PRINCIPLES OF GENERAL PHARMACY. LECTURE 1-20

Published @ 2017 Trieste Publishing Pty Ltd

ISBN 9780649460250

Principles of General Pharmacy. Lecture 1-20 by Various

Except for use in any review, the reproduction or utilisation of this work in whole or in part in any form by any electronic, mechanical or other means, now known or hereafter invented, including xerography, photocopying and recording, or in any information storage or retrieval system, is forbidden without the permission of the publisher, Trieste Publishing Pty Ltd, PO Box 1576 Collingwood, Victoria 3066 Australia.

All rights reserved.

Edited by Trieste Publishing Pty Ltd. Cover @ 2017

This book is sold subject to the condition that it shall not, by way of trade or otherwise, be lent, re-sold, hired out, or otherwise circulated without the publisher's prior consent in any form or binding or cover other than that in which it is published and without a similar condition including this condition being imposed on the subsequent purchaser.

www.triestepublishing.com

VARIOUS

PRINCIPLES OF GENERAL PHARMACY. LECTURE 1-20

Trieste

PREFACE.

The Ale and the B

THE design of these "Lectures" is to present to the student of Pharmacy a course of instruction on Weights and Measures, Specific Gravity and its uses, and all operations occuring in pharmaceutical practice, in the most simple manner possible. These lectures are based upon a course adopted by the late Professor A. Fennel when occupying the chair of Pharmacy in the Cincinnati College of Pharmacy. Each topic will be considered thoroughly in consise terms, and be in as condensed a form as practicable. In conclusion, the compiler ventures to express the hope that the work will meet with kind consideration, and prove serviceable to the pharmaceutical student.

ίų.

х.

CINCINNATI, June, 1886.

INTRODUCTORY.

PRESCRIPTIONS: Derivation of the word, the Latin Language, its use and advantages—Parts of a Prescription—The Metric System—Gravimetric and Volumetric Method—Approximate Measurement.

LECTURE I.

LECTURE II.

SPECIFIC GRAVITY: Principle of Specific Gravity—Method of Determining Specific Gravity—Hydrostatic Balance— Hydrometers—Tables of Baumé—Tralles—Their uses— Method of use-Specific Gravity Bottle—Method of Applying the principle—Examples. 20-28

LECTURE III.

SPECIFIC GRAVITY AND ABSOLUTE WEIGHT: Laws of Specific Gravity as a basis of determining absolute weight and volume—Method of determining these—Examples. 29-34

LECTURE IV.

LECTURE V.

LECTURE VI.

THERMOMETERS: Temperature—Construction of Thermometers— Determination of Fixed Points—Fahrenheit—Celsius— Réaumur—Conversion of the various systems—Examples.

LECTURE VII.

LECTURE VIII.

COMMINUTION — VEGETABLE MATTER: Cutting of Vegetable Matter—Transverse Section—Object—Comminution on a large scale—Degrees of Fineness—Reason for these various degrees — Effect of Pulverization — Trituration—Laevigation — Mediation — Precipitation — Granulation — Ellutriation—Decantation and Washing. 53-59

LECTURE IX.

LECTURE X.

VAPORIZATION: Laws of Evaporation-Means of Evaporation-Direct Heat-Water bath-Steam bath-Vacuo-Air bath-Sand bath-Oil bath-Glycerine bath-Paraffin bath-Saline bath-Spontaneous Evaporation.

vi

LECTURE XI.

DISTILLATION: Apparatus—Retorts—Receivers—Liebig's Condenser—Adapters—Funnel-tubes—Safety-tubes—Fractional Distillation. 72-74

LECTURE XII.

LECTURE XIII.

CRYSTALLIZATION: By Sublimation—By Fusion and Partial Cooling — By Deposition — By Precipitation — Circumstances affecting Crystallization—Systems of Crystallization. 79—8r

LECTURE XIV.

32

PRECIPITATION: Simple — Complex — Object of Precipitation — Means of effecting Precipitation—Nature of Precipitates— Magma — Heavy and Light Precipitates—Collecting and Washing Precipitates—Apparatus. 82—84

LECTURE XV.

NEUTRALIZATION: Atoms—Molecule—Radical—Acid—Acidulous Radical—Basylous Radical—Salts—Preparation of Test Paper—Roccella Lichens—Litmus—Saturations for Prescriptions—Alkalimetrie and Acidimetrie.

LECTURE XVI.

LECTURE XVII.

DIALVSIS: Diffusion of Liquids-Dialysis-Dialyzates. . . 91-92

vii

LECTURE XVIII.

EXTEMPORANBOUS PHARMACV: Synthesis—Analysis—Qualitative —Quantitative Methods of Analysis—Gravimetric--Volumetric—Incompatibility—Illustrations—Prescriptions—Mixtures—Saturations. 93—103

LECTURE XIX.

EMULSIONS: Classification—Natural and Artificial Emulsions— Seed and Gum Resin Emulsions—Balsam—Oleoresin— Resin—Camphor—Phosphorus—Spermaceti—Wax and Chloroform Emulsions—Emulsifying Agents—Process— Precautions. 104—109

LECTURE XX.

viii

INDEX.

		A					
Abies Canadense, 2							
Absolute Weight and Specific							
Grav						29	
	te Weig	htai	nd V	Joh	me		
	od of d						
	tion an						
Gase						. 88	
Abstra						118	
Aceta.		5 C	्रः		25	120	
	of Le	he			20	2	
Acid,		100		a		85	
Acidim	etrie	96) 		580		87	
	ous rad	ical	19			85	
Adapte		icai,		1	3	74	
Adhesi		•				51	
	veness	in Pil	lle.	÷.		110	
Adjuva			113,		26	3	
	lages of	the	Lat	1	-		
		me	La	un a		1-2	
guag	c, Chem	ical	23		٠		
	, Emul			1		51	
	ation S				3		
Air Bat		nate	01			50	
		1 3	83		٠	70	
Alembi		۲		1.20		73	
	netrie,	. n			1	87	
of	idal Sa	ns, r	reci	pita	tio		
			1		×	95-6	
	an Hel	noor	e,			2	
Amorp			1		•	80	
Analys			12			94	
	0.00000000	imet			(0)	94	
	Qual					94	
2	Quar				٠	94	
	Volu	netri	С	1.20		9.1	

14 44

.

- 92

ЗŤ

•

Apothecary System, .						
Apothecaries' Measu	are, .		14			
Approximate Measu	irem	ent, .	6			
Apothecaries' Weig	ht, .		10			
Aquila Alba, .	- (8) Sit	÷0	2			
Archimedes, .			20			
Argenti Nitras fusus	i,	52	2			
Arm,	²⁰ - 19		8			
Aromatic Herbs,		30	55			
Artificial Emulsions	6. 6		104			
Asafoetida, .	ê		55			
Asarum Canadense,	<u> </u>		1			
Atoms, .		4	85			
Avoirdupois Systen,			S			
" Weight	ι,	•	10			
в		*: ;				
Balance,			7			
Basis .	Xe - ar	- 22				

Basis		÷.	. S.		12	3
"	of Meas	sure	Calc	ula	tion	15, 19
Basyl	ous radi	cal,		5a		86
Bath,	Air					70
u	Glyceri	ne		14		70
**	Oil	÷2	54			70
- 0	Paraffin	ι.				70
*	Saline	÷.	124			70-1
**	Sand		e - 1	1		70
**	Steam	¥.,				70
	Water		e			69
Baum	é Hydro	ome	ter,			25
Black	Helleb	ore,		34.5		2
	Snake	Roo	t, .		÷.	I
Blue	Stone,					2
Britis	h Pharm	aco	poeia		2	50
Britt1	220110					CT.

ix