

| No. of Hours | TOPIC | Days | Expected date | Conducted date | Remark |
|--------------|---|------|---------------|----------------|--------|
| 1 | Introductory class | MON | 16-06-25 | | |
| 2 | Unit-III: Coarse dispersion: Suspension, interfacial properties of suspended particles | TUE | 17-06-25 | | |
| 3 | suspended particles | MON | 23-06-25 | | |
| 4 | settling in suspensions | TUE | 24-06-25 | | |
| 5 | formulation of suspensions | WED | 25-06-25 | | |
| 6 | Emulsions and theories of emulsification, | MON | 30-06-25 | | |
| 7 | microemulsion and multiple emulsions; Physical stability of emulsions, | WED | 02-07-25 | | |
| 8 | preservation of emulsions, rheological properties of emulsions | MON | 07-07-25 | | |
| 9 | phase equilibria and emulsion formulation. | TUE | 08-07-25 | | |
| 10 | Micromeritics: Particle size distribution | WED | 09-07-25 | | |
| 11 | mean particle size, number and weight distribution, particle number | MON | 14-07-25 | | |
| 12 | methods for determining particle size by different methods, | TUE | 15-07-25 | | |
| 13 | counting and separation method, particle shape, specific surface, | WED | 16-07-25 | | |
| 14 | methods for determining surface area, permeability adsorption, | MON | 21-07-25 | | |
| 15 | derived properties of powders | TUE | 22-07-25 | | |
| 16 | porosity, packing arrangement, densities, bulkiness & flow properties. | WED | 23-07-25 | | |
| 17 | TEST | MON | 28-07-25 | | |
| 18 | Unit-I: Drug stability: Reaction kinetics: zero, pseudo-zero first & second order | TUE | 29-07-25 | | |
| 19 | units of basic rate constants, determination of reaction order, determination of reaction order | WED | 30-07-25 | | |
| 20 | Physical & chemical factors influencing the | MON | 04-08-25 | | |

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| | chemical degradation of pharmaceutical product: temperature, | | | | |
| 21 | solvent, ionic strength, dielectric constant, specific & general acid base catalysis | TUE | 05-08-25 | | |
| 22 | Physical & chemical factors influencing the chemical degradation of pharmaceutical product | WED | 06-08-25 | | |
| 23 | Physical & chemical factors influencing the chemical degradation of pharmaceutical product | MON | 18-08-25 | | |
| 24 | Stabilization of medicinal agents against common reactions like hydrolysis & oxidation. | TUE | 19-08-25 | | |
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|--------------|---|------|---------------|----------------|--------|
| 25 | Accelerated stability testing in expiration dating of pharmaceutical dosage forms | WED | 20-08-25 | | |
| 26 | Photolytic degradation and its prevention | MON | 25-08-25 | | |
| 27 | Unit-V: Colloidal dispersions: Classification of dispersed systems | TUE | 26-08-25 | | |
| 28 | general characteristics, size & shapes of colloidal particles | MON | 01-09-25 | | |
| 29 | classification of colloids | TUE | 02-09-25 | | |
| 30 | comparative account of their general properties | WED | 03-09-25 | | |
| 31 | Optical properties | MON | 08-09-25 | | |
| 32 | kinetic properties | TUE | 09-09-25 | | |
| 33 | electrical properties, | WED | 10-09-25 | | |
| 34 | Effect of electrolytes | MON | 15-09-25 | | |
| 35 | coacervation, peptization & protectective action | TUE | 16-09-25 | | |
| 36 | TEST | WED | 17-09-25 | | |
| 37 | Unit-II: Rheology: Newtonian systems, law of flow, | MON | 22-09-25 | | |
| 38 | kinematic viscosity, effect of temperature | TUE | 23-09-25 | | |
| 39 | non-Newtonian systems, pseudoplastic, dilatants, plastic | WED | 24-09-25 | | |
| 40 | thixotropy, thixotropy in formulation | MON | 29-09-25 | | |
| 41 | determination of viscosity, capillary, falling sphere | TUE | 30-09-25 | | |
| 42 | determination of viscosity rotational viscometer | WED | 01-10-25 | | |
| 43 | Deformation of solids: Plastic and elastic deformation | MON | 06-10-25 | | |
| 44 | Heckel equation, stress, strain, elastic modulus | WED | 08-10-25 | | |
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