

Yashoda Shikshan Prasarak Mandal's
YASHODA TECHNICAL CAMPUS, SATARA
TEACHING PLAN

Name of Department: B.Pharm

Academic Year: 2024-25

Class: T.Y.B.Pharm

(Sem VI)

Subject: Medicinal chemistry-III

Name Of Teacher: Ms. Devale R.P.

L.No.	Main Topic	Subtopic & Contents Planned
1	Antibiotics	Penicillin, Cephalosporins,
2	β-Lactam	Lactamase inhibitors, Monobactams
3	antibiotics	Aminoglycosides -Streptomycin, Neomycin, Kanamycin
4		Tetracyclines -Tetracycline, Oxytetracycline,
5		Chlortetracycline, Minocycline, Doxycycline
6	Antibiotics	Macrolide : Erythromycin, Clarithromycin, Azithromycin.
7		Miscellaneous : Chloramphenicol*, Clindamycin.
8	Prodrugs :	Basic concepts and application of prodrugs design.
9	Antimalarials :	Etiology of malaria
10		Quinolines : SAR, Quinine sulphate, Chloroquine*,
11		Amodiaquine, Primaquine phosphate, Pamaquine*
12		Quinacrine hydrochloride, Mefloquine
13		Biguanides and dihydro triazines - Cycloguanil pamoate, Proguanil
14		Miscellaneous : Pyrimethamine,
15		Artesunate, Artemether, Atovaquone
16	Anti-TB	Isoniazid*, Ethionamide, Ethambutol
17	Agents	Pyrazinamide, Para amino salicylic acid.*
18		Anti tubercular antibiotics : Rifampicin, Rifabutin, Cycloserine
19		Streptomycin, Capreomycin sulphate.
20	UTI anti infective	Quinolones : SAR of quinolones, Nalidixic Acid, Norfloxacin
21	agents	Enoxacin,
22		Ciprofloxacin*, Ofloxacin, Lomefloxacin
23		Sparfloxacin, Gatifloxacin,
24		Moxifloxacin
25		Miscellaneous : Furazolidine, Nitrofurantoin*, Methanamine.
26	Antiviral agents :	Amantadine hydrochloride, Rimantadine hydrochloride,
27		Idoxuridine
28		trifluoride, Acyclovir*, Gancyclovir, Zidovudine,
29		Didanosine, Zalcitabine,
30		Lamivudine, Loviride, Delavirdine,
31		Ribavirin, Saquinavir, Indinavir,
32		Ritonavir.
33	Antifungal agents :	Antifungal antibiotics : Amphotericin-B, Nystatin, Natamycin,
34		Griseofulvin.
35		Clotrimazole, Econazole, Butoconazole,
36		Oxiconazole
37		Tioconazole, Miconazole*, Ketoconazole, Terconazole,
38		Itraconazole, Fluconazole, Naftifine hydrochloride, Tolnaftate*
39	Anti-protozoal Agents	Metronidazole*, Tinidazole, Ornidazole,
40		Diloxanide, Iodoquinol, Pentamidine Isethionate,
41		Atovaquone, Eflornithine.
42	Anthelmintics :	Diethylcarbamazine citrate*, Thiabendazole, Mebendazole
43		Albendazole, Niclosamide, Oxamniquine

37		Praziquantal, Ivermectin
38	Sulphonamides and Sulfones	Historical development, chemistry, Sulphamethizole, Sulfisoxazole, Sulphamethizine, Sulfacetamide*, Sulphapyridine,
39		Sulfamethoxazole*, Sulphadiazine, Mefenide acetate, Sulfasalazine.
40	Folate reductase inhibitors:	Trimethoprim*, Cotrimoxazole. Sulfones: Dapsone*.
41	Introduction to Drug Design	Various approaches used in drug design.
42		Physicochemical parameters used in quantitative structure activity relationship (QSAR) such as partition coefficient, Hammett's electronic parameter
43		Taft's steric parameter and Hansch analysis.
44		Pharmacophore modeling and docking techniques
45	Combinatorial Chemistry:	Concept and applications chemistry: solid phase and solution phase synthesis.
Particulars	Subject Teacher	HOD & Academic in-charge
Name		
Signature		
Remarks		