**SAT PRIYA COLLEGE OF PHARMACY, ROHTAK**

**LESSON PLAN**

**D.Pharmacy 1st yr. (session 2021-22)**

**Subject- Pharmaceutics**

**Name of Faculty- Dr. Minakshi Marwaha**

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| **S.No.** | **Date**  | **Theory Topic** | **Practical Topic** |
| **1** | 28-10-2021-30-10-2021 | Introduction to Pharmaceutics  | To study various type of dosage form |
| **2** | 01-11-2021-06-11-2021(Quiz/Oral Exam On Wednesday) | History of the profession of Pharmacy in India in relation to Pharmacy education, industry, pharmacy practice, and various professional associations.  |
| **3** | 08-11-2021-13-11-2021 | • Pharmacy as a career • Pharmacopoeia: Introduction to IP, BP, USP, NF and Extra Pharmacopoeia. Salient features of Indian Pharmacopoeia | To study route of drug administration. |
| **4** | 15-11-2021-20-11-2021 | Packaging materials: Types, selection criteria, advantages and disadvantages of glass, plastic, metal, rubber as packaging materials  |
| **5** | 24-11-2021-29-11-2021 | **Induction Program** |
| **6** | 30-11-2021-04-12-2021 | Pharmaceutical aids: Organoleptic (Colouring, flavouring, and sweetening) agents Preservatives: Definition, types with examples and uses | To prepare simple syrup |
| **7** | 06-12-2021-11-12-2021(Quiz/Oral Exam On Wednesday) | Unit operations: Definition, objectives/applications, principles, construction, and workings of: Size reduction: hammer mill and ball mill Size separation: Classification of powders according to IP, Cyclone separator, Sieves and standards of sieves  | To prepare piperazine citrate elixer |
| **8** | 13-12-2021-18-12-2021 | Unit operations: Definition, objectives/applications, principles, construction, and workings of: Mixing: Double cone blender, Turbine mixer, Triple roller mill and Silverson mixer homogenizer |
| **9** | 20-12-2022-31-12-2022 | **1st Internal Assessment Exam** |
| **10** | 01-01-2022-08-01-2022(Quiz/Oral Exam On Wednesday) | Unit operations: Definition, objectives/applications, principles, construction, and workings of: Filtration: Theory of filtration, membrane filter and sintered glass filter  | To prepare castor oil emulsion |
| **11** | 10-01-2022-15-01-2022 | Unit operations: Definition, objectives/applications, principles, construction, and workings of: Drying: working of fluidized bed dryer and process of freeze drying  |
| **12** | 17-01-2022-22-01-2022 | Unit operations: Definition, objectives/applications, principles, construction, and workings of: Extraction: Definition, Classification, method, and applications | To prepare cod liver oil emulsion |
| **13** | 24-01-2022-29-01-2022(Seminar on Friday) | Unit operations: Definition, objectives/applications, principles, construction, and workings of: Extraction: Definition, Classification, method, and applications |
| **14** | 31-01-2022-05-02-2022 | Tablets – coated and uncoated, various modified tablets (sustained release, extended-release, fast dissolving, multilayered) |
| **15** | 07-02-2022-12-02-2022(Quiz/Oral Exam On Wednesday) | Tablets – coated and uncoated, various modified tablets (sustained release, extended-release, fast dissolving, multilayered) | To prepare glycerol suppositories |
| **16** | 14-02-2022-19-02-2022 | Capsules - hard and soft gelatine capsules  | To prepare sodium alginate gel |
| **17** | 21-02-2022-26-02-2022(Seminar on Friday) | Liquid oral preparations - solution, syrup, elixir, emulsion, suspension, dry powder for reconstitution |
| **18** | 28-02-2022-05-03-2022 | Topical preparations - ointments, creams, pastes, gels, liniments and lotions, suppositories, and pessaries  | To study about prescription writing |
| **19** | 07-03-2022-12-03-2022(Quiz/Oral Exam On Wednesday) | Topical preparations - ointments, creams, pastes, gels, liniments and lotions, suppositories, and pessaries |
| **20** | 14-03-2022-19-03-2022 | Nasal preparations, Ear preparations  | To study about good manufacturing practices  |
|  **21** | 21-03-2022-25-03-2022 | **2nd Internal Assessment Exam** |
| **22** | 21-03-2022-26-03-2022 | Powders and granules - Insufflations, dusting powders, effervescent powders, and effervescent granules | To prepare magnesium hydroxide mixture |
| **23** | 28-03-2022-02-04-2022 |  Sterile formulations – Injectables, eye drops and eye ointments | To prepare normal saline solution |
| **24** | 02-04-2022 | **Field Visit** |
| **25** | 04-04-2022-09-04-2022(Quiz/Oral Exam On Wednesday) | Immunological products: Sera, vaccines, toxoids, and their manufacturing methods. |
| **26** | 11-04-2022-16-04-2022 | Basic structure, layout, sections, and activities of pharmaceutical manufacturing plants | To prepare cold cream |
| **27** | 18-04-2022-23-04-2022 | Quality control and quality assurance: Definition and concepts of quality control and quality assurance |
| **28** | 25-04-2022-30-04-2022(Seminar on Friday) | Current good manufacturing practice (cGMP), Introduction to the concept of calibration and validation. | To demonstrate tablet manufacturing process |
| **29** | 02-05-2022-07-05-2022(Quiz/Oral Exam On Wednesday) | Novel drug delivery systems: Introduction |
| **30** | 09-05-2022-14-05-2022 | Novel drug delivery systems- Classification with examples, advantages, and challenges | To demonstrate size reduction process  |
| **31** | 16-05-2022-21-05-2022 | Novel drug delivery systems- Classification with examples, advantages, and challenges |
| **32** | From 23-05-2022 Onward  | Revision/ Problem Discussion  |  |