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DVV Clarification

Criteria 3: Research Innovations and Extensions

Deviation Metric No: 3.3.1

Number of books and chapters in edited volumes/books published and papers published in national/ international conference proceedings per teacher during last five years

Findings of DVV:

Provide Cover page, content page and first page of (Books/chapters's name) with ISBN numbers, title, author, Department/ School/ Division/ Centre/ Unit/ Cell, name and year of publication.


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FACULTY PUBLICATION Books/Chapter DATA

Sl. No.	Name of the teacher	Title of the book/chapters published	Calendar Year of publication	ISBN number of the proceeding	Affiliating Institute at the time of publication	Name of the publisher	Link to Source
1	Dr Nitin B Ghiware	Text Book: Pharmacology-I	2019	978-93-887068-9-6	Nanded Pharmacy College	Nirali Prakashan	https://pragationline.com/pharmacology-1-jangme-wadulkar-ladde-ghiware/
2	Dr Sagar N Firke	Chapter: A Review on Floating Microsphere as Gastro Retentive Drug Delivery System	2021	978-81-961090-5-9	Nanded Pharmacy College	Current Overview on Pharmaceutical Sciences	https://www.bookpi.org/bookstore/product/current-overview-on-pharmaceutical-science-vol-2
3	Dr Ashish B Roge	Chapter: Study about Ethosomes: A Novel Approach in Transdermal Drug Delivery System	2021	978-81-961090-5-9	Nanded Pharmacy College	Current Overview on Pharmaceutical Sciences	https://stm.bookpi.org/COPS-V2/article/view/9173
4	Ms Shagufta Farooqui	Text Book: Research Methodology: Descriptive Questions & Answer Set	2021	978-93-912195-1-2	Nanded Pharmacy College	Astitva Prakashan	https://astitvaprakashan.com/product-tag/shagufta-farooqui/
5	Dr Giridhar R Shendarkar	Text Book: Introduction to Pharmacognosy	2017	978-81-931281-1-4	Nanded Pharmacy College	Varsha Publication	Not Available


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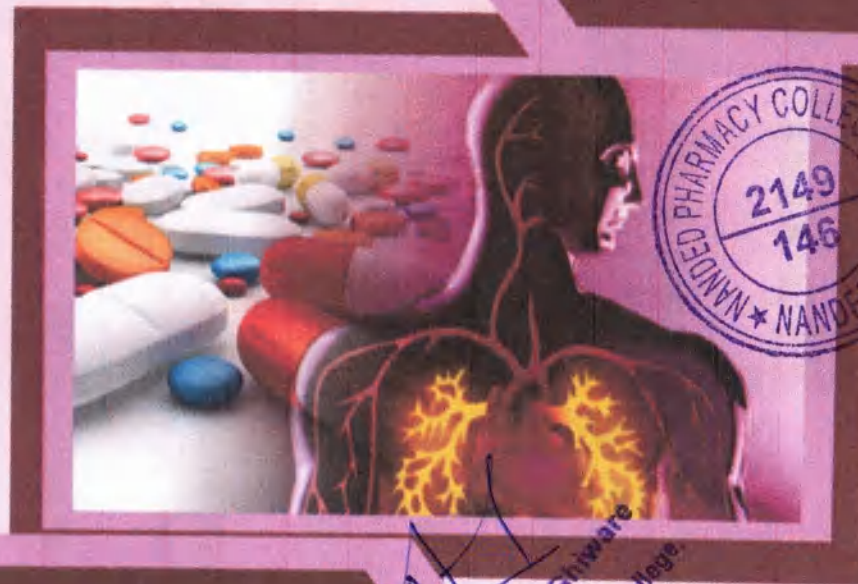
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SECOND YEAR B. PHARM. | SEMESTER-IV

PHARMACOLOGY-I

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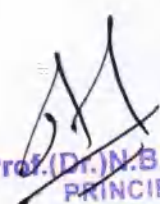
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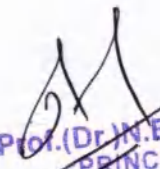
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1.1 INTROD

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- "The study processes es body process
- "The science Pharmacolog with the living th i.e. receptors. In 1

Drug: The wa defined as: "Subst physiological proc


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A Review on Floating Microspheres as Gastro-retentive Drug Delivery System

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and Nitin B. Ghiware^{a*}

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ABSTRACT

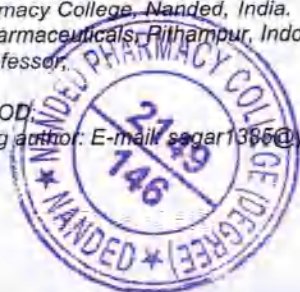
Apart from providing improved bioavailability of poorly absorbed drugs and a required release profile, the Gastroretentive drug delivery system has piqued the interest of pharmaceutical formulation scientists. For drugs with an absorption window in the upper small intestine, a controlled drug delivery system with a prolonged residence time in the stomach can be extremely useful. Tablets, capsules, pills, laminated films, granules, and powders are among the gastroretentive dosage forms available. Floating microspheres are one of many approaches to gastroretention, including mucoadhesion, flotation, sedimentation, expansion, modified shape systems, and so on. Floating microspheres have gained popularity due to their uniform distribution in the stomach, which results in more reproducible drug absorption and a lower risk of local irritation. These systems have several advantages over single-unit dosage forms. The current review briefly discusses the physiology of gastric emptying in relation to floating drug delivery systems. The drug is slowly released at the desired rate while the system floats over the gastric contents, resulting in increased gastro-retention time and reduced fluctuations in plasma drug concentration. The goal of this review is to compile the most recent literature on the method of preparation and various parameters influencing the performance and characterization of floating microspheres.


Keywords: Floating microspheres; microballoon; gastric emptying; solvent evaporation; Ethyl cellulose.

1. INTRODUCTION

Among the various routes of drug administration, the oral route has received the most attention, owing to its ease of administration and significant flexibility in

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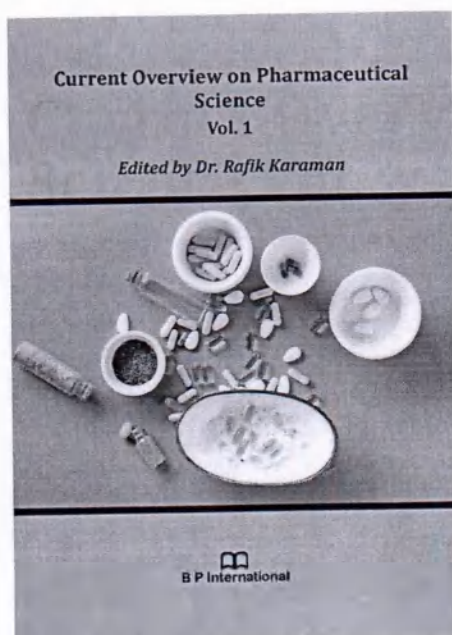



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(<https://stm.bookpi.org/COPS-V1/issue/view/892>) A Review on Floating Microspheres as Gastro-retentive Drug Delivery System

Sagar N. Firke ; Ashish B. Roge ; Pritam R. Siraskar ; Nitin B. Ghiware

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Abstract

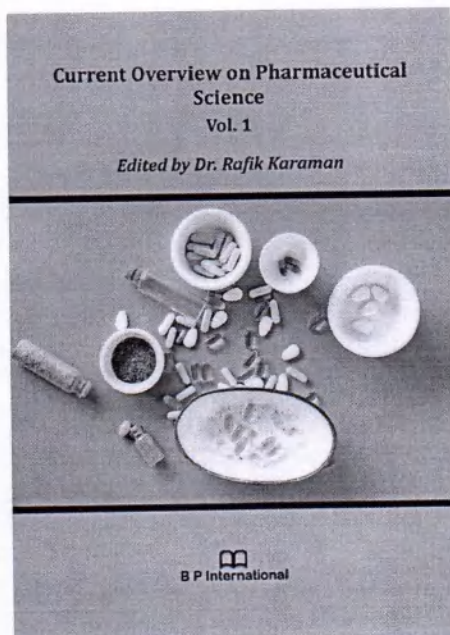
Apart from providing improved bioavailability of poorly absorbed drugs and a required release profile, the Gastroretentive drug delivery system has piqued the interest of pharmaceutical formulation scientists. For drugs with an absorption window in the upper small intestine, a controlled drug delivery system with a prolonged residence time in the stomach can be extremely useful. Tablets, capsules, pills, laminated films, granules, and powders are among the gastroretentive dosage forms available. Floating microspheres are one of many approaches to gastroretention, including mucoadhesion, flotation, sedimentation, expansion, modified shape systems, and so on. Floating microspheres have gained popularity due to their uniform distribution in the stomach, which results in more reproducible drug absorption and a lower risk of local irritation. These systems have several advantages over single-unit dosage forms. The current review briefly discusses the physiology of gastric emptying in relation to floating drug delivery systems. The drug is slowly released at the desired rate while the system floats over the gastric contents, resulting in increased gastro-retention time and reduced fluctuations in plasma drug concentration. The goal of this review is to compile the most recent literature on the method of preparation and various parameters influencing the performance and characterization of floating microspheres.

Keywords: Floating microspheres; microballoon; gastric emptying; solvent evaporation; Ethyl cellulose

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Professor, Bioorganic Chemistry College of Pharmacy, Al-Quds University, Jerusalem Palestine.

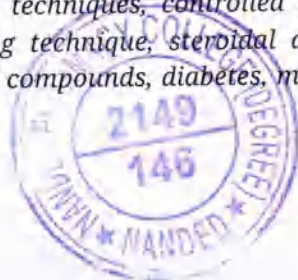
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This book covers key areas of Pharmaceutical Science. The contributions by the authors include mineral-herb preparations, ayurveda, chinese ethnomedicines, safety evaluation, microbial limit test, pesticide residue, toxicity, spectrophotometry, tablet dosage form, infertility, in silico analysis, polycystic ovary syndrome, anti-inflammatory drug, bootstrapping techniques, controlled release, non-steroidal anti-inflammatory drugs, anti-inflammatory activity, prodrug technique, steroidal drugs, pharmacokinetic profile, adverse effects, pharmacological activities, natural compounds, diabetes, medicinal plants, phenolic compounds, antiradical

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activity, antiproliferative agents, 1,2,4-oxadiazoles, floating microspheres, gastric emptying, and solvent evaporation. This book contains various materials suitable for students, researchers and academicians in the field of Pharmaceutical Science.

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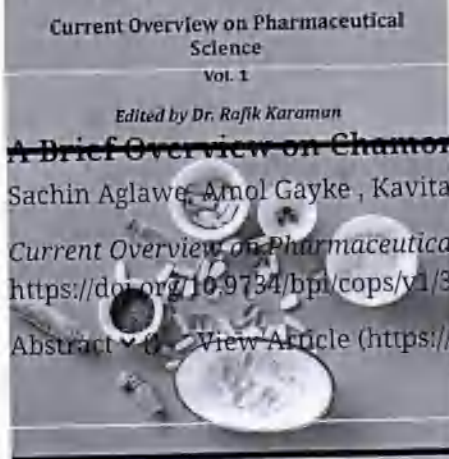
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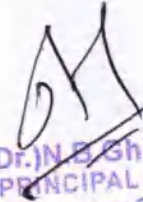
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Study about Ethosomes: A Novel Approach in Transdermal Drug Delivery System

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and Nitin B. Ghiware ^{c#}

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ABSTRACT

Ethosomal systems are newer lipid nano vesicular carriers that have been around for 20 years, but over that period they have grown significantly as a means of transdermal drug delivery. Phospholipids, ethanol at relatively high concentrations (up to 50%) and water are their main components also referred as "soft vesicles" due fluid bilayers. These nanocarriers carry medicinal substances with various physicochemical qualities throughout the skin and deep skin layers. Since they were introduced, Ethosomes have undergone substantial investigation; new substances have been added to their original composition, creating new varieties of ethosomal systems. The composition and structure of the vesicles augment their ability to entrap molecules with various physicochemical properties and deliver them to the deep strata of skin. These innovative carriers, which can be added to gels, patches, and lotions, are prepared using several novel methods. Skin bacterial and fungal infections, skin inflammation, acne vulgaris, arthritis, and skin cancer are examples of disorders managed successfully by ethosomal systems. Furthermore, Ethosomes loaded with a number of naturally occurring compounds for cosmetic applications are also reported. The efficient treatments together with a good safety profile and lack of toxicity or irritation paved the way towards the development of new dermal therapies. This review focuses on introduction, mechanism of penetration, method of production, methods of characterisation, and field application.

Keywords: TDDS; CTDDS; NTDDS; stratum comeum; vesicular drug delivery system; ethosomes.

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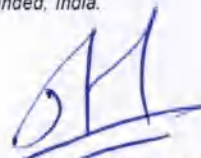
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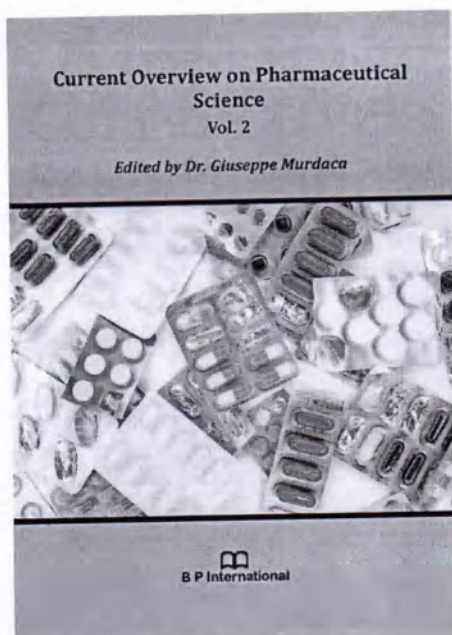



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Ethosomal systems are newer lipid nano vesicular carriers that have been around for 20 years, but over that period they have grown significantly as a means of transdermal drug delivery. Phospholipids, ethanol at relatively high concentrations (up to 50%) and water are their main components also referred as "soft vesicles" due fluid bilayers. These nanocarriers carry medicinal substances with various physicochemical qualities throughout the skin and deep skin layers. Since they were introduced, Ethosomes have undergone substantial investigation; new substances have been added to their original composition, creating new varieties of ethosomal systems. The composition and structure of the vesicles augment their ability to entrap molecules with various physicochemical properties and deliver them to the deep strata of skin. These innovative carriers, which can be added to gels, patches, and lotions, are prepared using several novel methods. Skin bacterial and fungal infections, skin inflammation, acne vulgaris, arthritis, and skin cancer are examples of disorders managed successfully by ethosomal systems. Furthermore, Ethosomes loaded with a number of naturally occurring compounds for cosmetic applications are also reported. The efficient treatments together with a good safety profile and lack of toxicity or irritation paved the way towards the development of new dermal therapies. This review focuses on introduction, mechanism of penetration, method of production, methods of characterisation, and field application.

Keywords: TDDS; CTDDS; NTDDS; stratum corneum; vesicular drug delivery system; ethosomes

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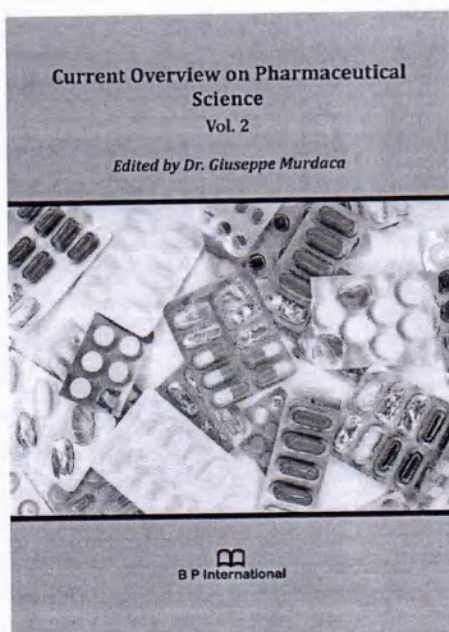



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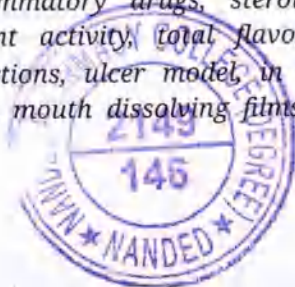
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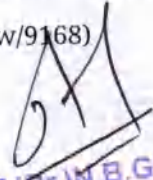
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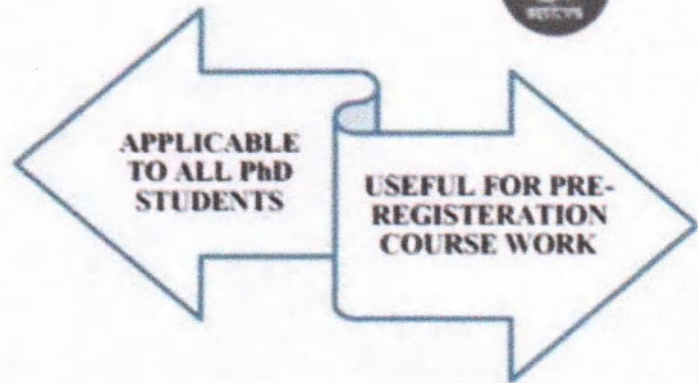
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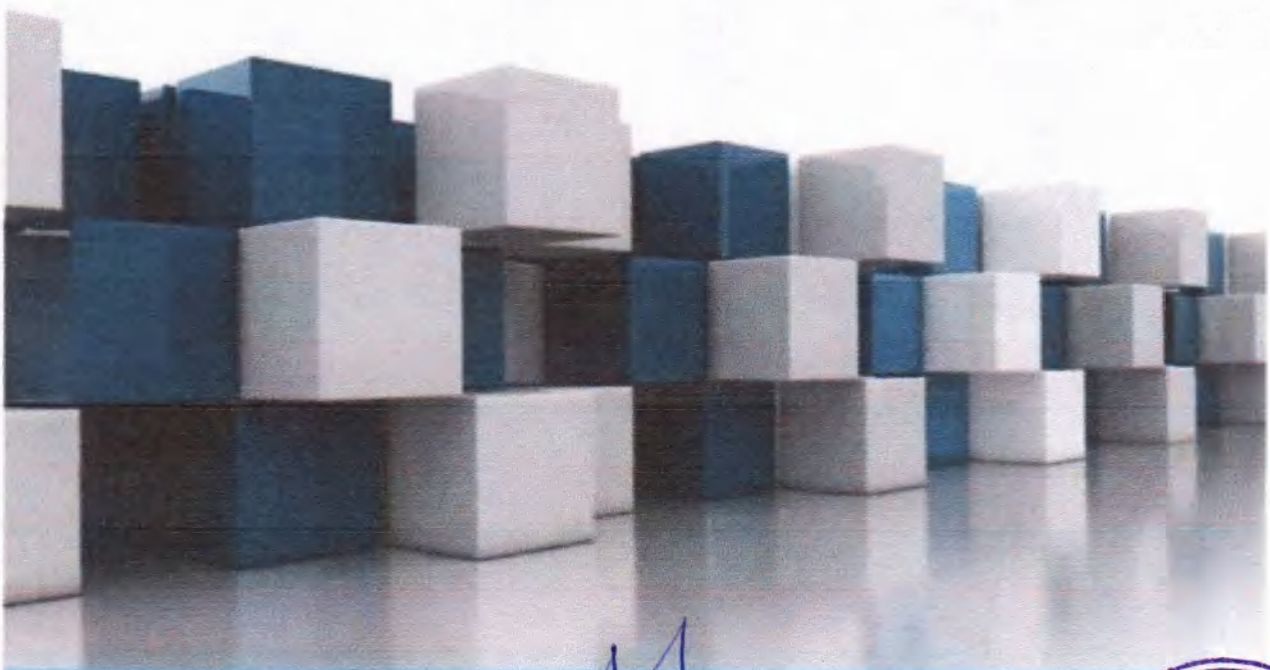


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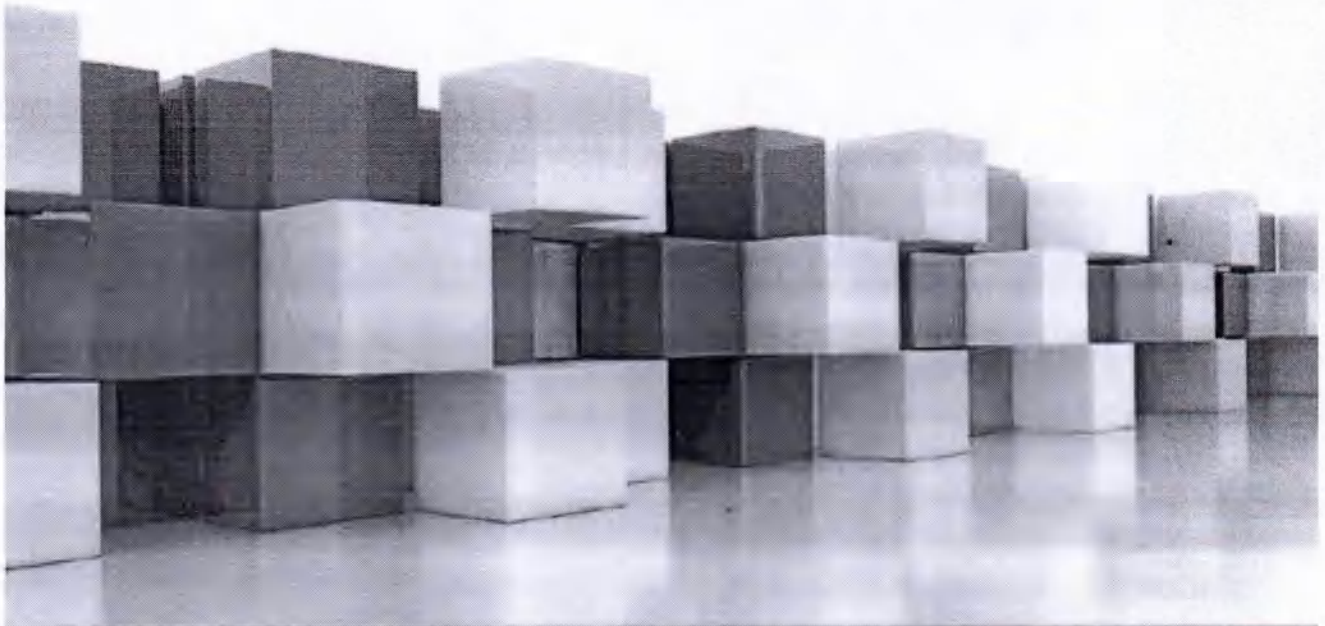
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Nanded Pharmacy College,
Nanded.

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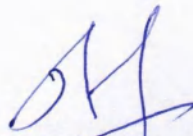
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FOR PhD COURSE WORK STUDENTS

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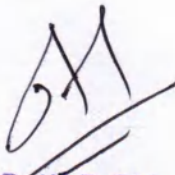



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Question Paper Pattern for University Examination

Paper- 1: Research Methodology (Question paper pattern)		
Marks:75		Duration:3hrs
N.B.:		
<ul style="list-style-type: none">• Attempt any five questions• Question no.1 is compulsory• Of the remaining attempt any four questions• All questions carry equal marks		
Q.1	Write short notes on (Any three out of five)	15 marks
Q.2	Descriptive question	15 Marks
Q.3	Descriptive question	15 Marks
Q.4	Descriptive question	15 Marks
Q.5	Write brief Note on a) b)	15 Marks
Q.6	Descriptive question	15 Marks
Q.7	Descriptive question	15 Marks
Q.8	Descriptive question	15 Marks




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SYLLABUS

Research Methodology:

Objective:

- To enable to student to understand and work methods and concepts related Research.
- To enable the student to develop research proposal and to work with research problem.
- To develop broad comprehension of research area.

Unit 1: Introduction

Meaning, Concept, nature steps types and characteristics of research. Scientific Inquiry Philosophical and Sociological foundations of research Interdisciplinary approach and its implications in various research area.


Unit 2: Methods of Research:

Qualitative and quantitative methods of research like Historical, case study, ethnography, ex post facto, documentary and content analysis, survey (Normative, descriptive, evaluative etc.) field and laboratory experimental studies. Characteristics of methods and their implications in research area.

Unit 3: Development of research proposal:

Research proposal and its elements Formulation of research problem criteria of sources and definition Development of objectives and characteristics of objectives. Development hypotheses and applications.




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Unit 4: Methods of data collection:

Concept of sampling and other concepts related to sampling. Probability and non-probability samples, their characteristics and implications. Tools of data collections, their types, attributes and uses. Redesigning, research tools-like questionnaire, opinnaere, observation, interviews, scales and tests etc.

Unit 5: Methods of data analysis:


Analysis of qualitative data based on various tools. Analysis of quantative data and it presentation with tables, graphs etc. Statistical tools and techniques of data analysis-measures of central tendency, dispersion. Decision making with hypothesis testing through parametric and non parametric tests. Validity and delimitations of research findings.

Unit 6: Report writing and evaluations:

Principles of report writing and guidelines according to style manuals.

Writing and presentation of preliminary, main body and reference section of report. Evaluation of research report.




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Text Book of
**INTRODUCTION TO
PHARMACOGNOSY**



Dr. G.R. Shendulkar



Prof. Dr. N.B. Ghiware
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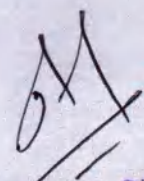
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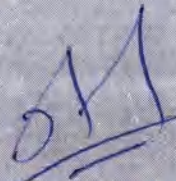
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Sr.	Title
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02	Study o
03	Study o
04	Genera
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06	Introd
07	Quali
08	Culti Proce
09	An I