

# MANIPAL UNIVERSITY

## SECOND MBBS DEGREE EXAMINATION – MAY 2009

### SUBJECT: PHARMACOLOGY – PAPER I (ESSAY)

Monday, May 11, 2009

Time: 10.30 – 13.00 Hrs.

Maximum Marks: 60

1. Classify beta adrenergic blockers. Explain four therapeutic uses of propranolol with the basis for each use and add a note on drug interaction between propranolol and insulin.  
(3+4+1 = 8 marks)
2. Define biotransformation. Discuss the various biotransformation reactions with suitable examples. Add a note on enzyme induction and its clinical implications.  
(1+3+3 = 7 marks)
3. **Write briefly on:**
  - 3A. Mechanism of action, uses and adverse effects of ramipril.
  - 3B. Cycloplegic mydriatics.
  - 3C. Fixed dose combinations.(5×3 = 15 marks)
4. **Explain the pharmacological basis for the following:**
  - 4A. Mannitol in acute congestive glaucoma.
  - 4B. Low dose aspirin in myocardial infarction.
  - 4C. Sodium cromoglycate in asthma.
  - 4D. Folic acid alone should not be used in pernicious anemia.
  - 4E. Lactulose in hepatic coma.(2×5 = 10 marks)
5. **Explain the following:**
  - 5A. Mechanism of action and adverse effects of lovastatin.
  - 5B. How cetirizine differs from promethazine?
  - 5C. Postmarketing surveillance.
  - 5D. Mechanism of action of domperidone.
  - 5E. Mechanism of action and adverse effects of sumatriptan.(2×5 = 10 marks)
6. **Answer the following:**
  - 6A. Explain the drug interaction between salbutamol and theophylline.
  - 6B. Mention four differences between heparin and warfarin.
  - 6C. Mention the therapeutic uses of furosemide.
  - 6D. Write the mechanism of action of urokinase and mention its uses.
  - 6E. Mention two mucolytics and explain the mechanism of action of any one.(2×5 = 10 marks)



# MANIPAL UNIVERSITY

## SECOND MBBS DEGREE EXAMINATION – MAY 2009

### SUBJECT: PHARMACOLOGY – PAPER II (ESSAY)

Tuesday, May 12, 2009

Time: 10.30 – 13.00 Hrs.

Maximum Marks: 60

1. Classify semisynthetic penicillins. Explain the mechanism of action, therapeutic uses and adverse effects of penicillin G.  
(3+2+2+1 = 8 marks)
2. Classify glucocorticoids. Explain the metabolic actions of glucocorticoids.  
(3+4 = 7 marks)
3. Write briefly on:
  - 3A. Preanaesthetic medication.
  - 3B. Methotrexate.
  - 3C. Mechanism of action, uses and adverse effects of paracetamol.(5×3 = 15 marks)
4. Explain the following:
  - 4A. Mechanism of action of sulfonylureas.
  - 4B. Drug interaction between lithium and furosemide.
  - 4C. Mechanism of action and adverse effects of clomiphene citrate.
  - 4D. Drug treatment of status epilepticus.
  - 4E. Treatment of plasmodium vivax malaria.(2×5 = 10 marks)
5. Answer the following:
  - 5A. What is sequential blockade? Explain with an example.
  - 5B. What is DOTS? Explain.
  - 5C. Mention the advantages of azithromycin over erythromycin.
  - 5D. Mention four drugs used in anaerobic infections.
  - 5E. Explain emergency contraception.(2×5 = 10 marks)
6. Answer the following:
  - 6A. Write the drug treatment of chronic alcoholism.
  - 6B. What is cheese reaction? Explain.
  - 6C. Explain the basis for the combination of halothane with nitrous oxide.
  - 6D. Mention four topical agents used in dermatophytic infections.
  - 6E. Mention two bisphosphonates and write two uses of them.(2×5 = 10 marks)

