MANIPAL UNIVERSITY

SECOND MBBS DEGREE EXAMINATION – NOV/DEC 2009

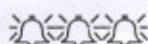### SUBJECT: PHARMACOLOGY – PAPER I (ESSAY)

Thursday, December 03, 2009

Time: 10:30 – 13:00 Hrs.   Maximum Marks: 60

1A. Classify atropine substitutes based on their therapeutic use.
1B. Mention two conditions in which atropine is the preferred drug and explain the rationale for its use in them.
1C. Explain succinylcholine apnea.

(3+3+2 = 8 marks)

2A. Name two ACE inhibitors. Mention its two uses and explain the basis for its use in any one.
2B. Enumerate the adverse effects and contraindications of ACE inhibitors.

(4+3 = 7 marks)

3.   Write briefly on:
3A. Mechanism of action, uses and adverse effects of hydrochlorothiazide.
3B. Iron preparations.
3C. Omeprazole.

(5×3 = 15 marks)

4.   Giving an indication and the route explain the basis/mechanism for the use of the following:
4A. Sodium cromoglycate
4B. Warfarin sodium
4C. Nitroglycerine
4D. Xylometazoline
4E. Latanoprost

(2×5 = 10 marks)

5.   Explain the following with a suitable example:
5A. First pass effect
5B. Tolerance
5C. Drug synergism
5D. Prodrug
5E. Cheese reaction

(2×5 = 10 marks)

6.   Answer the following:
6A. Name two first generation antihistamines and its two uses.
6B. Mention a drug used in acute attack of bronchial asthma and its rationale for the use.
6C. Why is calcium disodium edetate preferred to disodium edetate in lead poisoning?
6D. Explain redistribution with an example.
6E. Mention two advantages and two disadvantages of subcutaneous route of drug administration.

(2×5 = 10 marks)

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SECOND MBBS DEGREE EXAMINATION – NOV/DEC 2009

SUBJECT: PHARMACOLOGY – PAPER II (ESSAY)

Friday, December 04, 2009

Time: 10:30 – 13:00 Hrs.   Health Sciences Library   Maximum Marks: 60

✎ **Answer ALL questions.**

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

1. Classify antiretroviral drugs with suitable examples. Mention the mechanism of action and adverse effects of any one of them. Add a note on post exposure prophylaxis.

    (4+1+1+2 = 8 marks)

2. Classify non opioid analgesics. Explain the mechanism of action and adverse effects of any one of them.

    (4+1+2 = 7 marks)

3. **Answer the following:**

3A. Enumerate four general anesthetics. Mention the drugs used for preanesthetic medication along with the pharmacological basis for the same.

3B. Discuss the various regimens used in the treatment of tuberculosis.

3C. Explain the mechanism of action, beneficial effects and adverse effects of combined pill.

    ((2+3)+5+(1+2+2) = 15 marks)

4. **Answer the following:**

4A. Explain the regimen of an antimalarial drug for a person entering a malaria endemic area from a non-endemic area.

4B. Explain the *in vivo* and *in vitro* drug interactions of Aminoglycosides and Penicillins.

4C. Mention two antiestrogens with one therapeutic use for each.

4D. What is the mechanism of action of fluoroquinolones? Mention one fluoroquinolone that is given once daily.

4E. Name three antidepressants. Which antidepressant is safe in pregnancy?

    (2×5 = 10 marks)

5. **Answer the following:**

5A. Outline the drug treatment of status epilepticus.

5B. Mention two pharmacological actions of morphine to which tolerance does not develop? Name two drugs useful in acute morphine poisoning?

5C. Explain the advantages of atypical antipsychotics over classical antipsychotic drugs.

5D. Explain the pharmacological basis for the use of combination chemotherapy in leprosy.

5E. Why oxytocin is preferred over methylergometrine for the induction of labour?

    (2×5 = 10 marks)

6. **Answer the following:**

6A. Explain why patients on metronidazole are advised to abstain from alcohol.

6B. Give the pharmacological basis for the combination of levodopa and carbidopa in Parkinsonism.

6C. Why diazepam is preferred over phenobarbitone as a hypnotic?

6D. Explain why glibenclamide is not useful in type I diabetes.

6E. Give two uses and two adverse effects of cyclosporine.

    (2×5 = 10 marks)

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