

PHYSICAL PHARMACEUTICS-II

(THEORY)

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PREFACE

"Physical Pharmaceutics-II (Theory)" The numerous physical and physicochemical characteristics and concepts related to dosage forms and formulations are covered in this book. The subject's theoretical components give students a deeper understanding of formulation research and development, as well as stability studies of pharmaceutical dosage forms.

The physical characteristics of medications, formulation principles, and drug delivery systems are just a few of the many subjects covered in this book. With its concise explanations and comprehensive illustrations, this book offers a comprehensive grasp of the basic ideas underlying the science of physical pharmacy.

This book **Physical Pharmaceutics-II** (**Theory**) serves as an invaluable notes designed to fulfil the long-term requirement of B.Pharm 2nd Year 4th Semester students. It's clear and thorough presentation of the subject makes it perfect for students to use as self-study material. The entire Physical Pharmaceutics-II Theory syllabus is covered in the five chapters that make up this book. This book's main characteristic is its straightforward, comprehensive approach, which includes tables and illustrations. The material is prepared with the student's need for rapid comprehension and accuracy in mind, closely adhering to the PCI syllabus for subject code BP403T in the fourth semester of the B. Pharm program.

Objectives:

- 1. Understand various physicochemical properties of drug molecules in the designing the dosage forms
- 2. Know the principles of chemical kinetics & to use them for stability testing nad determination of expiry date of formulations
- 3. Demonstrate use of physicochemical properties in the formulation development and evaluation of dos- age forms.

Abbreviations

Active Pharmaceutical Ingredients (API) American Dental Association's (ADA) Brunaver, Emmett, and Teller (BET) Centistokes (CST) Centimetre Gram Second (CGS) Chloride (Cl) Critical Micelle Concentration (CMC) Degree of Substitution (DS) Discrete Element Method (DEM) Dynamic Light Scattering (DLS) Flow Point (FP) Gates-Gaudin-Schuhmann (GGS) Hindered Amine Light Stabilizers (HALS) International Standardization's Organization (ISO) Madin-Darby Canine Kidney (MDCK) Nanoparticle Tracking Analysis (NTA) Over-The-Counter (OTC) Parallel Artificial Membrane Permeability Assay (PAMPA) Particle Size Distribution (PSD) Point (PI) Rosin-Rammler (RR) Rotational Viscometer (RV) Solute Carriers (SLC) Stoke (S) Temperature (T) Velocity (V)

Water Oil Ratio (WOR)

Wet-Points (WP)

INDEX

Unit 1: Colloidal Dispersions	1
1.1 Introduction:	1
1.1.1 Colloids Meaning and Definition:	
1.2 Classification of Dispersed Systems & Their General Characteristics:	
1.2.1 General Characteristics of Dispersed Systems:	6
1.2.2 Structure and Properties of Dispersions:	
1.2.3 Colloid:	7
1.2.4 Hydrocolloids:	7
1.3 Size & Shapes of Colloidal Particles:	8
1.3.1 Different Shapes of Colloids:	9
1.3.2 Colloidal Particle:	10
1.4 Classification of Colloids & Comparative Account of Their General Pro-	perties:
	12
1.4.1 Classification of Colloids:	
1.4.2 Comparative Account of Their General Properties:	
1.5 Optical, Kinetic & Electrical Properties:	
1.5.1 Kinetic Properties:	
1.5.2 Electrical Properties:	
1.5.3 Optical Properties:	
1.6 Effect of Electrolytes:	
1.6.1 The Key Electrolyte Components:	
1.7 Coacervation:	
1.8 Peptization & Protective Action:	30
Unit 2: Rheology	33
2.1 Introduction of Rheology:	33
2.1.1 Newtonian System:	34
2.1.2 Law of Flow:	35
2.1.3 Kinematic Viscosity:	37
2.1.4 Effects of Temperature on Viscosity:	40
2.1.5 Non-Newtonian System:	44
2.1.6 Pseudoplastic:	47
2.1.7 Dilatant:	50
2.1.8 Plastic:	52

2.1.9 Thixotropic:	54
2.1.10 Thixotropic in Formulation:	57
2.1.11 Determination of Viscosity:	59
2.1.12 Capillary:	65
2.1.13 Falling Sphere:	68
2.1.14 Rotational Viscometers:	71
2.2 Deformation of Solids:	73
2.2.1 Plastic and Elastic Deformation:	74
2.2.2 Hackel Equation:	76
2.2.3 Stress:	77
2.2.4 Strain:	78
2.2.5 Modulus of Elasticity:	79
Unit 3: Coarse Dispersion	81
3.1 Introduction:	81
3.1.1 Structure and Properties:	81
3.2 Suspension:	82
3.2.1 Colloid:	83
3.3 Interfacial Properties of Suspended Particles:	85
3.4 Settling in Suspensions:	88
3.4.1 Single Particle Drags:	90
3.5 Kaolin Suspensions:	92
3.5.1 Controlled Flocculation:	93
3.5.2 Formulation of Suspensions:	95
3.5.3 Methods to Overcome Stability Problem:	96
3.6 Emulsions and Theories of Emulsification:	98
3.6.1 Emulsifier:	98
3.6.2 Theories of Emulsification: Importance:	100
3.7 Microemulsion and Multiple Emulsions:	100
3.7.1 Microemulsion:	100
3.7.2 Multiple Emulsions:	107
3.8 Stability of Emulsions:	113
3.8.1 Evaluation of Emulsion:	116
3.9 Preservation of Emulsions:	117
3.10 Rheological Properties of Emulsions and Emulsion Formulation	by HLB
Method:	119
3.10.1 Rheology and Rheological Properties:	119

Unit 4: Micromeritics	
4.1 Introduction:	125
4.2 Particle Size and Distribution:	125
4.2.1 Purpose of Particle Size Distribution Analysis:	126
4.2.2 Importance of Particle Size Distribution:	126
4.3 Mean Particle Size:	129
4.3.1 Particle Sizes Distribution Models:	130
4.4 Number and Weight Distribution:	132
4.4.1 Number Vs. Volume Distribution:	
4.5 Particle Number:	135
4.6 Methods for Determining Particle Size by Different Methods:	136
4.6.1 Common Methods of Particle Size Measurement:	
4.7 Counting and Separation Method:	142
4.8 Particle Shape and Surface Area:	146
4.8.1 Particle Shape:	
4.8.2 Specific Surface:	147
4.9 Methods for Determining Surface Area:	
4.10 Permeability:	
4.11 Adsorption:	
4.11.1 Adsorption Enthalpy:	
4.11.2 Different Instances of Adsorption:	
4.11.3 Types of Adsorption:	
4.12 Derived Properties of Powders:	
4.13 Porosity:	
4.14 Packing Arrangement:	
4.15 Densities:	
4.16 Bulkiness and Densities:	
4.16.1 Flow Properties:	161
4.16.2 Flow Properties of Powders:	
4.16.3 Methods to Determine Flow Properties of Powders:	
Unit 5: Drug Stability	166
5.1 Introduction:	166
5.2 Reaction Kinetics:	167
5.2.1 Zero:	167
5.2.2 Pseudo-Zero:	170
5.2.3 First and Second Order:	171
5.2.4 Units of Basic Rate Constant:	171
5.2.5 Determination of Reaction of Order:	174

5.3 Physical and chemical factors influencing the chemical degradation of	
Pharmaceutical Product:	177
5.3.1 Temperature:	177
5.3.2 Solvent:	178
5.3.3 Ionic Strength:	178
5.3.4 Dielectric Constant:	178
5.3.5 Specific & General Acid Base Catalysis:	179
5.3.6 Simple Numerical Problems:	181
5.4 Stabilization of Medicinal Agents against Common Reactions Like Hydrol	ysis
and Oxidation:	181
5.4.1 Hydrolysis:	181
5.4.2 Oxidation:	183
5.5 Accelerated Stability Testing in expiration dating of Pharmaceutical Dosage	•
Forms:	188
5.5.1 Stability Testing:	188
5.5.2 Expiration Dating:	191
5.6 Photolytic Degradation and its Prevention:	192
5.6.1 Effect of Photolytic Degradation:	194
5.6.2 Factors Causing Photolytic Degradation:	194
Reference	195

List of Figures

	Figures Name	Page No.
Figure 1.1:	Mechanical Dispersion.	3
Figure 1.2:	Bredig's Arc Method or by Electrical Dispersion	3
Figure 1.3:	Dialysis	4
Figure 1.4:	Electro Dialysis	4
Figure 1.5:	Different Shapes of Colloids.	9
Figure 1.6:	Zeta Potential.	12
Figure 1.7:	Electric Field.	15
Figure 1.8:	Electrical properties Electrophoresis	16
Figure 1.9:	Amino Acid Alanine	21
Figure 1.10:	Zeta potential and electrical double layer of colloidal particles	22
Figure 1.11:	Effect of Flash light	24
Figure 1.12:	For instance, adding a positively-charged polymer can cause negatively-charged colloidal silica particles to flocculate	30
Figure 1.13:	Colloid Action	32
Figure 2.1:	Rheology	34
Figure 2.2:	Newtonian System	35
Figure 2.3:	Newtonian rheogram (taken from types of flow and rheology models of drilling mud)	36
Figure 2.4:	Measuring Kinematic Viscosity	40
Figure 2.5:	Viscosity of Newtonian, Shear Thinning and Shear Thickening fluids as a function of shear rate.	46
Figure 2.6:	Plastic Flow	47
Figure 2.7:	Pseudoplastic Flow	47
Figure 2.8:	Dilatant Flow	48
Figure 2.9:	Non-Plastic fluid and Shear Stress	49
Figure 2.10:	Examples of Pseudoplastic Fluid Applications	50
Figure 2.11:	Toothpaste in life is a non-Plastic Fluid	50
Figure 2.12:	Dilatant Flow	52
Figure 2.13:	Measures for Dilatant Formulations	54
Figure 2.14:	Torque carrying capacity of gears vs speed	55
Figure 2.15:	Plastic deformation in gears (a) Cold flow (b) Rippling (c) Ridging	56
Figure 2.16:	Determine the Thixotropy	57
Figure 2.17:	Thixotropic Flow	59

	Figures Name	Page No.
Figure 2.18:	One type of graphical presentation of the hysteresis loop of thixotropic solutions: viscosity versus shear rate	60
Figure 2.19:	Graphical	61
Figure 2.20:	For the explanation of viscous flow	65
Figure 2.21:	Ostwald Viscometer	66
Figure 2.22:	Capillary	68
Figure 2.23:	The combination of rotational and capillary rheology enables viscosity measurements over a huge shear rate	69
Figure 2.24:	Extensional viscosity	70
Figure 2.25:	Body diagram for the falling ball viscometer	71
Figure 2.26:	Rotational Viscometer (RV)	75
Figure 2.27:	Plastic and Elastic Deformation	78
Figure 3.1:	Suspension	85
Figure 3.2:	Colloid	86
Figure 3.3:	Surface active molecules stabilize the interface	90
Figure 3.4:	Settling in Suspensions	91
Figure 3.5:	Dimensionless force versus Reynolds number for spherical particles	93
Figure 3.6:	Deviation from the Stokes' Model from increased fluid drag as a particle increases in size	94
Figure 3.7:	Microemulsions in non-conventional systems	108
Figure 3.8:	W/O/W Emulsion System	112
Figure 3.9:	O/W/O Emulsion System	112
Figure 3.10:	Types of Emulsions	124
Figure 3.11:	Water Content Effect on Emulsion Apparent Viscosity	125
Figure 4.1:	Particle size distribution in d10 d50 d90.	129
Figure 4.2:	Typical results of a particle size analysis by laser diffraction.	130
Figure 4.3:	Three different samples with the same mode, but clearly different particle size distributions	131
Figure 4.4:	Determination of the median from the cumulative curve	131
Figure 4.5:	Gates-Gaudin-Schumann Model	133
Figure 4.6:	The GGS model Predicts the Cumulative Percent Passing Distribution	134
Figure 4.7:	Number and Weight Distribution	136
Figure 4.8:	Number and volume distributions of 1-, 2-, and 3-micron particles	138
Figure 4.9:	(Click to enlarge) Equivalent number of beans.	138

	Figures Name	Page No.
Figure 4.10:	The particle size distribution that results from stacking sieves with varying mesh diameters on a shaker.	141
Figure 4.11:	Schematic illustration of sedimentation analysis	142
Figure 4.12:	Schematic setup of NTA analysis	143
Figure 4.13:	A particle size analyzer's use of laser diffraction	144
Figure 4.14:	Handpicking	146
Figure 4.15:	Winnowing Process	147
Figure 4.16:	Evaporation.	147
Figure 4.17:	Distillation Process	148
Figure 4.18:	Filtration Process	148
Figure 4.19:	Sedimentation Process	149
Figure 4.20:	Separating Funnel.	149
Figure 4.21:	Magnetic Separation Process.	149
Figure 4.22:	The Brunaver, Emmett, and Teller (BET) equation	152
Figure 4.23:	The Brunaver, Emmett, and Teller (BET) equation for nitrogen adsorption on a powder plotted linearly	153
Figure 4.24:	The subsieve sizer from Fisher	154
Figure 4.25:	An adsorption isotherm's open hysteresis loop, which is likely caused by materials with "ink-bottle" holes, as seen in the inset. Standard temperature and pressure, or STP, is the key	156
Figure 4.26:	Representation of the enterocyte showing the colocalization of CYP3A4 and P-gp	157
Figure 4.27:	a) Tetragonal Face b) Rhombohedral	163
Figure 4.28:	Angle of repose	168
Figure 5.1:	Graph of Zero Order Reaction	173
Figure 5.2:	Plot of log () against	180
	Plot of 1/() against for a second order reaction	180
Figure 5.4:	pH Rate Profile	185
Figure 5.5:	Hydrolysis of Ester	187
Figure 5.6:	A simplified general hydrolysis mechanism of esters and amides	189
Figure 5.7:	Aqueous pediatric suspensions of penicillin antibiotics are typically made right before they are dispensed (Josh Sher/Science Photo Library).	191

List of Tables

	Tables Name	Page No.
Table 1.1:	Displays a more comprehensive variety of colloidal dispersions.	11
Table 2.1:	Differences Between Pseudoplastic, No viscous, and Plastic Fluids	51
Table 2.2:	Differences Between Pseudoplastic, Non-viscous, And Plastic Fluids	58
Table 2.3:	Liquid 1: ethanol	64
Table 2.4:	Types of the Transport Processes	64
Table 2.5:	Observation	73
Table 2.6:	Calculation	74
Table 2.6:	Difference between Elastic and Plastic Deformation	79
Table 3.1:	The difference between suspension and colloids are tabulated below	87
Table 3.2:	We refer to this system as flocculated suspension	89
Table 4.1:	Particle Size Analysis	133
Table 4.2:	Gates-Gaudin-Schumann Model	136
Table 4.3:	Surface Mean Diameter.	136
Table 4.4:	Differences between Absorption and Adsorption	161
Table 4.5:	Carr's compressibility index, types of flow	168
Table 4.6:	Type of flow	170

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