



SUBJECT WISE SOME IMP. TOPICS WISE SYLLABUS FOR GPAT

Pharmacology 22 Questions	Drug classification, Mechanism of action, Adverse effect- related with a name like Gray baby syndrome, etc (Mostly you can follow: Anticancer, Antibiotics, Antifungal, Antiprotozoal, Diuretics, CNS depression, Antihistamines, Cardiovascular Drugs)
Medicinal Chemistry 10 Questions	SAR (Mostly Diuretics, BZDs, Morphin); Drug classification of (Sedative hypnotics, Antibiotics, Antimalarial, Morphin, Antihistaminic); Synthesis (Thiazide Diuretics, Phenothiazine, Quinine, BZDS, Antihistaminic) IUPAC Name of Steroidal drugs.
Organic Chemistry 8 Questions	IUPAC (Bicyclo, Spiro, and heterocyclic compounds), Optical and Geometrical isomerism. R, S / E Z, /Conformational isomerism, Newman and sawhorse projection, Name reaction (Diels- Alder Reaction, Knoevenagel, Aldol Condensation, Baeyer-Villiger, Claisen Condensation, Cannizzaro reaction, Reimer Tiemann, Pericyclic reaction.
Pharmacognosy 7 Questions	Chemical test (glycoside and alkaloids most important), Microscopic Character (Senna, Digitalis, Aloe, Clove, Cardamom, Cinnamon, Belladonna, Vinca); Biosynthesis Pathway, Tissue Culture, Sources of Drugs; Classification of Drugs; Chemical constituents & use of Ergot, Nux Vomica, Opium, Belladonna, Clove, Kurchi, Vasaka, Digitalis, Senna, Aloe, Clove, Cardamom, Cassia, Cinnamon, Ispaghula, Asafoetida, Peru & Tolu balsam, Myrobalan, Arjuna, Pale & black catechu.
Jurisprudence 3 Questions	Pharmacy acts Years only, Drug Schedule, DTAB Members
Analytical Chemistry 6 Questions	Woodward-Fieser Rule, Lambert's Law-Beer's law, UV Absorption Band & shift, IR(Sampling technique, molecular vibration, Vibration range for different grs); NMR (No of signal calculation, Chemical shift), Mass Spectroscopy (types of peak, use) Gas chromatography (Detectors, Use), HPLC (Instrumentation, use);
Pharmaceutics 16 Questions	Tablet (Mostly Coating, instrument, and excipients), Capsule, Parenterals, Rheology (Nonnewtonian's flow) HLB Values, Surfactant, Carr's index, Hausner ratio, Angle of repose, Emulsion, Fick's law, Zeta Potentials, Preservatives, artificial sweetener dose calculation sums elf-life and half-life, vol of distribution & plasma conc, rate of clearance, one and two-compartment model sums, AUC- Dose fraction -as i.v or oral; Bioavailability calculation.
Physical Chemistry 3 Questions	Chemical kinetics sums, Solution (molality, molarity , Normality and neutralization sums), Thermodynamics. Isotonic sums.