

# MANIPAL UNIVERSITY

## **SECOND BDS DEGREE EXAMINATION – NOVEMBER 2011**

SUBJECT: GENERAL AND DENTAL PHARMACOLOGY & THERAPEUTICS (ESSAY) (NEW REGULATION)

Monday, November 28, 2011

Time: 14:15 - 17:00 Hrs.

Maximum Marks: 60

- 1A. Enumerate various routes of drug administration.
- 1B. Explain the advantages and disadvantages of any one route.
- 1C. Write briefly on microsomal enzyme induction.

(4+3+3 = 10 marks)

- 2A. Classify skeletal muscle relaxants with examples.
- 2B. Explain mechanism of action, therapeutic uses of any one of them.
- 2C. Succinylcholine apnea.

(4+3+3 = 10 marks)

### 3. Answer the following:

- 3A. Enumerate four drugs used in congestive cardiac failure belonging to different class and explain the mechanism of any two.
- 3B. Define prokinetic agents. Compare pharmacological properties of Metaclopramide and Domperidone.
- 3C. Name two anti-platelet drugs and explain their mechanism of action. Write two uses and adverse effects.
- 3D. List four Aminoglycosides and mention four shared features of them.
- 3E. Explain the advantages and disadvantages of combination of antibiotics.
- 3F. List four antibiotics predominantly effective against gram negative organisms and explain mechanism of two drugs belonging to different class.
- 3G. Define chelating agents, mention three conditions where they are used with choice of agent.
- 3H. Compare pharmacological features of benzodiazepines and Barbiturates.
- 3I. Explain any two intravenous anesthetics.
- 3J. Explain two therapeutic uses and two adverse effects of morphine.

 $(4 \times 10 = 40 \text{ marks})$ 

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Reg. No.

## SECOND BDS DEGREE EXAMINATION - NOVEMBER 2011

SUBJECT: GENERAL AND DENTAL PHARMACOLOGY (ESSAY) (OLD REGULATION)

Monday, November 28, 2011

Time: 14:30 - 17:00 Hrs.

Maximum Marks: 80

1. List FOUR conditions where tetracyclines are the first choice. Explain effects of tetracyclines on teeth and bone. Add a note on advantages of doxycycline over other tetracyclines.

(2+3+2=7 marks)

2. Classify local anesthetics based on duration of action with TWO examples for each class. Explain their mechanism of action. Explain the techniques of local anesthesia.

 $(4\frac{1}{2}+1\frac{1}{2}+4 = 10 \text{ marks})$ 

- 3A. Explain how genetics and pathological states modify the actions of drugs with appropriate examples.
- 3B. Define biotransformation. Mention processes of biotransformation reactions with suitable examples.

(4+1+3 = 8 marks)

- 4A. Name TWO cardioselective and TWO nonselective  $\beta$  blockers. Explain TWO uses of  $\beta$  blockers with pharmacological basis.
- 4B. Name FOUR atropine substitutes and mention ONE specific use for each.

(2+4+2+2 = 10 marks)

5. Giving an indication explain the pharmacological basis for the following

- 5A. Adrenaline
- 5B. Morphine
- 5C. Neostigmine
- 5D. Sodium cromoglycate
- 5E. Pilocarpine
- 6. Write briefly on:
- 6A. Proton pump inhibitors
- 6B. Thiazides
- 6C. Ciprofloxacin
- 6D. Fluorides
- 6E. Insulin preparations

 $(4 \times 5 = 20 \text{ marks})$ 

 $(3 \times 5 = 15 \text{ marks})$ 

- 7. Explain the basis for the following drug combinations
- 7A. Sulfamethoxazole + trimethoprim
- 7B. Frusemide + spironolactone
- 7C. Lignocaine + adrenaline
- 7D. Magnesium trisilicate + aluminum hydroxide
- 7E. INH + pyridoxine

