

MANIPAL UNIVERSITY

SECOND MBBS DEGREE EXAMINATION – MAY 2008

SUBJECT: PHARMACOLOGY - I (ESSAY)

Thursday, May 08, 2008

Time available: 10.30 – 13.00 Hours

Maximum Marks: 60

✍ **Draw diagrams and flow charts wherever appropriate.**

✍ **Answer ALL questions.**

1. Explain the actions of atropine on the eye and CNS. Explain the therapeutic uses of atropine substitutes.

(2+2+4 = 8 marks)

2. Classify antihypertensive drugs. Explain the mechanism of action, uses and adverse effects of clonidine.

(2+1+2+2 = 7 marks)

3. Write briefly on:

3A. Therapeutic uses and adverse effects of digoxin.

3B. Drugs used by inhalation in bronchial asthma.

3C. Proton pump inhibitors.

(5×3 = 15 marks)

✍ **Answer the following:**

4A. Mechanism of action and uses of fibrinolytics.

4B. Enumerate the differences between warfarin and heparin.

4C. Mention two parenteral iron preparations and their adverse effects.

4D. Mention the advantages of antacid combinations with examples.

4E. Name two second generation antihistamines and two uses of them.

(2×5 = 10 marks)

5A. Mention two 5-HT antagonists with their use. Explain the basis for any one use.

5B. Mention two uses and two adverse effects of d-penicillamine.

5C. Explain the rationale for the use of frusemide in acute left ventricular failure.

5D. Explain dilutional hyponatremia and its management.

5E. Explain drug interaction between atorvastatin and ezetimibe.

(2×5 = 10 marks)

6A. Mention a therapeutic use of nimodipine with rationale for the use.

6B. Mention two drugs used in myasthenia gravis with rationale for their use.

6C. Mention the differences between d-tubocurarine and succinylcholine.

6D. Mention two methods to prolong the duration of action of a drug given parenterally with examples.

6E. Explain tachyphylaxis with its clinical importance.

(2×5 = 10 marks)



MANIPAL UNIVERSITY
SECOND MBBS DEGREE EXAMINATION – MAY 2008
SUBJECT: PHARMACOLOGY - II (ESSAY)

Friday, May 09, 2008

Time available: 10.30 – 13.00 Hours

Maximum Marks: 60

✍ **Answer ALL questions.**

✍ **Draw diagrams and flow charts wherever appropriate.**

1. Classify antiepileptic agents with examples. Explain the mechanism of action and adverse effects of phenytoin sodium. (4+2+2 = 8 marks)

2. Enumerate various groups of antimalarials with example for each group. Enlist four uses and four adverse effects of chloroquine. (3+2+2 = 7 marks)

3. Write briefly on:
 - 3A. Dissociative anaesthesia.
 - 3B. Antipsuedomonal penicillins.
 - 3C. Management of thyrotoxicosis. (5×3 = 15 marks)

4. Answer the following:
 - 4A. Enumerate two antimetabolites belonging to different groups. Explain the mechanism of action of any one agent.
 - 4B. Enumerate two immunosuppressants. Explain the mechanism of action of anyone.
 - 4C. Mention four techniques (routes) used for local anaesthetics.
 - 4D. Write briefly on uricosuric agents.
 - 4E. Explain the rationale for using morphine in acute myocardial infarction. (2×5 = 10 marks)

5. Answer the following:
 - 5A. Explain the basis for short duration of action following intravenous thiopentone sodium.
 - 5B. Write briefly on drug induced Parkinsonism.
 - 5C. Classify insulin preparations based on onset and duration of action with example for each group.
 - 5D. Explain why glucocorticoids should not be stopped abruptly after long term use.
 - 5E. Explain two methods of hormonal contraception. (2×5 = 10 marks)

6. Answer the following:
 - 6A. Enlist four drugs used in lepra reaction.
 - 6B. Enlist four therapeutic uses of rifampicin.
 - 6C. Explain one drug interaction for zidovudine.
 - 6D. Mention two preparations and two adverse effects of alkylating agents.
 - 6E. Explain the precautions for intravenous use of amphotericin B. (2×5 = 10 marks)



MANIPAL UNIVERSITY

SECOND MBBS DEGREE EXAMINATION – NOV/DEC 2008

SUBJECT: PHARMACOLOGY - I (ESSAY)

Monday, December 01, 2008

Time available: 10.30 – 13.00 Hours

Maximum Marks: 60

- 1A. Explain synthetic reactions of biotransformation with suitable examples.
1B. Write the clinical significance of hepatic microsomal enzyme system. (4+4 = 8 marks)
- 2A. Classify adrenergic agonists based on their mechanism of action with examples.
2B. Write briefly on nasal decongestants. (4+3 = 7 marks)
3. Write briefly on the following:
3A. Name TWO centrally acting antihypertensives and explain the mechanism and adverse effects of them.
3B. Mention any THREE group of drugs with example used in bronchial asthma and explain the mechanism of action of any ONE group.
3C. Enumerate THREE groups of drugs with example used in peptic ulcer and add a note on the management of H.pylori. (5+(3+2)+(3+2) = 15 marks)
4. Explain:
4A. Mechanism of action of nitrates.
4B. Drug interaction between enalapril and frusemide.
4C. Basis for use of Timolol in glaucoma.
4D. "Prodrug" with an example.
4E. Basis for use of streptokinase in acute myocardial infarction. (2×5 = 10 marks)
5. Mention:
5A. TWO parenteral iron preparations with TWO side effects.
5B. TWO prostaglandin analogues with one specific use for each.
5C. TWO advantages of Enoxaparin over heparin.
5D. The indication of Desferrioxamine with the basis.
5E. ONE indication of glycopyrrolate with the basis. (2×5 = 10 marks)
6. Answer the following:
6A. Explain post-marketing surveillance.
6B. Explain why hydrochlorothiazide is preferred over frusemide in mild hypertension.
6C. Explain the mechanism of action of adenosine with its use.
6D. Why neostigmine is preferred over physostigmine in myasthenia gravis?
6E. Explain the rationale for combining ezitimibe with atorvastatin. (2×5 = 10 marks)



MANIPAL UNIVERSITY

SECOND MBBS DEGREE EXAMINATION – NOV/DEC 2008

SUBJECT: PHARMACOLOGY – II (ESSAY)

Tuesday, December 02, 2008

Time available: 10.30 – 13.00 Hours

Maximum Marks: 60

1. Classify cephalosporins. List the therapeutic uses and adverse effects of third generation cephalosporins.
(4+2+2 = 8 marks)
2. Mention **three** groups of nonsteroidal antiinflammatory drugs with **two** examples for each group. Explain the therapeutic uses and adverse effects of any one of them.
(3+2+2 = 7 marks)
3. Write briefly on:
 - 3A. Selective estrogen receptor modulators.
 - 3B. Methotrexate.
 - 3C. Mechanism of action, uses and adverse effects of diazepam.(5×3 = 15 marks)
4. Giving an indication, explain the pharmacological basis / mechanism of action for the following.
 - 4A. Methylergometrine.
 - 4B. Sulfacetamide
 - 4C. Carbamazepine.
 - 4D. Disulfiram.
 - 4E. Lignocaine.(2×5 = 10 marks)
5. Answer the following:
 - 5A. Explain the drug interaction between zidovudine and paracetamol.
 - 5B. Write briefly on emergency contraception.
 - 5C. Mention **four** drugs used in oral candidiasis.
 - 5D. Mention the therapeutic uses of chloroquine.
 - 5E. Name **two** bisphosphonates and mention **two** uses of them.(2×5 = 10 marks)
6. Explain the basis for the following:
 - 6A. Combination of levodopa and carbidopa.
 - 6B. Combination of amphotericin B and flucytosine.
 - 6C. Tetracyclines are contraindicated in pregnancy.
 - 6D. Multidrug therapy is used in tuberculosis.
 - 6E. Glibenclamide is not effective in Type 1 diabetes mellitus.(2×5 = 10 marks)

