Contents

Preface v

PART 1: FIRST YEAR DIPLOMA IN PHARMACY SUBJECTS		
	Section I: Pharmaceutics	
Syllabus (As Per ER 2020) Pharmac	eutics	5
1. History of the Profession of Ph	armacy in India	7
2. Packaging Materials		11
3. Pharmaceutical Aids and Prese	rvatives	13
4. Unit Operations		15
5. Tablets and Capsules		21
6. Liquid Oral Preparations		24
7. Topical Preparations		26
8. Sterile Formulations and Immu	nological Products	31
9. Quality Control and Quality As	ssurance	34
10. Novel Drug Delivery System		36
S	ections II: Pharmaceutical Chemistry	
Syllabus (As Per ER 2020) Pharmac	eutical Chemistry	41
1. Introduction to Pharmaceutical	Chemistry	43
2. Volumetric Analysis		46
3. Inorganic Pharmaceuticals		50
4. Introduction to Nomenclature	of Organic Chemical Systems	55
5. Drugs Acting on Central Nervo	ous System	58
6. Drugs Acting on Autonomic N	ervous System	61
7. Drugs Acting on Cardiovascula	ır System	64
8. Diuretics		67
9. Hypoglycemic Agents		69
10. Analgesic and Anti-inflammato	ory Agents	71
11. Anti-infective Agents		73
12. Antibiotics		76
13. Anti-neoplastic Agents		79
	Sections III: Pharmacognosy	
Syllabus (As per ER 2020) Pharmac	ognosy	83
1. History of Pharmacognosy		85
2. Classification of Crude Drugs		87
3 Quality Control of Drugs		89

/iii	Pharma Success

4.	Chemical Nature of Crude Drugs	91
5.	Pharmacological Grouping of Crude Drugs	94
6.	Plant Fibres used as Surgical Dressings	101
7.	Basic Principles Involved in the Alternative System of Medicine	104
8.	Role of Medicinal and Aromatic Plants	107
9.	Herbs as Health Food	109
10.	Herbal Cosmetics	111
11.	Phytochemical Investigation of Drugs	114
	Sections IV: Human Anatomy and Physiology	
Syll	labus (As per ER 2020) Human Anatomy and Physiology	119
1.	Scope of Anatomy and Physiology	121
2.	Structure of Cell	124
3.	Tissues of the Human Body	127
4.	The Osseous System (The Skeleton)	130
5.	The Haemopoietic System (The Blood)	133
6.	The Lymphatic System	137
7.	The Cardiovascular System (The Blood Circulation)	139
8.	The Respiratory System	142
9.	The Digestive System	145
10.	The Skeletal Muscles	149
11.	The Nervous System	151
12.	The Sense Organs	154
13.	The Urinary System (The Renal System)	158
14.	The Endocrine System (Hormonal Coordination)	161
15.	The Reproductive System	164
	Sections V: Social Pharmacy	
Syll	labus (As per ER 2020) Social Pharmacy	171
	ntroduction to Social Pharmacy	173
	Preventive Healthcare: Role of Pharmacist	177
	Nutrition and Health	182
	ntroduction to Microbiology and Common Microorganisms	187
	Introduction to Health System	193
6. F	Pharmacoeconomics	196
	PART 2: SECOND YEAR DIPLOMA IN PHARMACY SUBJECTS	
	Sections VI: Pharmacology	
•	labus (As Per ER 2020) Pharmacology	203 205
1.	1. General Pharmacology	

Contents	ix
2. Drugs Acting on Peripheral Nervous System	210
3. Drugs Acting on the Eye	
4. Drugs Acting on the Central Nervous System	216
5. Drugs Acting on the Cardiovascular System	220
6. Drugs Acting on Blood and Blood Forming Organs	222
7. Drugs Acting on Respiratory System	224
8. Drugs Acting on Gastrointestinal Tract	227
9. Drugs Acting on the Kidney	229
10. Hormones and Hormone Antagonists	232
11. Autocoids	235
12. Chemotherapeutic Agents	237
Sections VII: Community Pharmacy and Management	
Syllabus (As Per ER 2020) Community Pharmacy and Management	245
Community Pharmacy Practice	247
2. Professional Responsibilities of Community Pharmacists	250
3. Prescription and Prescription Handling	252
4. Communication Skills	255
5. Patient Counselling	258
6. Medication Adherence	261
7. Health Screening Services in Community Pharmacy	263
8. Over-the-Counter (OTC) Medications	265
9. Community Pharmacy Management	268
Sections VIII: Biochemistry and Clinical Pathology	
Syllabus (As Per ER 2020) Biochemistry and Clinical Pathology	275
Introduction to Biochemistry (The Cell)	277
2. Carbohydrates	280
3. Proteins	283
4. Lipids	286
5. Nucleic Acids	290
6. Enzymes	293
7. Vitamins	296
8. Metabolism	299
9. Minerals	303
10. Water and Electrolytes	306
11. Introduction to Biotechnology	309
12. Organ Function Tests	311
13. Pathology of Blood and Urine	314
OJ - The state of	011

x Pharma Success

Sections IX: Pharmacotherapeutics

Syll	labus (As Per ER 2020) Pharmacotherapeutics	319
1.	Introduction to Pharmacotherapeutics	321
2.	Cardiovascular System	324
3.	Respiratory System	327
4.	Endocrine System	330
5.	Central Nervous System	332
6.	Gastrointestinal Disorders	335
7.	Haematological Disorders	339
8.	Infectious Diseases	341
9.	Musculoskeletal Disorders	347
10.	Dermatology	349
11.	Psychiatric Disorders	351
12.	Ophthalmology	353
13.	Anti-microbial Resistance	355
14.	Women's Health	356
	Sections X: Hospital and Clinical Pharmacy	
Syll	labus (As Per ER 2020) Hospital and Clinical Pharmacy	361
1.	Hospital Pharmacy	363
2.	Different Committees in the Hospital	366
3.	Supply Chain and Inventory Control	368
4.	Drug Distribution	371
5.	Compounding in Hospitals	373
6.	Radiopharmaceuticals	375
7.	Application of Computers in Hospital Pharmacy Practice, Electronic Health Records, Softwares used in Hospital Pharmacy	378
8.	Clinical Pharmacy	381
	Clinical Laboratory Tests	384
10.	Poisoning	387
11.	Pharmacovigilance	389
	Medication Errors	391
13.	Drug Interactions	393
	Sections XI: Pharmacy Law and Ethics	
Syll	labus (As Per ER 2020) Pharmacy Law and Ethics	397
1.	General Principles of Law, History and Various Acts Related to Drugs and Pharmacy Profession	399
2.	TI DI A (1040 1 D 1	400
3.	Drugs and Cosmetics Act 1940 and Rules 1945 and New Amendments	404
	Narcotic Drugs and Psychotropic Substances Act 1985 and Rules	409
5.	The Drugs and Magic Remedies (Objectionable Advertisements) Act, 1954	411

	Contents	хi
6.	The Prevention of Cruelty to Animals Act 1960	413
7.	The Poisons Act 1919	415
8.	Food Safety and Standards Authority of India Act and Rules	417
9.	National Pharmaceutical Pricing Authority	419
10.	Code of Pharmaceutical Ethics	421
11.	Medical Termination of Pregnancy Act 1971	423
12.	Central Drugs Standards Control Organization (CDSCO) and Indian Pharmacopoeia Commission (IPC)	425
13.	Good Regulatory Practices (GRPs)	427
14.	Introduction to BCS System of Classification	428
15.	Blood Bank: Basic Requirements and Functions	432
16.	Clinical Establishment Act and Rules	434
17.	Biomedical Waste Management Rules 2016	435
18.	Bioethics	437
19.	The Consumer Protection Act 1986	438
20.	Introduction to the Disaster Management Act	441
21.	Medical Devices	442