Lab Manual of PHARMACOLOGY

Ms. Ankita Tripathi

(Assistant Professor, Department of Pharmacy) IIMT College of Pharmacy, G.Noida, (UP), INDIA

Dr. Vivek Chauhan

(Assistant Professor-III, Department of Pharmacy) IIMT College of Pharmacy, G.Noida, (UP), INDIA

Mrs. Radhika Chaurasia

(Assistant Professor, Department of Pharmacy) IIMT College of Pharmacy, G.Noida, (UP), INDIA

Mrs. Sapna Chaudhar

(Assistant Professor, Department of Pharmacy) IIMT College of Pharmacy, G.Noida, (UP), INDIA

Mr. Lalit Rana

(Assistant Professor, Department of Pharmacy) IIMT College of Pharmacy, G.Noida, (UP), INDIA

LAB MANUAL OF PHARMACOLOGY

Copyright ©: Ms. Ankita TripathiPublishing Right P: VSRD Academic Publishing
A Division of Visual Soft India Private Limited

ISBN-13: 978-93-91462-03-1 FIRST EDITION, JUNE 2021, INDIA

Printed & Published by: VSRD Academic Publishing A Division of Visual Soft India Private Limited

Disclaimer: The author(s) are solely responsible for the contents compiled in this book. The publishers or its staff do not take any responsibility for the same in any manner. Errors, if any, are purely unintentional and readers are requested to communicate such errors to the Authors or Publishers to avoid discrepancies in future.

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior permission of the Publishers & Author.

Printed & Bound in India

VSRD ACADEMIC PUBLISHING

A Division of Visual Soft (India) Pvt. Ltd.

REGISTERED OFFICE

154, Tezabmill Campus, Anwarganj, KANPUR – 208 003 (UP) (INDIA) Mob.: +91 9899936803 ||Web.: www.vsrdpublishing.com || Email: vsrdpublishing@gmail.com

MARKETING OFFICE

340, First Floor, Adarsh Nagar, Oshiwara, Andheri(W), MUMBAI – 400 053 (MH) (INDIA) Mob.: +91 9956127040 || Web.: www.vsrdpublishing.com || Email: vsrdpublishing@gmail.com

PREFACE

The purpose of laboratory techniques in Pharmacology is to develop a scientific foundation for the use of drugs in the prevention, diagnosis and treatment of disease. In this manual, an attempt has been made to acquaint the undergraduate pharmacy student with the experimental approach to the science of Pharmacology.

As the medical education is shifting from discipline-based learning to problem-based learning, simultaneous learning and training on various systems and diseases of the body become mandatory. The extent and magnitude of development in medicine necessitate upgrading the scientific knowledge.

I hope that this laboratory manual will meet the expectations of the pharmacology faculty and students and they will continue to give their valuable inputs in improving the practical book further in subsequent printings and editions.

🗷 Ms. Ankita Tripathi

ACKNOWLEDGEMENT

MOM, DAD... This is for you!!!

It gives me immense pleasure to publish my book titled "LABORATORY MANNUAL OF PHARMACOLOGY".

It takes a village to write and release a book, and I am so fortunate to have such an incredible team behind me.

I am eternally grateful to my mother Mrs. Manju Tripathi and father Dr. S.K. Tripathi, for constantly encouraging and supporting me during this entire time. And a big thank you to my awesome brothers Gaurav and Saurav and my amazing sister Kiran, for having my back, supporting, encouraging, helping, chatting and being there. Thank you for the trust you have in me and all your efforts to ensure I succeed in the path that I have chosen to tread.

I express my very special thanks to my husband **Ratnesh** and for his neverending co-operation, help and encouragement throughout my work. Thank you for every day, every moment, every little thing you do.

My beta readers are unmatched, they are discerning, thoughtful crew and never let me get away with anything.

Lastly, I thank 'God' the almighty for showing me the path to the ladder of success.

Thankful I ever remain

🗷 Ms. Ankita Tripathi

THIS BOOK IS DEDICATED WITH LOVE AND AFFECTION TO OUR PARENTS AND TO ALL WELL WISHERS AND BELOVED STUDENTS

CONTENTS

1
6
9
1
3
5
8
0
3
6

EXPERIMENT NO. 11
ERMINATION OF PA2 VALUE OF PRAZOSIN
USING RAT ANOCOCCYGEUS MUSCLE (BY SCHILDS PLOT METHOD)
EXPERIMENT NO. 12
DETERMINATION OF PD2 VALUE USING GUINEA PIG ILEUM
EXPERIMENT NO. 13
EFFECT OF SPASMOGENS AND SPASMOLYTICS
USING RABBIT JEJUNUM
EXPERIMENT NO. 14
EFFECT OF SPASMOGENS AND SPASMOLYTICS
USING RABBIT JEJUNUM