اللَّهُمَّ لا سَهْلَ إِلاَّ ما جَعَلْتَهُ سَهْلاً*،*وأنْتَ تَجْعَلُ الحَزْنَ إذَا شِئْتَ سَهْلاً

NOTE: The list is very extensive. It contains all the drugs mentioned in the slides for the sake of being thorough. So highlight and study what you think is important. Good luck!

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| **Drug** | **Function/Characteristic** | **Lecture** |
| Tylenol  | 500 mg paracetamol compared to Panadol (relative bioavailability ) | 2 |
| Heparin | High molecular weight/ Vd (4L) | 2 |
| Atracurium  | Vd (11L) / Hydrophilic | 2 |
| Ethanol  | Vd (38L) | 2 |
| Digoxin  | Binds to tissues / Vd (385L) / lipid soluble | 2 |
| Long plasma half life | 4 |
| Treatment of heart failure (blocks Na outflux) | 5 |
| Small therapeutic index | 6 |
| Gentamycin  | Hydrophilic / low Vd | 2 |
| Insulin | High MW / low Vd | 2 |
| Warfarin | Anticoagulant / binds to protein (albumin) / low Vd / acidic | 2 |
| Small therapeutic index | 6 |
| Type A ADR leads to bleeding/hemorrhage | 10 |
| Phenytoin  | Lipid soluble / acidic binds to albumin | 2 |
| Antiepileptic (metabolic enzyme inducer) | 3 |
| Morphine | Lipid soluble / Basic drug | 2 |
| Analgesics (pain killer) addictive drug | 10 |
| Penicillin | Hydrophilic | 2 |
| Example of active tubular secretion / acidic / short plasma half life | 4 |
| Large therapeutic index | 6 |
| Type B ADR (causes anaphylactic shock) / May cause type 1/2/3 hypersensitivity  | 10 |
| Aspirin (salicylates) | Acidic | 2 |
| Diazepam  | Basic binds with alpha 1-acid glycoprotein | 2 |
| Large therapeutic index | 6 |
| Type E ADR when stopped leading to anxiety and insomnia  | 10 |
| Quinidine | Basic binds with alpha 1-acid glycoprotein | 2 |
| May cause type 2 hypersensitivity  | 10 |
| Tetracycline | Binds to bones | 2 |
| Levodopa | Prodrug (carbidopa) / converted to dopamine | 3 |
| Prednisone | Prodrug (prednisolone) | 3 |
| Moclobemide  | Antidepressant (inhibits MAO and increases serotonin) | 3 |
| Allopurinol | Treats gout (inhibits xanthine oxidase) | 3 |
| Lidocaine | Anaesthetic (hydrolysed by amidase) | 3 |
| Antiarrhythmic drug given after myocardial infarction | 4 |
| Isoniazid  | Anti-TB | 3 |
| Alcohol | (metabolic enzyme inducer) | 3 |
| Depressant (addicting drug) depresses CNS | 10 |
| Phenobarbitone | Hypnotic (metabolic enzyme inducer) | 3 |
| Rifampicin | Anti-TB (metabolic enzyme inducer) | 3 |
| Erythromycin  | Antibiotic (metabolic enzyme inhibitor) | 3 |
| Cimetidine  | Anti-ulcer (metabolic enzyme inhibitor) | 3 |
| Histamine receptor blocker (H2) used to treat gastritis | 8 + 9 |
| Ketoconazole | Antifungal | 3 |
| Ammonium Chloride | Used in ion trapping to acidify urine (traps basic) | 4 |
| Atropine | Basic | 4 |
| Efficacy = 0 / antagonist | 5 |
| Reversible competitive antagonist to Ach | 6 |
| Neostigmine | Basic | 4 |
| Reversible competes with Ach at neuromuscular junction | 5 |
| Sodium Bicarbonate | Used in ion trapping to alkalinate urine (traps acidic) | 4 |
| Sylphonamides | Acidic | 4 |
| Thyroxine | Long plasma half life | 4 |
| Tubocuranine | Short plasma half life | 4 |
| Amoxicillin  | Maintenance dose (500 mg/ 8 hrs) to maintain therapeutic level | 4 |
| Antacids | Treat GERD by neutralizing acid via chemical reactions (extra info) | 5 |
| Diuretics | Osmotic (physical method of action) | 5 |
| Purgative (MgSO4) | Treatment of constipation (physical method of action) | 5 |
| Vincristine  | Anticancer (inhibits microtubule formation) | 5 |
| Colchicine | Treats gout (inhibits neutrophil motility and reduces inflammatory response) | 5 |
| Organophosphate | Irreversible competes with Ach | 5 |
| Local anaesthetics | Block Na influx in nerve fibres (no pain) | 5 |
| Sulfonylurea  | Treatment of type 2 diabetes (blocks K outflow and increases insulin secretion) | 5 |
| Cocaine | Blocks reuptake of catecholamine | 5 |
| Stimulant (addicting drug) stimulates CNS | 10 |
| Pindolol  | Partial agonist/ beta blocker/ decreases heart rate | 5 |
| Propranolol  | Pure agonist / decreases heart rate | 5 |
| Adrenaline | Vasoconstriction / bronchodilation | 6 |
| Histamine | Vasodilation / bronchoconstriction | 6 |
| Dimercarpol  | Chemical antagonist used in heavy metal poisoning | 6 |
| Phenoxybenzamine | Irreversible competitive antagonist to noradrenaline | 6 |
| Verpamil | Noncompetitive antagonist to noradrenaline | 6 |
| Diphenhydramine | First generation histamine receptor blocker (H1)SedatingUsed to treat allergic rhinitis / uticaria / insomnia / motion sickness | 8 + 9 |
| Cyclizine  |
| Promethazine |
| Loratidine  | Second generation histamine receptor blocker (H1)NonsedatingUsed to treat allergic rhinitis / conjunctivis / uticaria | 8 + 9 |
| Cetrizine  |
| Fexofenadine  |
| Acrivastine |
| Rantidine  | Histamine receptor blocker (H2) used to treat peptic ulcers | 8 + 9 |
| Tamotidine  | Histamine receptor blocker (H2) | 8 + 9 |
| Betahistine | Histamine receptor blocker (H3) dilates blood vessels in ear / used to treat vertigo | 8 + 9 |
| Glucocorticoids  | Block phospholipase A2 | 8 + 9 |
| Zileuton  | Block lipoxygenase used for bronchial asthma | 8 + 9 |
| NSAIDS | Block cyclooxygenase | 8 + 9 |
| Activate RAS (renin angiotensin system) and nullify the antihypertensive effects of ACEIs (post receptor) | 10 |
| Carboprost  | (prostaglandin analog) incudes labor in first trimester | 8 + 9 |
| Latanoprost  | (prostaglandin analog) treats glaucoma | 8 + 9 |
| Misoprostol  | (prostaglandin analog) for peptic ulcers | 8 + 9 |
| Alpoprostadil  | (prostaglandin analog) erectile dysfunction | 8 + 9 |
| Zafirlukast  | (prostaglandin analog) Leukotriene receptor blocker used for bronchial asthma | 8 + 9 |
| Sildenafil  | Erectile dysfunction (potentiates action of NO on smooth muscles of corpora cavernosa) | 8 + 9 |
| Captopril  | ACE inhibitorUsed to treat hypertension, cardiac failure, and post myocardial infarction | 8 + 9 |
| Enalpril |
| Isoartan  | ARB (angiotensin receptor blocker)Used to treat hypertension, cardiac failure, and post myocardial infarction | 8 + 9 |
| Valsartan  |
| Buspirone | (5HT1A receptor agonist) anxiolytic | 8 + 9 |
| Cisapride  | (5HT4 receptor agonist) treatment of GastroEosophogal Reflux Disease and intestinal motility | 8 + 9 |
| Odansetron | (5HT3 receptor antagonist) antiemetic (prevents vomiting) used in cancer therapy | 8 + 9 |
| Sumatriptan  | (5HT1A/B/D receptor agonist) treatment of migranes | 8 + 9 |
| Cyproheptadine  | (5HT2 receptor antagonist) carcinoid syndromeControls diarrhea, flushing, malabsorption, hypotension | 8 + 9 |
| Barbiturates | (Enzyme inducer) increases metabolism of contraceptive pills (pre-receptor).Depressant (addicting drug) depresses CNS | 10 |
| Amphetamine  | Depletion (exhaustion) of mediator storesStimulant (addicting drug) stimulates CNS | 10 |
| Β-adrenoreceptor | Binding alteration (phosphorylation of receptors leads to decrease in activation of AC and related ionic channel). | 10 |
| Isoprenaline | Down regulation (decrease number of receptors) by activation of beta-receptors to increase receptors recycling by endocytosis. | 10 |
| Nicotine  | Stimulant (addicting drug) stimulates CNS | 10 |
| Benzodiazepins  | Depressant (addicting drug) depresses CNS | 10 |
| Heroine  | Analgesics (pain killer) addictive drug | 10 |
| LSD | Hallucinogen (dramatically alter perception) addictive drug | 10 |
| Cannabis |
| Marijuana  |
| Quinine  | Type B ADR (causes thrombocytopenia) | 10 |
| Corticosteroid | Chronic use leads to Type C ADR which causes secondary osteoporosis  | 10 |
| Tobacco smoking | Leads to carcinogenesis Type D ADR | 10 |
| Retinoids  | Tetragenicity Type D ADR | 10 |
| Clonidine | Type E ADR occurs after stoppage leading to rebound hypertension | 10 |
| Streptomycin | May cause type 1/3 hypersensitivity | 10 |
| Sulphonamides  | May cause type 3 hypersensitivity  | 10 |
| Local anaesthetic creams | May cause type 4 hypersensitivity and contact dermatitis | 10 |
| Anti-histamine creams |
| Topical antibiotics  |

Useful website containing common prefixes and suffixes used in pharmacology:

<http://www.cram.com/flashcards/pharmacology-suffixes-prefixes-501345>