure, uses and the important physical and chemical properties of Histaminic, Anti-histaminic, and Anti-Neoplastic Agents. Demonstrate Understanding of The stability and storage conditions and the different type of pharmaceutical formulations of these drugs and their popular brand names.	3	0	2	3	0	2	2	1	1
			DP202T-CO9	Describe nomenclature, chemical structure, uses and the important physical and chemical properties of Hormonal and Steroidal Drugs. Demonstrate Understanding of The stability and storage conditions and the different type of pharmaceutical formulations of these drugs	3	0	2	3	0	2	2	1	1
Second Year D.Pharm	Pharmaceutical Chemistry-II (Practical)	DP202P	DP202P-C01	and their popular brand names. Perform Systematic qualitative testing of organic drugs involving solubility determination, melting point and/or boiling point, detection of elements and functional groups	3	0	1	2	1	0	0	3	1
D.i nai m	(i factical)		DP202P-C02	Perform official identification tests for certain groups of drugs included in the I.P. like barbiturates, sulfonamides, Phenothiazines, Antibiotics etc.	3	0	1	2	1	0	0	3	1
Second Year	Pharmacology & Toxicology	DP203T	DP203T-C01	Explain the scope of pharmacology in pharmacy and various terms used.	3	0	1	2	0	1	1	0	2
D.Pharm	(Theory		DP203T-CO2	Explain the route of drug administration and processes of drug absorption.	3	0	2	3	0	3	3	0	1
-			DP203T-CO3	Describe general mechanism of drug action and pharmacokinetics of drugs.	3	0	2	3	1	3	3	0	3
				Describe the pharmacology of drugs acting on nervous system, cardiovscular system, Respiratory system, Digestive system and Renal					-		U		<u> </u>
			DP203T-CO4	functions.	3	0	2	3	1	3	3	0	3
			DP203T-C05	Explain the physiological role of various autocoids	3	0	2	3	1	3	3	0	2
			DP203T-C06	Explain the physiological for or various autocolds Explain the pharmacology and rational use of drugs used for the treatment various endocrine disorders.	3	0	2	3	1	3	3	0	3
			DP203T-C07	Describe the role of various chemotherapeutic agent in microbial diseases.	3	0	2	3	0	3	3	0	3
			DP203T-C07	Explain the role of disinfectant and antiseptic.	3	0	2	3	1	3	3	0	2
Second Year D.Pharm	Pharmacology & Toxicology (Theory	DP203P	DP203P-C01	Explain the effect of potassium and calcium ions, acetylcholine, adrenaline and digitalis on frog's heart. Explain the effect of strychnine on frog.	3	0	2	2	1	2	0	0	
			DP203P-C02	Explain the effect of acetyl choline on rectus abdomens muscle of frog and guinea pig ileum.	3	0	2	2	1	1	0	0	
			DP203P-C03	Describe the effect of spasmogens and relaxants on rabbits intestine.	3	0	2	2	1	1	0	0	
			DP203P-C04	Explain the effect of local anaesthetics on rabbits intestine.	3	0	2	2	1	1	0	0	
			DP203P-C04	Describe the effect of mydriatics and miotics on rabbit's eye.	3	0	2	2	1	1	0	0	
			DP203P-C05	Describe the effect of of hypnotics in mice, convulsants and anti-convulsants in mice or rats.	3	0	2	2	1	1	0	0	
			DP203P-C08 DP203P-C07	Perform test for pyrogens and explain its significance.	3	0	2	2	1	0	0	0	
			DP203P-C07 DP203P-C08	Explain taming and hypnosis potentiating effect of chlorpromazine in mice/rats.	3	0	2	3	1	1	0	0	
Cocond V	Dhorme cout!1	DD204T							1	1	0	-	-
Second Year	Pharmaceutical	DP204T	DP204T-C01	Describes Scope and Objectives of Jurisprudence and evaluation of Concept of pharmacy	3	0	3	3	3	1	1	0	3
D.Pharm	Jurisprudence (Theory)		DP204T-CO2	Demonstrate understanding of code of pharmaceutical ethics	3	0	3	3	3	2	3	0	1
				Describe the pharmacy act specially with relation to Education Regulations, Working of state and central councils, constitution of	2	0	2	2	2	2	0	0	<u> </u>
			DP204T-CO3	these councils and functions and registration procedures under the pharmacy Act	3	0	3	3	2	2	0	0	:
			DP204T-CO4	Demonstrate understanding of Drugs and cosmetics Act and the Rules there under	3	0	3	3	3	2	1	0	
			DP204T-C05	Describes the powers of Inspectors, the sampling procedures and the procedure and formalities in obtaining licenses under the rule	3	0	3	3	3	2	0	0	

			DP204T-CO6	Discuss salient features related to retail and whole sale distribution of drugs and their schedules.	3	0	3	3	3	1	0	0	1
			DP204T-C07	Demonstrate understanding of The Drugs and Magic Remedies Act, 1954	3	0	3	3	3	2	1	2	2
	Drug Store and Business Management (Theory)	DP205T	DP205T-CO1	Compare Trade, Industry and commerce and explain functions and subdivision of commerce. Explain Elements for Economics and Management.	3	0	3	3	2	2	0	0	2
			DP205T-CO2	Illustrate Forms of Business Organizations and Channels of Distribution	3	0	3	3	0	1	0	0	3
			DP205T-CO3	Describe selection of site, space Lay-out and legal requirements in drug house management.	3	0	3	3	0	0	0	1	2
			DP205T-CO4	Explain Importance and objectives of purchasing, selection of suppliers, credit information, tenders, contracts and price determination and legal requirements therein.	3	0	3	3	2	1	0	0	3
		DP205T-CO5 Demonstrate the understanding of Codification, handling of drug stores and other hospital supplies.	Demonstrate the understanding of Codification, handling of drug stores and other hospital supplies.	3	3	3	3	1	1	2	2	2	
			DP205T-CO6	Explain objectives, importance, and modern techniques of analysis of Inventory control. Demonstrate understanding of lead time, inventory carrying cost, safety stock, minimum and maximum stock levels. Determine economic order quantity and explain scrap and surplus disposal.	3	3	3	3	2	1	0	0	3
		DP205T-C07	Explain Sales promotion, Market Research, Salesmanship, qualities of a salesman, Advertising and Window Display.	3	0	3	3	3	2	0	0	3	
			DP205T-C08	Describe Recruitment, training, evaluation and compensation of the pharmacist.	3	0	3	3	1	0	0	0	
		DP205T-C09	Describe Service and functions of bank and interpret Finance planning and sources of finance.	3	0	3	1	1	0	0	0	1	
			DP205T-C010	Demonstrate understanding of accounting concepts and conventions.	3	0	3	1	1	0	0	0	1
			DP205T-C011	Illustrate Double entry Book Keeping and Different kinds of accounts, Cash Book, General Ledger, Trial Balance, Profit and Loss account and Balance sheet.	3	0	3	1	1	0	0	0	1
			DP205T-C012	Explain techniques of analyzing financial statements.	3	0	3	1	1	0	0	0	0
			DP205T-C013	Explain Budgeting.	3	0	3	1	1	0	0	0	0
Second Year	Hospital and Clinical	DP206T	DP206T-CO1	Demonstrate understanding of classification, functions, management, & organization of hospital.	3	0	3	3	3	2	2	1	2
D.Pharm	Pharmacy (Theory)		DP206T-CO2	Describe drug distribution system, drug dispensing, and manufacturing of sterile and non sterile preparations	3	2	3	3	1	2	2	0	3
			DP206T-CO3	Educate consumers by providing proper drug information. Perform patient counseling and carry out therapeutic drug monitoring. Demonstrate understanding of function of pharmacy and therapeutic committee	3	0	3	3	3	3	3	0	3
			DP206T-CO4	Demonstrate understanding of registration of patients in OPD and IPD, and Maintenance of patients case reports on computer	3	3	3	3	1	2	3	0	3
			DP206T-CO5	Demonstrate understanding of patient compliance and non compliance	3	0	3	3	0	1	3	0	2
			DP206T-CO6	Explain with examples drug abuse, drug dependence, drug addiction, and drug toxicity	3	0	2	3	1	0	3	0	3
			Define and explain Bioavailability, drug interactions, adverse drug reaction, pathophysiology and symptoms of diseases. Explain common terminology used in medicine	3	0	2	3	1	2	3	0	3	
	Hospital and Clinical	DP206P	DP206P-C01	Prepare water for injection, intravenous infusion and injections.	3	0	1	2	1	0	0	0	0
	Pharmacy (Theory)		DP206P-CO2	Perform sterilization of surgical instruments, hospital fabrics, surgical dressings.	3	2	1	2	1	0	0	0	0
			DP206P-CO3	Evaluate absorbent cotton wool and absorbent cotton ribbon guaze.	3	0	1	2	1	0	0	0	0
			DP206P-CO4	Apply knowledge of computers in registration of patients in OPD/IPD, keeping case history & preoperative check list.	3	3	3	3	1	1	3	0	3
			DP206P-C05	Prepare a project report, give first aid treatment, and improve patient compliance.	3	0	3	3	3	1	3	0	0