

B.D.S SECOND YEAR YEAR

SUBJECT: GENERAL AND DENTAL PHARMACOLOGY AND THERAPEUTICS

Teaching Scheme(Hours)				Credits	Examination Scheme				
Lec(L)	Prac(P)	Clinical(C)	Total		External		Sessional		Total
					Theory	Pract	Theory	Pract	
78	75	-	153	1	1	3	3	8	

A. COURSE OVERVIEW

The broad goal of teaching under graduate students in pharmacology is to inculcate rational and scientific basis of therapeutics keeping in view of dental curriculum and Profession.

At the end of the course the student shall be able to:

- Describe the pharmacokinetics and pharmacodynamics of essential and commonly used drugs in general and in dentistry in particular.
- List the indications, contraindications; interactions, and adverse reactions of commonly used drugs with reason.
- Tailor the use of appropriate drugs in disease with consideration to its cost, efficacy, safety for individual and mass therapy needs.
- Indicate special care in prescribing common and essential drugs in special medical situations such as pregnancy, lactation, old age, renal, hepatic damage and immuno compromised patients.
- Integrate the rational drug therapy in clinical pharmacology.
- Indicate the principles underlying the concepts of “Essential drugs

B. COURSE CONTENT

NO	TOPIC	L+P (hrs)	CLs
1	GENERAL PHARMACOLOGY: Principles	6+6	CL 1
2	CNS drugs; General anaesthetics, hypnotics, analgesics psychotropic drugs, anti – epileptics, muscle relaxants, local anaesthetics, Implications of these drugs in clinical dentistry.	6+6	CL1,3,4
3	Autonomic drugs; sympathomimetics, antiadrenergic drugs parasympathomimetics and parasympatholytics, Implications of Autonomic drugs in clinical dentistry	6+6	CL1,2,3,4
4	Cardiovascular drugs; Cardiac stimulants ; antihypertensive drugs, vasopressor agents, treatment of shock, Antianginal agents and diuretics, Implications of these drugs in clinical dentistry	6+6	CL1,2,3,4
5	Autocoids: Histamine, antihistamines, prostaglandins, leukotriens and bronchodilators, Implications of Autocoids in clinical dentistry.	6+6	CL1,2,3,4
6	Drugs acting on blood : coagulants and anticoagulants, hematinics, Implications of these drugs in clinical dentistry	6+6	CL1,2,3,4
7	G.I.T. Drugs, Purgatives, anti-diarrhoeal, antacids, anti-emetics, Implications of these drugs in clinical dentistry.	6+5	CL1,2,3,4
8	Endocrines; Emphasis on treatment of diabetes and glucocorticoids, thyroid and antithyroid agents, drugs affecting calcium balance and anabolic steroids, Implications of these drugs in clinical dentistry.	6+5	CL1,2,3
9	Chemotherapy	5+5	CL1,6
10	Vitamins	5+5	CL1,2,3
11	Pharmacotherapy of emergencies in dental office and emergency drugs tray Implications of Pharmacotherapy in clinical dentistry.	5+5	CL1,5

12	Chealating agents	5+5	CL1
13	DENTAL PHARMACOLOGY Anti - septics, astrigents, obtundents, mummifying agents, bleaching agents, styptics, disclosing agents, dentifrices, mouth washes, caries and fluorides	5+5	CL1,5,6
14	DENTAL PHARMACOLOGY Pharmacotherapy of common oral conditions in dentistry	5+5	CL1,5,6

C. TEXT BOOKS

1. Robbins – Pathologic Basis of Disease Cotran, Kumar, Robbins

D. REFERENCE BOOKS

1. R.S.Satoskar, Kale Bhandarkar's; Pharmacology and Pharmacolherapeutics, 10th Edition, Bombay Popular Prakashan,1991.
2. Bertam G Katzung; Basic and Clinical pharmacology, 6th edition, Appleton & Lange, 1997.
3. Lauurence D.R; Clinical Pharmacology, 8th edition, Churchill Livingstone,1997.
4. Satoskar R.S. & Bhandarkar S.D; Pharmacology and Pharmaco Therapeutics part I & part ii, 13th edition, Popular Prakashan Bombay, 1993.
5. Tripathi K.D; Essentials of Medical Pharmacology, 4th edition, Jaypee Brothers, 1999

E. COMPETENCY LEVEL

CL Number	Skill	Statement
CL1	Knowledge	<ul style="list-style-type: none"> • Knowledge about the pharmacokinetics and pharmacodynamics of essential and commonly used drugs in general and in dentistry in particular.
CL2	Investigations	<ul style="list-style-type: none"> • Observe experiments designed for study of effects of drugs. • Critically evaluate drug formulations and be able to interpret the clinical pharmacology of marketed preparations commonly used in.dentistry
CL3	Patient Care: Diagnosis	<ul style="list-style-type: none"> • Indicate special care in prescribing common and essential drugs in special medical situations such as pregnancy, lactation, old age, renal, hepatic damage and immuno compromised patients
CL4	Patient Care: Treatment planning	<ul style="list-style-type: none"> • List the indications, contraindications; interactions, and adverse reactions of commonly used drugs with reason
CL5	Patient Care: Treatment	<ul style="list-style-type: none"> • Prescribe drugs for common dental and medical ailments with consideration to its cost, efficacy, safety for individual and mass therapy needs
CL6	Research and Innovation	<ul style="list-style-type: none"> • Upgradation of knowledge and skill from time to time, familiarize with new concept and equipment in pharmacology
CL 7	Evidence Based Learning	<ul style="list-style-type: none"> • Consolidate all the above mentioned major competencies acquired during the course and integrate newer evidence based knowledge in displaying expertise in the science of GENERAL AND DENTAL PHARMACOLOGY AND THERAPEUTICS

PROGRAM SPECIFIC OUTCOME (PSO)

PSO1	Diagnosis	Practical knowledge of use of drugs in clinical practice will be acquired through integrated teaching with clinical departments.
PSO2	Investigations	Observe experiments designed for study of effects of drugs.
PSO3	Treatment	Critically evaluate drug formulations and be able to interpret the clinical pharmacology of marketed preparations commonly used in dentistry.

F. COURSE MATRIX

	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PO 13	PO 14	PO 15	PS O1	PS O2	PS O3
CL1	3	3	3	1	3	1	1	3	2	1	1	1	1	1	1	3	2	2
CL2	2	2	2	2	2	2	1	3	2	1	1	1	1	1	1	3	3	2
CL3	3	3	3	3	3	3	2	2	2	2	2	2	2	1	1	3	2	2
CL4	2	2	2	3	2	3	3	2	2	1	1	3	1	1	2	3	3	3
CL5	2	2	2	3	2	3	3	3	2	3	2	2	2	1	2	3	3	3
CL6	1	1	1	1	1	1	1	1	1	1	3	2	1	1	1	3	2	2
CL7	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Avg	2.3	2.3	2.3	2.3	2.3	2.3	2.0	2.4	2.0	1.7	1.9	2.0	1.6	1.3	1.6	3.0	2.6	2.4