**KENYA MEDICAL TRAINING COLLEGE – NYAMIRA**

**END OF YEAR I SEMESTER II EXAMINATION**

**MARCH 2017 KRCHN CLASS (PRE-SERVICE)**

**RESPIRATORY CONDITION 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) RESPIRATORY CONDITIONS. –10 MARKS**

Q.1. The respiratory system can best be described as:

1. The route by which the supply of oxygen present in the atmosphere air enters the body
2. The route by which exchange of gases occurs between the blood and the lungs
3. The route by which there is a provision of the transport system for oxygen and carbon dioxide
4. The system through which the cells of the body need energy for the anabolic activities

Q.2. The breathing cycle consists of three phases:

1. Inspiration, tidal volume, pause
2. Expiration inspiration, respiration
3. Inspiration, expiration, pause
4. Respiration, expiration, pause

Q.3. Total lung capacity:

1. Is the largest volume of air which can be expelled from the lungs
2. Is the maximum amount of air the lung can hold
3. Is the volume of air remaining in the lungs after forced expiration
4. Is the amount of air remaining in the air passages and alveoli at the end of quiet expiration

Q.4. Of the twelve pairs of ribs:

1. The 1st rib is fixed
2. They move inwards when pulled outwards
3. They move outwards when pulled inwards
4. They move upwards when pulled outwards to the first rib

Q.5. Which one of the following is a complication of bronchitis:

1. Emphyma
2. Pneumothorax and enlargement of left lung
3. Pneumothorax
4. Haemothorax

Q.6. The following clinical presentation are characterized of which condition?, thus “wheezing when breathing in and out, tightness of the chest and shortness of breath”

1. Bronchial asthma
2. Lung cancer
3. Bronchiectasis
4. Pneumonia

Q.7. The lungs and chest wall are covered with a thin layer of tissues called:

1. Alveoli
2. Visceral
3. Pleura
4. None of the above

Q.8. Tension pneumothorax occurs when:

1. The pleural pressure rises above the atmospheric pressure
2. There is compression not only in the lungs but also the mediastinum and other organs like trachea
3. It is symptomatic
4. Communication between the pleural space and the lungs persists which allows air to enter the pleural space during inspiration but prevents it from escaping during expiration

**PART ONE: MCQS (MULTIPLE CHOICE QUESTIONS) RESPIRATORY CONDITIONS. –10 MARKS**

Q.9. Internal respiration is the:

1. Exchange of gases by diffusion between the alveoli and the blood in the alveoli capillaries across the respiratory membrane
2. Is the exchange of gases by diffusion between blood in the capillaries and the body cells
3. Difference in partial pressure that exists across a semi-permeable membrane
4. Is the maximum volume of air which can be moved into and out of the lungs

Q.10. In status asthmaticus:

1. There is a severe respiratory distress which persists despite pharmacologic and supportive interventions
2. Carbon dioxide is retained followed by acidosis
3. There is increased amount of oxygen intake alongside carbon dioxide leading to severe respiratory distress
4. The patient is nursed in an environment where there is strong air aeration

**PART TWO: SAQS (SHORT ANSWER QUESTIONS) RESPIRATORY CONDITIONS – 20 MARKS**

Q.1. (a) State three (3) types of cells that are involved in the development of airway

inflammation in the asthma. 1 ½ mark

(b) State two (2) main characteristics of bronchial asthma. 2 marks

(c) Explain only the specific nursing care given to a patient with bronchial asthma 5 marks

(d) Name two (2) complications of bronchitis. 1 mark

Q.2. Explain the pathophysiology of bronchitis. 3 marks

Q.3. Name the nerve:

1. That is involved in the stimulation of intercostal muscles ½ mark
2. That supplies the diaphragm ½ mark

Q.4. Define the following terms:

1. Pathophysiology
2. Adjuvant therapy
3. Palliative therapy 1 ½ mark

Q.5. Draw a well labelled diagram of the respiratory system. 5 marks

**PART THREE: (LAQS) LONG ANSWER QUESTIONS) RESPIRATORY CONDITIONS – 23 MARKS**

Q.1. Mary a 28 year old lady is admitted to the surgical ward following an injury to her chest after a fall at her work place.

1. Name any two (2) specific types of chest injuries. 1 mark
2. State four (4) causes of chest injuries 2 marks
3. Describe the in hospital life support management for Mary 6 marks
4. Name two complications of chest injuries 1 mark

Q.2. Mr YY, has been admitted to a medical ward upon a made diagnosis of cancer of the lungs.

1. Name four (4) specific cardinal signs and symptoms that Mr YY may

present with.

2 marks

1. State four (4) individual risk factors that may have caused the carcinoma

to Mr YY. 2 marks

1. D raw a well labelled diagram showing the flow of blood between the heart

and the lungs 3 marks

1. Explain the specific medical and nursing management for Mr YY 6 marks