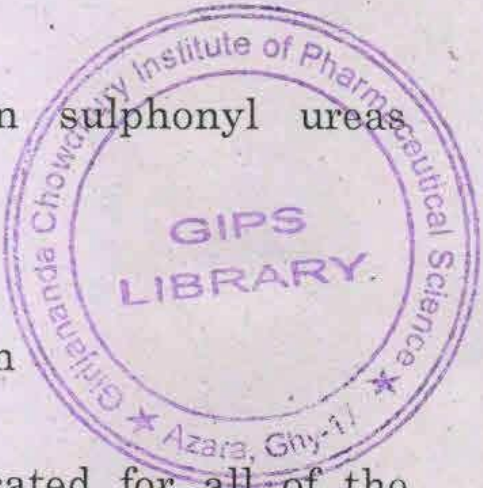


- (ii) The penicillin have a carboxylic acid group placed at
- (a) C-2
 - (b) C-3
 - (c) C-6
 - (d) C-7
- (iii) Inhibitor of sterol α -demethylase is
- (a) Naftifine
 - (b) 5-Fluocytosine
 - (c) Ciclopirox
 - (d) Ketocanazole
- (iv) The activated co enzymes in the formation of β -glucuronides is
- (a) Uridine 6'diphospho- α -D glucuronic acid
 - (b) Adenosine 5'diphospho- α -D glucuronic acid
 - (c) Uridine 5' diphospho- α -D glucuronic acid
 - (d) Guanine 6' diphospho- α -D glucuronic acid
- (v) Nonsteroidal antiandrogen useful as cancer agent is
- (a) Flutamide
 - (b) Tamoxifen
 - (c) Etoposide
 - (d) Etoposide
- (vi) The antidiabetic drug also effective in lowering the cholesterol level is
- (a) Phenformin
 - (b) Repaglinide
 - (c) Chlorpropamide
 - (d) Rosiglitazone

- 
- (vii) The terminal nitrogen in sulphonyl ureas should be substituted with
- (a) Atleast 2 carbon chain
 - (b) Atleast 3 carbon chain
 - (c) Atleast 12 carbon chain
 - (d) Atleast 1 aryl unit
- (viii) Fluoroquinolones are indicated for all of the following expect
- (a) Urinary tract infection
 - (b) Bronchial Asthama
 - (c) Bone infection
 - (d) Tuberculosis
- (ix) The starting compound for the synthesis of Niclosamide is
- (a) 1 formylthiophen
 - (b) 2 acetylthiophen
 - (c) 2 formyl furan
 - (d) None of the above
- (x) The antifungal with bis-triazole nucleus is
- (a) Ketoconazole
 - (b) Butaconazole
 - (c) Fluconazole
 - (d) Ciotrimazole

Answer any six questions

2. Explain the catalytic reaction cycle involving cytochrome P-450 in the oxidation of xenobiotics. Write about NIH shift of Arene oxide. Write about ω oxidation and $\omega-1$ oxidation Give examples. Write about glucuronic acid conjugation of phase II reactions. (5+3+3+4=15)

3. Define prodrugs. Differentiate between hard drug and soft drug. Explain the — metabolism of Sulindac and estramustine. Write the SAR of Fluoroquinolone antibiotic. (2+3+5+5=15)
4. Discuss the MOA of β -lactam antibiotic with reference to the biosynthesis of peptidoglycan. Write about the degradation of penicillin. Give the synthesis and IUPAC names for Ampicillin and cephalexin. (5+5+5=15)
5. Write the synthesis and IUPAC names for
 - (a) Zidovudine
 - (b) Thiotepea
 - (c) Acyclovir
 - (d) Nalidixic acid (4+4+4+3=15)
6. Discuss the classification, MOA and SAR of sulphonamide drugs. Give synthesis of any two drugs from the classification. Write short note on sulphones. (7+5+3=15)
7. Classify Antimalarial drugs. Explain the mechanism of action with reference to the life cycle of malaria. Write the synthesis of any two anti malarial drug. (4+4+7=15)
8. Write short notes on
 - (a) Oral hypoglycaemic agents
 - (b) Antithyroid drugs
 - (c) Immunosuppressive and immunostimulants. (5+5+5=15)
9. Classify various Anti-neoplastic drugs, with their mechanism of action, write the synthesis of Busulpan and 5-fluro uracil. Why the multi drug therapy is needed in cancer treatment? (3+3+7+2)