

As Per NEP 2020

University of Mumbai



Syllabus for Basket of OE	
Board of Studies in Chemistry	
UG First Year Programme	
Semester	I
Title of Paper	Credits 2/ 4
Medicines in Every Day Life	2
	2
	2
	2
From the Academic Year	2024-2025

Semester I Medicines in Every Day Life

Sr No	Heading	Particulars
1	Description the Course	The course aims to provide the information on commonly used medicines
2	Vertical	Open Elective (OE)
3	Type	Theory
4	Credits	2 Credits (1 Credit = 15 Hours for Theory)
5	Hours Allotted	30 Hours (Theory 1 Credit = 15 Hours)
6	Marks Allotted	50 Marks
7	Course Objectives (CO)	<p>CO 1. Introduce the fundamental concept of medicines and their significance in healthcare</p> <p>CO 2. Familiarize with key terminologies related to pharmacology and drug development</p> <p>CO 3. Recognize the roles and responsibilities of regulatory authorities in ensuring drug safety and efficacy</p> <p>CO 4. Differentiate between prescription and over-the-counter medicines</p> <p>CO 5. Gain insight into various routes of drug administration and dosage forms</p>
8	Course Outcomes (OC)	<p>Students will be able to-</p> <p>OC 1 Define the key attributes of a medicinal drugs</p> <p>OC 2 Differentiate between various medicinal terms</p> <p>OC 3 Describe the roles of regulatory authorities like FDA, FSSAI</p> <p>OC 4 Explain the routes of drug administration</p> <p>OC 5 Make logical purchase of over-the-counter drugs and know the process of getting prescribed drug</p>

9	Modules
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Semester	Module	Description	Credits
I	I	Introduction to Medicines	02
	II	Overview and Administration of Medicines	

MODULE	DESCRIPTION
I	<p>1 Introduction to Medicines (15L)</p> <p>1.1 Definition, importance and history of medicines (Drugs) (02L)</p> <p>1.2 Requirement of an ideal drug, Generic name, Brand name (03L)</p> <p>1.3 Important Terms in Medicinal Chemistry: Pharmacon, Pharmacophore, Prodrug, Half-life efficacy (03L)</p> <p>1.4 Brief Idea about the Terms: Drug Receptors, Drug potency, Bioavailability, Pharmacokinetics, Pharmacodynamics, Drug toxicity, Drug addiction (05L)</p> <p>1.5 Brief idea about important pharma industries and regulatory authorities in India (02L)</p>
II	<p>2 Overview and Administration of Medicines (15L)</p> <p>2.1 Brief Overview about Medicines used in Daily Life:</p> <p>Antipyretics (Drugs against fever), Antihypertensive (Drugs for controlling high blood pressure), Antidiabetic (Drugs controlling diabetes), Antibacterial (Drugs against bacterial infections), Antifungal (Drugs against fungal infections), Antituberculosis (Drugs used in treating tuberculosis), Drugs for Skin diseases (Drugs against melasma, Acne) (09L)</p> <p>2.2 Concepts of sedatives, hypnotics and anesthetics (02L)</p> <p>2.3 Concepts of over-the-counter and prescribed drugs (02L)</p> <p>2.4 Routes of drug administrations (02L)</p>

Reference Books

1. Medicinal Chemistry, D. Sriram, P. Yogeshwari, 2nd Edition, Pearson
2. Medicinal Chemistry, William O. Foye
3. Burgers Medicinal Chemistry and Drug Discovery by Manfred E. Wolf
4. Introduction To Medicinal Chemistry by Graham Patrick
5. An Introduction to Drug Design by S S Pandeya and J R Dimmock

QUESTION PAPER PATTERN

Theory	Credit	No. of Hours	Marks
	02	30	50

Internal Continuous Assessment: 40% (20 Marks)	External, Semester End Examination: 60% Individual Passing in Internal and External Examination (30 Marks)
Continuous Evaluation through: Quizzes, Class Tests, presentation, project, role play, creative writing, assignment etc.(at least 3)	As per the Format of Question Paper
Format of Question Paper: for the final examination	

Question Paper Pattern for 30 Marks:

Semester End Theory Examination:

1. Duration - These examinations shall be of **one-hour** duration.
2. Theory question paper pattern:
 - a. There shall be **02** questions, Question 1 carries 15 Marks based on Unit I and Question 2 carries 15 Marks based on Unit II.
 - b. All questions shall be compulsory with internal choice within the questions.

Question	Particulars	Marks	Questions Based on
Q.1	A) Objective Questions 06 out of 10	06	Unit I
	B) Subjective Questions 03 out of 05	09	
Q.2	A) Objective Questions 06 out of 10	06	Unit II
	B) Subjective Questions 03 out of 05	09	
Total		30	---

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