## CHOICE BASED CREDIT SYSTEM (CBCS) SEM VI (2016 SYLLABUS)

| Sr.No. | Code | Name of Subject | Course outcome |
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| 43 | BPH C 601 T | PHARMACEUTICAL CHEMISTRY- I | 1. Learner should able to identify and study the suitable drug targets for treatment of disorders |
| | | | 2. Learner should able to identify the relationship between the physicochemical properties of the chemical entity and biological response |
| | | | 3. Learner should able to draw a schematic metabolic pathway for any given drug |
| | | | 4. Learner should able to identify the SAR of all the classes of antimalarial, antitubercular, anti-infective, antibiotic, antiparasitic disorders |
| 44 | BPH C 602 T | PHARMACEUTICS III | 1.Learner should able to know the various solid oral dosage forms and their manufacturing techniques |
| | | | 2. Learner should able to know various considerations in development of pharmaceutical dosage forms including stability |
| | | | 3. Learner should able to formulate solid dosage forms and evaluate them for their quality |
| | | | 4. Learner should able to understand the responsibilities of quality assurance & quality control departments |
| | | | 5. Learner should able to appreciate the importance of documentation |
| 45 | BPH C 603 T | PHARMACEUTICAL ANALYSIS II | 1. Learner should able to comprehend underlying principle, instrumentation, application and limitations in instrumental techniques involving molecular as well as atomic absorption and emission techniques such as UV-Visible, Fluorescence, Infra-Red, Raman, Atomic absorption spectroscopy and Atomic emission spectroscopy |
| | | | 2. Learner should able to explain fundamentals, working principle and applications of X-ray diffraction technique, potentiometric titrations and thermal methods of analysis like TG, DSC and DTA |
| | | | 3. Learner should able to generalize the concepts and quality control aspects related to radiopharmaceuticals |
| | | | 4. Learner should able to calculate and interpret the results for spectral analysis and statistical data analysis. |
| 46 | BPH C 604 T | PHARMACOGNOSY II | 1. Learner should able to explain the concept of adulteration and substitution in crude drugs, extraction process for phyto-constituents using different methods and principles. |
| | | | 2.Learner should able to write the source, composition, general methods of extraction, evaluation, chemical tests, therapeutic uses of crude drugs containing volatile oils, resins and tannins |
| | | | 3.Learner should able to write the biosynthesis of monoterpenoids and phenypropanoid constituents of volatiles |
| | | | 4. Learner should able to understand the chemistry of phytoconstituents belonging to the classes of terpenoids, sulfur containing constituents and quinones and write source composition and structures of phytoconstituents of crude drugs belonging to these classes |
| | | | 5. Learner should able to write the significance of excipients of natural origin, used in pharmaceutical formulations and describe various classes of excipients like binders, colours, sweetners and flavorants along with the examples of their |

| | | | 6. Learner should able to describe the applications of plant tissue culture techniques with respect to production of secondary metabolites and edible vaccines. |
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| 47 | BPH C 605 L | PHARMACEUTICAL CHEMISTRY LAB I | 1. The leaner should be able to understand different compound synthesis by acetylation |
| | | | 2. The leaner should be able to study Halogenation – Synthesis of p-bromoacetanilide |
| | | | 3. The leaner should be able to acquired knowledge of hydrolysis of methyl benzoate |
| | | | 4.The leaner should be able to study Esterification of PABA to benzocaine |
| 48 | BPH C 606 L | PHARMACEUTICS LAB III | 1. Learner should able to formulate solid dosage forms like tablets and capsules and evaluate them for their quality. |
| | | | 2.Learner should able to understand the tablet coating process. |
| | | | 3. Learner should able to learn the concepts of accelerated stability testing and shelf life calculations. |
| 49 | BPH C 607 L | PHARMACEUTICAL ANALYSIS LAB II | 1. Learner should able to record the absorbance and calculate concentration of analyte in formulation or as an API by use of A(1%, 1cm), single point and double point standardisation by UV spectrophotometer. |
| | | | 2.Learner should able to relate and construct linear regression analysis data for colorimetric assays and operate a colorimeter instrument |
| | | | 3.Learner should able to record and calculate the concentration of an analyte by measure of fluorescence of an analyte in absence and presence of quenching agent |
| | | | 4. Learner should able to operate a pH meter, measure equivalence point by potentiometric titration, calculate pKa and normality for a given acid or mixture of acids |
| | | | 5. Learner should able to understand the sample preparation technique for FTIR spectroscopy, interpret the IR spectra to identify the functional groups of an analyte, and understand the working of a flame photometer |
| 50 | BPH E 609 T | BIOPHARMACEUTICS AND PHARMACOKINETICS | 1. Learner should able to explain the basic terms used in Biopharmaceutics and Pharmacokinetics |
| | | | 2. Learner should able to understand the concept of pharmacokinetics models and significance of various pharmacokinetic parameters |
| | | | 3. Learner should able to understand BCS Classification, theories of Dissolution and methods of dissolution testing |
| | | | 4. Learner should able to explain the concepts of Bioavailability and Bioequivalence and IVIVC |
| | | | 5. Learner should able to solve problems based on principles of Pharmacokinetics |
| 51 | BPH E 613 T | PHARMACEUTICAL EXCIPIENTS | 1. Learner should able to define, classify and elaborate on regulatory aspects of Pharmaceutical excipients. |
| | | | 2. Learner should able to understand the characterization and interactions of excipients with APIs and packaging materials |
| | | | 3. Learner should able to elaborate on common and novel excipients in Pharmaceuticals |
| | | | 4. Learner should able to explain the role of polymers as excipients |