

अखिल भारतीय फार्मसी काउन्सिल के शिक्षा अधिनियम 2020 के अनुसार
डिप्लोमा फार्मसी (द्वितीय वर्ष) के नवीनतम् पाठ्यक्रमानुसार

PHARMACOTHERAPEUTICS

फार्माकोथेरेप्यूटिक्स

Bilingual (English-हिन्दी)

डिप्लोमा फार्मसी द्वितीय वर्ष के छात्रों के लिए



अलंकार श्रीवास्तव

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असिस्टेन्ट प्रोफेसर (फार्मसी)

IFTM यूनिवर्सिटी

मुरादाबाद (यू.पी.)

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4. Pharmacotherapeutics (फार्माकोथेरेप्यूटिक्स)
5. Hospital and Clinical Pharmacy (हॉस्पिटल एवं क्लिनिकल फार्मसी)
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7. Environ. Edu. and Disaster Management (पर्यावरण शिक्षा एवं आपदा प्रबन्धन)

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Second Year

1. फार्माकोलॉजी (हिन्दी)
Pharmacology (Eng.)
2. सामुदायिक फार्मसी एवं प्रबन्धन (हिन्दी)
Community Pharmacy and Manag. (Eng.)
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Hospital and Clinical Pharmacy (Eng.)
6. फार्मसी कानून एवं नैतिकता (हिन्दी)
Pharmacy Law and Ethics (Eng.)
7. पर्यावरण शिक्षा एवं आपदा प्रबन्धन (हिन्दी)
Env. Edu. and Disaster Management (Eng.)

नोट : पुस्तक के मुद्रण में हर सम्भव प्रयास किया गया है कि सम्पादन, प्रूफ रीडिंग तथा विषय-सामग्री सम्बन्धित कोई त्रुटि अथवा कमी न रहे। उसके पश्चात् भी पुस्तक में यदि कोई त्रुटि अथवा कमी रह जाती है तो उसके लिये लेखक/प्रकाशक जिम्मेदार नहीं होंगे। पुस्तक के सुधार प्राप्त पाठकों के सुझावों के लिये लेखक/प्रकाशक आभारी होंगे।

□ किसी भी वाद-विवाद के लिये नायिक क्षेत्र मेरठ होगा।

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Mr. Alankar Shrivastav

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Dr. Harpreet Singh

Dr. Arun Kumar Mishra, is having 14 Years of teaching experience with an experience of supervising 20 M.Pharm students. Under his supervision, 9 students have been awarded Ph.D, 2 students have submitted the **Ph.D** thesis and 6 are working for **Ph.D degree**. His area of interest is Analytical Chemistry, Dermatology, Synthetic Medicinal Chemistry, Natural Product Chemistry and Pharmacology. Dr. Mishra is recipient of workshop grant from DBT, authored three books, two books chapter and got published 2 Indian patents. He has participated in 11 short time courses/ workshop/ conferences organized by different Government bodies and presented 36 posters in various conferences. He has to his credit 84 research and 32 review articles in various journals of high repute with cumulative impact factor 41.07 in SCI indexed journals. Apart from this, Dr. Mishra has been awarded for various credentials by different Organizations. Apart from his duties as **Professor IFTM University**, he is in charge of Central Facility of Instruments Head (Pharmacy).



Dr. Arun Kumar Mishra

Preface

Pharmacotherapeutics is a subdiscipline of pharmacology that studies the medical properties and effects of drugs. It is the study of the benefits and drawbacks of drugs.

This **Bilingual Textbook**, which is titled Pharmacotherapeutics, was written by our team with the needs of students studying for their Diploma in Pharmacy in mind. We have high hopes for the use of this textbook by academics as a handy reference book. In the book, we have concentrated on the theoretical details of etiopathogenesis, clinical manifestations, non-pharmacological and pharmacological management of the diseases associated with the cardiovascular system, the respiratory system, the endocrine system, the central nervous system, gastrointestinal disorders, hematological disorders, infectious diseases, musculoskeletal disorders, dermatology, and ophthalmology, among other medical specialties.

This issue of the book focuses particularly on the pharmacotherapeutics that are associated with a variety of diseases in considerable detail. There has been a lot of research done on the etiopathogenesis of important diseases. To stay up to date on the most recent developments in the treatment of a wide range of conditions, a thorough understanding of pharmacotherapeutics is required. Reading this book can help students and other people with a basic level of education learn more.

We would like to express our gratitude to Dr. M.P. Pandey, Vice Chancellor of IFTM University in Moradabad, for providing us with inspiration, encouragement, and useful suggestions. We would also like to thank the Director(s) of Pharmacy at IFTM University in Moradabad, as well as the editorial staff of the Publisher Board, for their assistance in hastening the publication process. We would like to express our gratitude to Dr. Amrita Mishra and the other members of both authors' families for all of the assistance they provided in writing this book and making this act possible.

We would also like to take this opportunity to extend our appreciation to the editorial staff of **Gyan Publishing House** for the invaluable assistance they provided. We would like to express our gratitude to the graphic designers who worked with us to produce a significant portion of the artwork for the text. In addition, we would like to extend our thanks to our coworkers and students who kindly agreed to be used as text subjects for a number of the informative chapters in this book. Within the next few years, we plan to publish a new edition of the book. In order to do this, we are eager to add comments, both good and bad, to future editions of this textbook.

Mr. Alankar Shrivastava

Dr. Harpreet Singh

Dr. Arun K Mishra

SYLLABUS

PHARMACOTHERAPEUTICS - (THEORY)

Course Code: ER20-24T

1. Pharmacotherapeutics : Introduction, scope, and objectives. Rational use of Medicines, Evidence Based Medicine, Essential Medicines List, Standard Treatment Guidelines (STGs).

Definition, etiopathogenesis, clinical manifestations, non-pharmacological and pharmacological management of the diseases associated with

(a) Cardiovascular System :

- Hypertension.
- Angina and Myocardial infarction.
- Hyperlipidaemia.
- Congestive Heart Failure.

(b) Respiratory System :

- Asthma.
- COPD.

(c) Endocrine System :

- Diabetes.
- Thyroid disorders-Hypo and Hyperthyroidism.

(d) Central Nervous System :

- Epilepsy.
- Parkinson's disease.
- Alzheimer's disease.
- Stroke.
- Migraine.

(e) Gastro Intestinal Disorders :

- Gastro oesophageal reflux disease.
- Peptic Ulcer Disease.
- Alcoholic liver disease.
- Inflammatory Bowel Diseases (Crohn's Disease and Ulcerative Colitis),

(f) Haematological disorders :

- Iron deficiency anaemia.
- Megaloblastic anaemia.

(g) Infectious diseases :

- Tuberculosis.
- Pneumonia.
- Urinary tract infections.

- Hepatitis.
- Gonorrhoea and Syphilis.
- Malaria.
- HIV and Opportunistic infections.
- Viral Infections (SARS, CoV2)
- (h) Musculoskeletal disorders :**
 - Rheumatoid arthritis.
 - Osteoarthritis.
- (i) Dermatology :**
 - Psoriasis.
 - Scabies.
 - Eczema.
- (j) Psychiatric Disorders :**
 - Depression.
 - Anxiety.
 - Psychosis.
- (k) Ophthalmology.**
 - Conjunctivitis (bacterial and viral).
 - Glaucoma.
- (l) Anti-microbial Resistance**
- (m) Women's Health :**
 - Polycystic Ovary Syndrome.
 - Dysmenorrhea.
 - Premenstrual Syndrome.

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