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MANIPAL UNIVERSITY

SECOND BDS DEGREE EXAMINATION - MAY / JUNE 2007

SUBJECT: GENERAL AND DENTAL PHARMACOLOGY (ESSAY)

Monday, June 04, 2007

Time available: 14.30 - 17.00 Hours

Maximum Marks: 80

- 1A. Mention four groups of NSAID's with an example for each group.
- 1B. Explain the mechanism of two clinically useful actions of aspirin.
- 1C. List four uses and four adverse effects of aspirin.

(2+4+2 = 8 marks)

- 2A. Enumerate four azole anti fungal agents.
- 2B. Explain the mechanism of action of azole and two uses of any one of them.
- 2C. Mention four differences between tetracycline and doxycycline.
- 2D. Explain why tetracyclines are contraindicated in children.

 $(2\times4=8 \text{ marks})$

- 3A. Enumerate two advantages and disadvantages of I.V. route.
- 3B. Define the term bioavailability. Explain two factors which affect the bioavailability of a drug.
- 3C. Define the term drug synergism with suitable examples.

(2+4+2=8 marks)

- 4. Explain the pharmacological basis for the following drug combinations.
- 4A. Pyridoxine and isoniazid.
- 4B. Hydrochlorothiazide and Amiloride.
- 4C. Propranolol and phenoxybenzamine.

 $(3\times3 = 9 \text{ marks})$

- Mention one drug used for the following condition and explain the basis/mechanism for the same.
- 5A. Acute attack of angina.
- 5B. Myasthania gravis.
- 5C. Functional constipation.
- 5D. Rickets.

 $(2\times4=8 \text{ marks})$

- 6A. List four groups of antihypertensives with two examples for each group.
- 6B. Enumerate four uses and four adverse effects of corticosteroids.

$$(4+(2+2) = 8 \text{ marks})$$

- 7. Write briefly on:
- 7A. Stryptics.
- 7B. Salbutamol.
- 7C. Infiltration Anaesthesia.
- 7D. Mannitol.

$$(4\times4 = 16 \text{ marks})$$

- 8A. Mention three groups of semisynthetic penicillins with an example for each group.
- 8B. Enumerate four uses of semisynthetic penicillin.

$$(3+2=5 \text{ marks})$$

- 9A. Mention two 2nd generation antihistaminics. List two advantages of it over first generation.
- 9B. Enumerate four groups of drugs used in the treatment of peptic ulcer with an example for each group.

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

- 10. Explain the mechanism/rationale for the following:
- 10A. Streptokinase in Myocardial infarction.
- 10B. Adrenaline in anaphylactic shock.
- 10C. Sulfonoylureas in diabetes mellitus.

 $(2\times3=6 \text{ marks})$

Reg. No.			

MANIPAL UNIVERSITY

SECOND BDS DEGREE EXAMINATION – SEPTEMBER 2007

SUBJECT: GENERAL AND DENTAL PHARMACOLOGY (ESSAY)

Monday, September 24, 2007

Time available: 14.30 – 17.00 Hours

Maximum Marks: 80

- Answer ALL the questions. Draw diagrams wherever necessary.
- 1A. List two intravenous general anaesthetics. Give one advantage and one disadvantage of each.
- 1B. Explain why adrenaline is combined with lignocaine. Write two contraindications for the use of this combination.

(3+4 = 7 marks)

- 2A. Define bioavailability. Explain four factors affecting bioavailability.
- 2B. Define the following with suitable examples.
 - i) Pharmacogenetics.
 - Teratogenecity.
 - iii) Tachyphylaxis.

 $(5+(2\times3) = 11 \text{ marks})$

3. Classify insulin preparations depending on the duration of action with two examples for each.

(6 marks)

- 4A. List four first line antitubercular drugs with a specific adverse effect of each of them.
- 4B. List two drugs used in oral candidiasis.

(4+1 = 5 marks)

List three classes of drugs used in bronchial asthma with an example for each class. Explain
the mechanism of action of any one of them.

(5 marks)

- 6. Write briefly on:
- 6A. Uses and adverse effects of atropine.
- 6B. Two general toxicities of anticancer drugs and methods to ameliorate them.
- 6C. Two uses of glucocorticoids with the rationale for the mentioned uses.
- 6D. Diclofinac sodium.

 $(4\times4 = 16 \text{ marks})$

- 7. Explain the pharmacological basis for the following:
- Neostigmine in myasthenia gravis.
- 7B. Tetracyclines are contraindicated in pregnancy.
- 7C. Low dose aspirin in prophylaxis of myocardial infarction.
- 7D. Hydrochlorothiazide with amiloride in hypertension.
- 7E. Protamine sulphate in heparin over dosage.

 $(2 \times 5 = 10 \text{ marks})$

- 8. Write FOUR differences between:
- 8A. Heparin and Warfarin.
- 8B. Phenobarbitone and Diazepam.

 $(2 \times 2 = 4 \text{ marks})$

- 9. Define the following with two examples for each:
- 9A. Obtundents.
- 9B. Bleaching agents.

 $(2\times2=4 \text{ marks})$

- Answer the following:
- 10A. List four drugs used in peptic ulcer. Explain the mechanism of action of any one of them.
- 10B. List three groups of drugs used in angina with two examples for each group.
- 10C. List two loop diuretics and write the mechanism of action.
- 10D. List two cardioselective beta-blockers. Mention one use with the basis.

 $(3\times4 = 12 \text{ marks})$

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MANIPAL UNIVERSITY

SECOND BDS DEGREE EXAMINATION - DECEMBER 2007

SUBJECT: GENERAL AND DENTAL PHARMACOLOGY (ESSAY)

Monday, December 31, 2007

Time available: 14.30 - 17.00 Hours

Maximum Marks: 80

- 1A. Enumerate four opioid analgesics and explain their analgesic action.
- 1B. List two uses and two adverse effects of commonly used opioid analgesic.

(4+2 = 6 marks)

- 2A. Classify penicillins.
- 2B. Enumerate four therapeutic uses and four adverse effects of penicillin G.

(2+4 = 6 marks)

- 3A. Classify glucorticoids based on duration of action; giving an example for each.
- 3B. Mention four uses of corticosteroids.

(3+2 = 5 marks)

- 4A. List the differences between d- tubocurarine and succinylcholine.
- 4B. Name two cardio selective and two non selective β blockers. Give four uses of β blockers.

(2+4 = 6 marks)

- 5. Give the pharmacological basis for the following:
- Salbutamol in bronchial asthma
- 5B. Omeprazole in peptic ulcer
- 5C. Nitroglycerine in angina pectoris
- 5D. Sulfamethoxazole and trimethoprim as antibacterial agents
- 5E. Neuromuscular blockers should not be used along with aminoglycoside antibiotics

 $(3\times5 = 15 \text{ marks})$

- List two uses and two adverse effects of the following:
- 6A. Hydrochlorothiazide
- 6B. Phenytoin sodium
- 6C. Metronidazole
- 6D. Ibuprofen
- 6E Atropine

 $(2 \times 5 = 10 \text{ marks})$

- 7. Write briefly on:
- 7A. Sublingual route
- 7B. Prodrug
- 7C. Mummifying agents
- 7D. Role of fluorides in dentistry

 $(4\times4 = 16 \text{ marks})$

- 8. Name one drug used in the following conditions with the basis for use:
- 8A. Motion sickness
- 8B. Mild hypertension
- 8C. Type II diabetes mellitus
- 8D. Lepra reaction
- 8E. Insomnia

 $(2 \times 5 = 10 \text{ marks})$

Name two ACE inhibitors. Explain their mechanism of action. Mention two uses of ACE inhibitors.

(4 marks)

10. Give two indications for the use and two adverse effects of heparin.

(2 marks)