**Lesson Plan**

**Name of Faculty: Rashmi sumbria**

**Discipline: Pharmacy**

**Semester: I Year**

**Subject: Pharmaceutics I**

Lesson plan Duration: 15 Week (august 2017 to April 2018)

Work Load (Lecturer/Practical) per week (in hour) Lecture 03, Practical 04hrs each batch

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Week | Theory | |  | Practical |
|  | Days | Topic (including Assignment Test) |  | Topics |
| 1 | 1 | Pharmacopoeia |  | Prepare magnesium Oxide Capsule |
|  | 2 | Pharmacopoeia |  |  |
|  | 3 | Metrology |  |  |
| 2 | 4 | Numerical practice |  | Compound Sodium bicarbonate Granules |
|  | 5 | Numerical practice |  |  |
|  | 6 | Isotonic solution |  |  |
| 3 | 7 | Isotonic solution calculations |  | Granules for Calcium Lactate Tab |
|  | 8 | Distillation: Introduction, simple distillation |  |  |
|  | 9 | Fractional distillation, |  |  |
| 4 | 10 | Steam distillation, |  | Granules for Paracetamol Tab |
|  | 11 | Vacuum Distillation, Vacuum still |  |  |
|  | 12 | Purified water and Water for injection |  |  |
| 5 | 13 | Introduction to drying process & its types |  | Sodium bicarbonate tablets |
|  | 14 | Tray dryers |  |  |
|  | 15 | Fluidized bed dryer , vacuum dryer |  |  |
| 6 | 16 | Freeze dryer |  | Paracetamol Tablet |
|  | 17 | sterilization concept, difference from disinfection |  |  |
|  | 18 | Microbes thermal resistance |  |  |
| 7 | 19 | dry heat sterilization, |  | Evaluation of Tablets as per IP Standards |
|  | 20 | Moist heat sterilization, |  |  |
|  | 21 | Radiation sterilization. |  |  |
| 8 | 22 | Gaseous sterilization |  | Evaluation of Tablets as per IP Standards |
|  | 23 | Aseptic techniques |  |  |
|  | 24 | Sterilization of the surgical dressings |  |  |
| 9 | 25 | Sterilization of the I V fluids |  | Aseptic technique |
|  | 26 | Introduction: tablet, |  |  |
|  | 27 | Types: compressed tablets |  |  |
| 10 | 28 | Excipients of compressed tablets |  | Sterile Water for Injection IP |
|  | 29 | Excipients of compressed tablets |  |  |
|  | 30 | Machinery of tablet manufacturing |  |  |
| 11 | 31 | Compressed tablet production process |  | Sodium Chloride Injection IP/ sterilization |
|  | 32 | Compressed tablet production process |  |  |
|  | 33 | Defects of tablets |  |  |
| 12 | 34 | Defects of tablets |  | Dextrose Injection IP sterilization |
|  | 35 | Coating of tablets |  |  |
|  | 36 | Coating of tablets |  |  |
| 13 | 37 | Evaluation of tablets |  | Atropine Sulphate Eye Drop IP sterilization |
|  | 38 | Evaluation of tablets |  |  |
|  | 39 | Introduction and Types of capsules |  |  |
| 14 | 40 | Filling of hard gelatin capsules, |  | Boric Acid Eye Lotion sterilization |
|  | 41 | Filling of soft gelatin capsules, |  |  |
|  | 42 | Handling, storage, special applications of capsules |  |  |
| 15 | 43 | Immunological products productions sera |  | Zinc Sulphate eye drop IP sterilization |
|  | 44 | Immunological products productions vaccine |  |  |
|  | 45 | Immunological products productions toxoids |  |  |