**KENYA MEDICAL TRAINING COLLEGE – NYAMIRA**

**END OF YEAR ONE SEMESTER TWO EXAMINATION**

**SEPTEMBER 2014 KRCHN CLASS (PRE-SERVICE)**

**PHARMACOLOGY EXAMINATION**

DATE: …………………… TIME:…………………..

**INSTRUCTIONS**

1. Read the questions carefully and answer only what is asked.
2. Enter your examination number and question number on each page used.
3. ALL questions are compulsory.
4. For part 1 (MCQs), write the answer in the spaces provided on the answer booklet and each MCQ is one (1) mark.
5. For Part 2 (SHORT ANSWER QUESTIONS), answer the questions following each other.
6. For Part 3 (LONG ANSWER QUESTIONS), answer to each question MUST start on a separate page.
7. Omission of and or wrong numbering of a question or part of the question will result in 10% deduction of the marks scored from the relevant part.
8. Do NOT use a pencil.
9. Mobile phones are NOT allowed in the examination hall.

For Examiner:

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| --- | --- | --- | --- | --- |
| **MCQS** | **SAQS** | **LAQS 1** | **LAQS 2** | **TOTAL** |
|  |  |  |  |  |

**PART ONE: MCQS (MULTIPLE CHOICE QUESTIONS) PHARMACOLOGY– 10 MARKS**

Q.1. Which of the following are the most efficacious diuretic agents available:

1. Carbonic anhydrase inhibitors.
2. Loop diuretics.
3. Thiazide diuretics.
4. Potassium –sparing diuretics.

Q.2. Which of the following routes of administration is least likely to subject a drug to first pass effect?

1. Oral.
2. Rectal.
3. Intravenous.
4. Intramuscular.

Q.3. One of the following drugs is not a non-nucleoside reverse transcriptase inhibitors. Which one?

1. Nevirapine.
2. Ritonavir.
3. Epavirenz.
4. Delavirdine.

Q.4. Which of the following statements is not true of type I diabetes mellitus?

1. It is a severe form associated with keranism in the untreated state.
2. Circulating insulins is virtually absent, plasma glucagon is elevated.
3. It occurs mostly in obese adults.
4. It is thought to result from an infectious or toxic environment.

Q.5. Which of the following local anaesthetics is not an ester?

1. Cocaine.
2. Lidocaine.
3. Procaine.
4. Benzocaine.

Q.6. Of the following antibiotics, one is used in the management of malaria. Which one?

1. Amoxicillin.
2. Chloramphenicol.
3. Doxycycline.
4. Limcomycin.

Q.7. Which of the following organs is the most important in drug metabolism:

1. Brain.
2. Kidneys.
3. Liver.
4. Pancreas.

**PART ONE: MCQS (MULTIPLE CHOICE QUESTIONS) PHARMACOLOGY– 10 MARKS**

Q.8. Of the following classes of compounds, which one stimulates the production /release of insulins from the pancreatic beta cells?

1. Biguanides.
2. Progestin.
3. X glucosidase inhibitors.
4. Sulfonylureas.

Q.9. All of the following are adverse effects of metronidazole apart from:

1. Nausea.
2. Headache.
3. Salivating.
4. Metallic taste.

Q.10. Which of the following is the drug of choice for the treatment of hydatid disease:

1. Praziquantel.
2. Albendazole.
3. Levamisole.
4. Mebendazole.

**PART TWO: SHORT ANSWER QUESTIONS – PHARMACOLOGY – 20 MARKS**

Q.1. Outline the first choice drug combination for treatment of mycobacterium tuberculosis.

Q.2. Give two (2) reasons why drugs are administered sublingually.

Q.3. State four (4) challenges encountered in the treatment of TB infections.

Q.4. Outline the treatment of each of the following:

1. Tapeworm infestation.
2. Hookworm infestation.

Q.5. Name two (2) non-nucleoside reverse transcriptase inhibitors.

Q.6. Differentiate pharmacodynamics from pharmacokinetics.

Q.7. Name two (2) potassium sparing diuretics.

Q.8. State four (4) advantages of the oral route.

Q.9. List four (4) physiological effects of histamine.

Q.10. List two (2) classes of beta lactam antibiotics.

**PART THREE: LONG ANSWER QUESTIONS – PHARMACOLOGY – 20 MARKS**

Q.1. (a) Explain the types of diabetes. 2 marks

1. Classify the drugs used in the management of diabetes giving an example in

each case. 8 marks

Q.2. (a) Give four (4) reasons why fungal infections are on the increase. 2 marks

(b) Classify antifungals giving an example in each case. 6 marks

(c) Explain the toxic effects of antifungals. 2 marks