

| No. of Hours | TOPIC                                                                                                                         | Days | Expected date | Conducted date | Remark |
|--------------|-------------------------------------------------------------------------------------------------------------------------------|------|---------------|----------------|--------|
| 1            | Introductory class                                                                                                            | MON  | 09-06-25      |                |        |
| 2            | Introductory Medicinal Chemistry                                                                                              | TUE  | 10-06-25      |                |        |
| 3            | Basic Chemistry                                                                                                               | WED  | 11-06-25      |                |        |
| 4            | Antibiotics Historical background                                                                                             | MON  | 15-06-25      |                |        |
| 5            | Nomenclature, Stereochemistry,                                                                                                | TUE  | 16-06-25      |                |        |
| 6            | Structure activity relationship,                                                                                              | WED  | 17-06-25      |                |        |
| 7            | Chemical degradation classification and important products of the following classes. $\beta$ -Lactam antibiotics: Penicillin, | MON  | 23-06-25      |                |        |
| 8            | Cephalosporins,                                                                                                               | TUE  | 24-06-25      |                |        |
| 9            | $\beta$ - Lactamase inhibitors,                                                                                               | WED  | 25-06-25      |                |        |
| 10           | Monobactams Aminoglycosides:                                                                                                  | MON  | 30-06-25      |                |        |
| 11           | Streptomycin, Neomycin, Kanamycin                                                                                             | TUE  | 01-07-25      |                |        |
| 12           | Tetracyclines: Tetracycline, Oxytetracycline, Chlortetracycline,                                                              | WED  | 02-07-25      |                |        |
| 13           | Minocycline, Doxycycline                                                                                                      | MON  | 07-07-25      |                |        |
| 14           | Antibiotics Historical background, Nomenclature, Stereochemistry, Structure activity relationship, Chemical degradation       | TUE  | 08-07-25      |                |        |
| 15           | classification and important products of the following classes. Macrolide:                                                    | WED  | 09-07-25      |                |        |
| 16           | Erythromycin Clarithromycin, Azithromycin. Miscellaneous:                                                                     | MON  | 14-07-25      |                |        |
| 17           | Chloramphenicol*, Clindamycin.                                                                                                | TUE  | 15-07-25      |                |        |
| 18           | Prodrugs: Basic concepts                                                                                                      | WED  | 16-07-25      |                |        |
| 19           | application of prodrugs design.                                                                                               | MON  | 21-07-25      |                |        |
| 20           | Antimalarials: Etiology of malaria. Quinolines:                                                                               | TUE  | 22-07-25      |                |        |
| 21           | SAR, Quinine sulphate, Chloroquine*, Amodiaquine,                                                                             | WED  | 23-07-25      |                |        |
| 22           | Primaquine phosphate, Pamaquine*, Quinacrine hydrochloride, Mefloquine                                                        | MON  | 28-07-25      |                |        |
| 23           | . Biguanides and dihydro triazines: Cycloguanil pamoate, Proguanil.                                                           | TUE  | 29-07-25      |                |        |
| 24           | Miscellaneous: Pyrimethamine, Artesunate, Artemether, Atovaquone.                                                             | WED  | 30-07-25      |                |        |
| 25           | Anti-tubercular Agents Synthetic anti tubercular agents: Isoniazid*, Ethionamide,                                             | MON  | 04-08-25      |                |        |

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| 26           | Ethambutol, Pyrazinamide, Para amino salicylic acid.*<br>Anti tubercular antibiotics: Rifampicin, Rifabutin, Cycloserine Streptomycine, Capreomycin sulphate.          | MON  | 18-08-25      |                |        |
| 27           | Urinary tract anti-infective agents Quinolones: SAR of quinolones,                                                                                                     | TUE  | 19-08-25      |                |        |
| 28           | Nalidixic Acid, Norfloxacin, Enoxacin, Ciprofloxacin*,                                                                                                                 | WED  | 20-08-25      |                |        |
| 29           | Ofloxacin, Lomefloxacin, Sparfloxacin, Gatifloxacin, Moxifloxacin                                                                                                      | MON  | 25-08-25      |                |        |
| 30           | Miscellaneous: Furazolidine, Nitrofurantoin*, Methanamine.                                                                                                             | TUE  | 26-08-25      |                |        |
| 31           | Antiviral agents: Amantadine hydrochloride, Rimantadine hydrochloride, Idoxuridine trifluoride,                                                                        | MON  | 01-09-25      |                |        |
| 32           | Acyclovir*, Gancyclovir, Zidovudine, Didanosine, Zalcitabine, Lamivudine, Loviride                                                                                     | TUE  | 02-09-25      |                |        |
| 33           | Delavirding, Ribavirin, Saquinavir, Indinavir, Ritonavir.                                                                                                              | WED  | 03-09-25      |                |        |
| 34           | Antifungal agents: Antifungal antibiotics: Amphotericin-B, Nystatin Natamycin, Griseofulvin.                                                                           | MON  | 08-09-25      |                |        |
| 35           | Synthetic Antifungal agents: Clotrimazole, Econazole, Butoconazole, Oxiconazole Tioconazole, Miconazole*,                                                              | TUE  | 09-09-25      |                |        |
| 36           | Ketoconazole, Terconazole, Itraconazole, Fluconazole, Naftifine hydrochloride, Tolnaftate*.                                                                            | WED  | 10-09-25      |                |        |
| 37           | Anti-protozoal Agents: Metronidazole*, Tinidazole, Ornidazole, Diloxanide,                                                                                             | MON  | 15-09-25      |                |        |
| 38           | Iodoquinol, Pentamidine Isethionate, Atovaquone, Eflornithine. Anthelmintics: Diethylcarbamazine citrate*,                                                             | TUE  | 16-09-25      |                |        |
| 39           | Thiabendazole, Mebendazole*, Albendazole, Niclosamide, Oxamniquine, Praziquantal, Ivermectin.                                                                          | WED  | 17-09-25      |                |        |
| 40           | Sulphonamides and Sulfones Historical development, chemistry, classification and SAR of Sulfonamides: Sulphamethizole, Sulfisoxazole, Sulphamethizine, Sulfacetamide*, | MON  | 22-09-25      |                |        |
| 41           | Sulphapyridine, Sulfamethoxazole*, Sulphadiazine, Mefenide acetate, Sulfasalazine. Folate reductase inhibitors                                                         | TUE  | 23-09-25      |                |        |
| 42           | Trimethoprim*, Cotrimoxazole. Sulfones: Dapsone*.                                                                                                                      | WED  | 24-09-25      |                |        |
| 43           | Introduction to Drug Design Various approaches used in drug design.                                                                                                    | MON  | 29-09-25      |                |        |
| 44           | Physicochemical parameters used in quantitative structure activity relationship (QSAR) such as partition coefficient,                                                  | TUE  | 30-09-25      |                |        |
| 45           | Hammett's electronic parameter,                                                                                                                                        | MON  | 06-10-25      |                |        |
| 46           | Taft's steric parameter and Hansch analysis.                                                                                                                           | MON  | 06-10-25      |                |        |
| 47           | Pharmacophore modeling and docking techniques.                                                                                                                         | WED  | 08-10-25      |                |        |
| 48           | Combinatorial Chemistry: Concept and applications chemistry:                                                                                                           | WED  | 08-10-25      |                |        |
| 49           | solid phase and solution phase synthesis.                                                                                                                              | MON  | 29-09-25      |                |        |
| 50           | TEST                                                                                                                                                                   | TUE  | 30-09-25      |                |        |