



“Investing in Africa’s future”

COLLEGE OF HEALTH, AGRICULTURE AND NATURAL SCIENCES

NSNS 323: HUMAN ANATOMY

END OF FIRST SEMESTER FINAL EXAMINATIONS

NOVEMBER-DECEMBER 2020

LECTURER: Mrs Chituku S

DURATION: 24 HRS

INSTRUCTIONS

Answer ONE questions

Each question carries equal marks (100).

DO NOT repeat material.

Write legibly.

QUESTION 1a

- i. Most homeostatic control mechanisms are negative feedback mechanisms, explain this giving examples. 10 marks.
- ii. Describe the homeostatic control mechanism of the body. 15 marks

QUESTION 1b

Osteoporosis is a bone disease where there is a reduction in bone mineral density. This occurs either when removal or resorption of bone happens too quickly, new bone is formed too slowly, or for both reasons. Describe bone formation and the hormones that influence the process. (25)

QUESTION 1c

Therapeutic mobility and exercise training after stroke presents many challenges due to an asymmetrical gait pattern, decreased walking speed, and increased energy expenditure during activity. There is a need to improve cardiorespiratory fitness so that individuals participating in stroke rehabilitation can tolerate functional mobility training and activities. Describe the structures of systemic and pulmonary circulation that are affected by cardiovascular accident. (25)

QUESTION 1d

Describe negative and positive feedback involved in breast feeding (25)

QUESTION 2a

The endocrine and the nervous system synergistically function to control homeostasis

- i. Describe the hypothalamus (10)
- ii. Explain the relationship between endocrine and nervous system. (15)

Question 2b

Peptic ulcers are defects in the gastric or duodenal mucosa that extend through the muscularis mucosa describe the structure of the stomach and give a rationale why it has that structure. (10)

Question 2c

Describe the following stating how different the muscle is to the other

- i. Epithelial tissue (5)
- ii. Muscle tissue (7)
- iii. Cardiac muscle (8)
- iv. Nervous tissue (5)

Question 2d

A person suffering from renal failure can present with anuria. Outline the structure that would be damaged in this disease. (25)

Question 3a

A 25 year old woman had thyroidectomy done 12 years ago and on Thyroxin supplementation presence at the hospital with fainting attacks.

- i) State the Classification of hormones (5)
- ii) Describe the thyroid gland and its secretion (15)
- iii) Explain what might be the cause of fainting attacks (5)

Question 3b

A para I complains of lower abdominal pains during breast feeding.

- i. With this in mind describe the hormones produce the pituitary gland. (20)
- ii. Explain the causes of the abdominal pain. (5)

Question 3c

A boy presence at an ophthalmic clinic with a ruptured globe and the ophthalmologist order removal of the eye.

- i. Describe the structures of the anterior segment eye that are injured. (30)
- ii. Outline the structures of posterior segment of the eye to be removed. (20)

END OF PAPER