**KENYA MEDICAL TRAINING COLLEGE – NYAMIRA**

**END OF YEAR TWO SEMESTER ONE EXAMINATION**

**MARCH 2016 KRCHN CLASS (PRE-SERVICE)**

**NEUROLOGY 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) NEUROLOGY– 10 MARKS**

Q.1. The autonomic nervous system:

1. Controls the parasympathetic functions of the body.
2. Causes a decrease in the heart rate.
3. Is the involuntary part of the nervous system.
4. Its functions are not initiated in the brain.

Q.2. Which of the following best describes depressed fracture of the skull:

1. Bone fragments are embedded into the tissue of the brain.
2. Is a break in the continuity of a bone.
3. Is a fracture of the base of the skull.
4. All of the above

Q.3. In status epilepticus, anticonvulsant therapy is considered to prevent:

1. Vascular collapse and cerebral.
2. Hyperpyrexia and voluntary contractions.
3. Death and drug toxicity.
4. None of the above.

Q.4. One of the leading theory by the researchers is that over excitation of nerve cells by the neurotransmitters glutamate leads to all cell injury and neuronal degeneration. This could be a possible cause of which neurological problem:

1. Meningitis.
2. Brain tumours.
3. Peripheral neuritis.
4. Disseminated sclerosis.

Q.5. Glasgow come scale is used to assess:

1. A patient’s response to motor.
2. A patient’s response to pain.
3. A patient’s response to stimuli.
4. A patient’s spontaneous to eye opening.

Q.6. Which cranial nerve, when damaged by process inflammation causes Bell’s palsy:

1. 8th cranial nerve.
2. 5th cranial nerve.
3. 6th cranial.
4. 7th cranial nerve.

Q.7. Common causes of interclanial haemorrhage are:

1. Circular aneurysm and severe headache.
2. Diffused axonal injury and coagulopathies.
3. Trauma and rapture of aneurysm.
4. Complications of anticoagulant therapies and haematoma.

Q.8. In secondary head injury, any bleeding within the skull (which is a rapid closed compartment) increases the volume of contents within a container of fixed size and subsequent displacement of the brain. This may lead to restriction of blood flow to the brains, hence decreasing waste removal and oxygen delivery. What will be the resultant effect the cells of the brain?

1. They may become anoxic and cannot metabolize properly producing infarction ischaemia.
2. Oxygen delivery is increased inter-cranial pressure.
3. Brain cells dies leading to increased inter-cranial pressure.
4. Cells within the structures of the skull leads to chemical changes associated with direct trauma and hence cerebral oedema.

Q.9. Which of the following diagnostic procedures may show arterial fibrillation in a patient with cerebrovascular accidents (CVA)?

1. Magnetic resonance imaging (MRI).
2. Computed tomography (CT) scanning.
3. Cardiac monitor.
4. Cerebral angiography.

Q.10. Status epilepticus is a complication of:

1. Premonitory sensations.
2. Prolonged seizure activity.
3. Generalized tonic –clonic contractions.
4. Postictal state.

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

Q.1. Define the following terms:

1. Parkinson’s disease. 1 ½ mark
2. Belly’s palsy. 1 ½ mark

Q.2. MaryAnne has been brought to your health facility unconscious by a good Samaritan. You are to do a neurological assessment for MaryAnne.

1. Define Glasgow come scale. 1 mark
2. Explain all the three steps you will follow in order to give a score range

of MaryAnne. 10 marks

1. Draw a well labelled diagram showing the flow of cerebrospinal fluid. 5 marks
2. State the possible score range for MaryAnne after your assessment. 1 mark

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

Q.1. Cerebrovascular accident (CVA) is considered an emergency.

1. Define the term cerebrovascular accident. 1 mark
2. Explain the role of arterial fibrillation in cerebrovascular accident. 2 marks
3. Explain the specific role of a nurse in the management of patients with

cerebrovascular accident. 5 marks

1. name four (4) contributing factors to cerebrovascular accident. 2 marks

Q.2. Mr Kate, a form three student at Miti secondary school is admitted with provisional diagnosis of epilepsy.

1. Define epilepsy. 1 mark
2. State three (3) main goals of medical management for Mr Kate. 1 ½ mark
3. Describe the nursing management for Mr Kate. 7 marks
4. Name one specific complication of epilepsy. ½ mark