MANIPAL UNIVERSITY

SECOND MBBS DEGREE EXAMINATION – MAY 2012

SUBJECT: PHARMACOLOGY – PAPER I (ESSAY)

Thursday, May 10, 2012

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

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1. Giving an example for each, explain the pharmacological basis for the use of nitrates, beta adrenoceptor antagonists and calcium channel blockers in the treatment of angina pectoris. Add a note on the adverse effects of nitrates.

    (2+2+2+2 = 8 marks)

2. Define pharmacovigilance. Explain the types of adverse drug reactions with examples. Enumerate two adverse drug reactions that occur on chronic drug use with examples.

    (1+4+2 = 7 marks)

3. **Answer the following:**

3A. Enumerate three anticholinersterases with an indication for each. Add a note on treatment of anticholinesterase poisoning.

    (3+2 = 5 marks)

3B. Write briefly on hydrochlorothiazide.

    (5 marks)

3C. Mention two parenteral anticoagulants. Write three uses with pharmacological basis for any one. Add a note on its laboratory monitoring.

    (1+3+1 = 5 marks)

4. **Answer the following:**

4A Explain the mechanism of action and write the use of pantoprazole.

4B Write briefly on dimercaprol.

4C Explain the advantages of transdermal route of drug administration with a suitable example.

4D Name two antiemetics belonging to different classes used in chemotherapy-induced vomiting. Explain the mechanism of action of any one.

4E Name two nasal decongestants. Mention two adverse effects of any one.

    (2×5 = 10 marks)

5. **Mention one use and explain the pharmacological basis for the following:**

5A Theophylline

5B Latanoprost

5C Bromhexine

5D Dobutamine

5E Sumatriptan

    (2×5 = 10 marks)

6. **Compare and contrast:**

6A First order kinetics and zero order kinetics.

6B Ipratropium and atropine.

6C Lisinopril and losartan.

6D Verapamil and nifedipine.

6E Liquid paraffin and bisacodyl.

    (2×5 = 10 marks)

MANIPAL UNIVERSITY

SECOND MBBS DEGREE EXAMINATION – MAY 2012

SUBJECT: PHARMACOLOGY – PAPER II (ESSAY)

Friday, May 11, 2012

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

1. Classify the drugs used in the treatment of HIV infection with examples. Explain two regimens under HAART along with rationale. Add a note on post-exposure prophylaxis.

    (3+3+2 = 8 marks)

2. Enumerate six general anesthetics. Mention one drug used for induction and one drug for maintenance of general anesthesia. Write three objectives of preanesthetic medication along with the drugs used.

    (3+1+3 = 7 marks)

3. **Answer the following:**

3A. Enumerate four opioid analgesics. Mention two actions of morphine to which tolerance does not develop. Name the drug of choice for opioid dependence with rationale.

    (2+1+2 = 5 marks)

3B. Enumerate four first line antitubercular agents. Mention one characteristic adverse effect of each. Write the rationale for the combination of drugs in tuberculosis.

    (2+2+1 = 5 marks)

3C. Write briefly on ecbolics.

    (5 marks)

4. **Giving an indication, explain the basis / mechanism for the use of:**

4A. Diazepam
4B. Methotrexate
4C. Stanozolol
4D. Meropenem
4E. Mifepristone

    (2×5 = 10 marks)

5. **Answer the following:**

5A. Why ethanol is used in methyl alcohol poisoning?
5B. What are the advantages of doxycycline over oxytetracycline?
5C. What are the differences between ampicillin and amoxicillin?
5D. What are the measures to be taken to minimize HPA axis suppression when corticosteroids need to be prescribed on a long term basis?
5E. Mention two insulin secretagogues given orally. Write the mechanism of action of any one.

    (2×5 = 10 marks)

6. **Explain the following:**

6A. Adverse effects of phenytoin.
6B. Common properties of aminoglycosides.
6C. Advantages of risperidone over chlorpromazine.
6D. Rationale for the combination of lignocaine and adrenaline.
6E. Therapeutic uses of aspirin.

    (2×5 = 10 marks)