



BIRLA INSTITUTE OF TECHNOLOGY AND SCIENCE, Pilani
Pilani Campus

INSTRUCTION DIVISION
SECOND SEMESTER 2015-2016
Course Handout (Part-II)

Date: 05/01/2016

In addition to part-I (General handout for all the courses appended to the time table) this portion gives further specific details regarding the course.

Course No. : PHA C322/PHA F212
Course Title : Dispensing Pharmacy
Instructor-in-charge : Dr. Deepak Chitkara
Team of Instructors : Dr. Gautam Singvi, Ms. Archana K.K., Ms. Deepali Gupta,
Ms. Shruti R

1) Course Description:

Prescriptions and principles involved in the dispensing of prescriptions; physical, chemical and therapeutic incompatibilities involved and their remedy in such prescriptions; techniques involved in dispensing various pharmaceutical preparations like mixtures, ointments, suspensions, emulsions etc.

2) Scope and Objective of the Course:

This course is concerned with the preparation and dispensing of medicines. It intends to impart knowledge to the students on various aspects of dispensing of medicaments with stress on compounding, stability, incompatibilities, packing methods and labeling procedures. It also orients the students to take the responsibilities of a hospital pharmacist.

3) Text Book:

1) Carter, S. J., Cooper and Gunn's Dispensing for Pharmaceutical Students, Pitman Medical Publishing Co. Ltd., 12th Ed, 1975.

4) Reference Books:

- a) Merchant, S. H., Qadry, J. S., A Textbook of Hospital Pharmacy, B. S. Shah Prakashan, 2nd Ed., 1994.
- b) Remington's Pharmaceutical Sciences, Mack Publishing Company, 17th Ed., 1985.
- c) Different Pharmacopias.
 - Indian Pharmacopieia 1996.
 - British Pharmacopieia 1999.
 - United States Pharmacopieia 2006.
 - Martindale: The extra Pharmacopieia 1999.



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5) Course Plan:

a) Lecture wise programme:

Lecture No.	Learning Objectives	Topics to be covered	Reference* Chapter./Sec.# (Book)
1	Definition and scope of dispensing pharmacy	Introduction	T- Chapter 1
2	Components of prescriptions; Sources of information	Prescription	T- Chapter 1
3-4	Basics of proper dispensing; Fundamental operations in compounding including weighing and measurements	General dispensing procedures	T- Chapters 1, 5 and 6
5	Understanding commonly used terminologies in a prescription	Latin terms and abbreviations	T- Appendix 9
6	Care to be taken and sources of error in a prescription	Modern methods of prescribing	Class-notes
7	Various types of dispensed preparations	Dispensed preparations	T- Chapter 2
8-9	Labeling requirements for dispensed products according to regulatory guidelines	Labeling	T-Chapter 4 and Appendix 7
10	Dose and its calculations	Posology	T- Appendix 10
11-12	Understanding various types of calculations involved in dispensing	Pharmaceutical calculations	T- Chapter 8 and Appendix 8
13-14	Various types of packaging containers/ materials for dispensed products	Containers and closures	T-Chapters 3 & 21 and Appendix 7
15-16	Colour, flavour, antioxidants and preservatives employed in dispensed products	Additives	T-Chapter 7 and Appendix 1
17-18	Various types of solution preparations such as aromatic water, elixirs etc.	Solutions	T-Chapter 9
19-20	Formulation, evaluation and stability of suspensions	Suspensions	T-Chapter 10
21-23	Formulation, evaluation and stability of emulsions and creams	Emulsions and creams	T-Chapter 11
24-25	Formulation and evaluation of different types of powders; Critical parameters in tablet and capsule manufacturing	Powders and oral unit dosage forms	T-Chapter 12
26-28	Different types of ointment bases; Formulation and evaluation of ointments, pastes and jellies	Ointments, pastes and jellies	T-Chapter 13
29	Formulation and evaluation of suppositories and pessaries	Suppositories and Pessaries	T-Chapter 14
30	Introduction to ophthalmic and parenteral preparations	Sterile dosage forms	T-Chapter 20 and 29; Class-notes





31-33	Physical, chemical and therapeutic incompatibilities	Incompatibilities	T-Chapter 15
34-35	Setting up a hospital pharmacy; Duties and responsibilities of a hospital pharmacist	Hospital pharmacy practice	Ref (a)

b) Practicals:

Name of Experiments	No of Practical Hours	Reference* Chapter./Sec.# (Book)
Dispensing of different pharmaceutical preparations	12 for each section	# Different chapters of text book # Different sections of Ref (b) and (c)

6) Evaluation Scheme:

Components	Duration	Weightage	Date and Time	Remarks
Tutorial *	10 minutes	10%		Closed Book
Mid Term Test	90 minutes	25%	18/3 2:00 -3:30 PM	Closed Book
Laboratory Component	Continuous	30%		To be announced
Comprehensive Examination	120 minutes	35%	13/5 FN	Closed Book.+ Open Book

* Series of surprise tutorial evaluations (comprising of problem-solving/ conceptual/ quiz-based questions) will be carried in the last ten minutes of regular/ tutorial class and the average will be considered for final evaluation.

7) Mid-Semester Evaluation: Will be announced.

8) Make-up: Prior approval or intimation to take a make-up is a must. It is solely the discretion of the instructor-in-charge, depending upon the genuineness of the circumstances, to allow a student to appear for a make-up evaluation component.

9) Grading Procedure: As specified in Handout – Part I, appended to the timetable, the instructor in-charge reserves the right to award a NC report in case the student does not make himself/ herself available for any of the evaluation component mentioned above. Also it is not imperative on part of the instructor in-charge to award all the grades. Borderline cases during grading will be judged on the basis of regularity to classes and consistency or progress in the performance in evaluation components. The maximum pull-up to be exercised by the





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instructor in-charge will be announced in the class and shall be based on the subjective judgment of the evaluator.

10) Chamber Consultation Hours: To be announced in class.

11) Notices: All the notices pertaining to this course will be displayed only on Pharmacy Group Notice board.

**Instructor In-Charge
PHA F212**



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