# **CHUKA**



## **UNIVERSITY**

#### UNIVERSITY EXAMINATIONS

# SECOND YEAR EXAMINATION FOR THE AWARD OF DEGREE OF MASTER OF SCIENCE IN NURSING

NUMS 843: CARDIOVASCULAR AND THORACIC NURSING

STREAMS: MS.c NURSING TIME: 3 HOURS

DAY/DATE: FRIDAY 9/8/2019 2.30 P.M - 5.30 P.M.

### INSTRUCTIONS

• Answer ALL Questions

- Write your answers legibly
- Do not write anything on the question paper

## **OUESTION ONE**

A 58-year-old man is undergoing evaluation following a confirmed diagnosis of hypertension. His current blood pressure reading is 163/96 mmHg. He is also obese with a body mass index (BMI) of 36 kg/m<sup>2</sup>.

- (a) Describe any four (4) potential mechanisms that may have contributed to the development of hypertension in the above patient. [8 Marks]
- (b) Explain the comprehensive evaluation of the above patient.

[12 Marks]

(c) Explain the recommended lifestyle modification practices for the clients with hypertension. [5 Marks]

# **QUESTION TWO**

A 43-year-old woman comes to the emergency department with complaints of 2 days of fever, malaise, cough, green sputum production and dyspnea. Her past medical history is not significant. She is uncomfortable but alert with temperature of  $39.2^{\circ}$ C, respiratory rate 28 breths/min, blood pressure 110/70 mmHg, heart rate 105 beats/min, SPO<sub>2</sub> on room air is 91%. Her white blood cell count is  $15,500/\mu$ L. Upon further evaluation, a diagnosis of community acquired pneumonia is made:

- (a) Explain the pathophysiology of community acquired pneumonia. [8 Marks]
- (b) Describe the collaborative management of the above patient. [12 Marks]
- (c) State five (5) ways of preventing community acquired pneumonia. [5 Marks]

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## **OUESTION THREE**

A 62-year-old woman with a history of mitral stenosis is admitted with signs of heart failure:

- (a) Describe the etiology and pathogenesis of mitral stenosis. [8 Marks]
- (b) Explain the collaborative management of the above patients. [12 Marks]
- (c) Explain the primary prevention methods of mitral stenosis. [5 Marks]

## **QUESTION FOUR**

A 34-year-old woman is brought to the emergency department with a history of snoring, sweating and decreased level of consciousness of abrupt onset. On quick examination, the patient appears apprehensive, cyanotic and is developing labored breathing. A possible diagnosis of airway obstruction is made:

(a) Explain the emergency management of the above patient. [15 Marks]

(b) Describe the potential causes of upper airway obstruction and their prevention. [10 Marks]

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