

BIRLA INSTITUTE OF TECHNOLOGY & SCIENCE, PILANI

Pharmacology-II (PHA F341)

Mid Semester Examination (CLOSED BOOK)

Date: 05/10/2016

Duration: 90 Minutes

Weightage: 35%

1. Match the following with suitable mechanism of Action. [10M]

- | | |
|-------------------|--|
| a) Niacin | decreases the slope of Phase 4 |
| b) Atorvastatin | suppresses Phase 0 upstroke |
| c) Gemfibrozil | Inhibits Lipolysis |
| d) Cholestyramine | Prolong Action Potential |
| e) Ezetimibe | Formation of resin/bile acid complex |
| f) Quinidine | Inhibiting the cholesterol absorption |
| g) Lidocaine | shortens Phase 3 repolarization |
| h) Flecainide | Increase expression of Lipoprotein Lipase |
| i) Verapamil | decreased rate of Phase 4 spontaneous depolarization |
| j) Amiodarone | Increased number of LDL Receptor |

2. Explain why "with decreased renal function, thiazide diuretics lose efficacy"? Explain actions and adverse effects of Thiazide Diuretics. [1M+2.5M+2.5M=6M]

3. Explain the factors predisposing to Digitalis Toxicity. 5M

4. Match the Following with suitable, Indication, Action or Therapeutic Use or class of drug. [1M for each= 14 M]

- | | |
|------------------------|-------------------------------|
| a) Thiazide diuretics | Glaucoma |
| b) Loop Diuretics | Diabetic Nephropathy |
| c) Ethacrynic acid | Increased Na retention |
| d) Chlorthalidone | Alpha 1 blocker |
| e) Furosemide | Verapamil |
| f) Enalapril | Amlodipine |
| g) Propranolol | Deafness |
| h) Losartan | Ototoxicity |
| i) Diphenylalkylamines | Acute Pulmonary Edema |
| j) Benzothiazepines | Hyperkalemia |
| k) Dihydropyridines | Hypertensive Pregnant Patient |
| l) Prazocin | Hypercalcemia |
| m) Methyl Dopa | Diltiazem |
| n) Acetazolamide | Magnesiumuria |

5. Why Sildenafil Citrate is contraindicated with organic nitrates? Explain the mechanism of action of nitrates in detail. [1M+4M]