

**UNIVERSITY OF ESWATINI  
FACULTY OF HEALTH SCIENCES  
DEPARTMENT OF GENERAL NURSING**

**MAIN EXAMINATION, MAY 2021**

**COURSE TITLE:           PATHOPHYSIOLOGY**

**COURSE CODE:           GNS 603**

**TIME ALLOCATED:       THREE (3) HOURS**

**MARKS ALLOCATED:    100**

**INSTRUCTION:**

- **ANSWER ALL QUESTIONS**
- **ANSWER ALL QUESTIONS IN THE SEPARATE ANSWER-BOOKLET PROVIDED**
- **THERE ARE FIVE (5) QUESTIONS, EACH WORTH 20 MARKS**
- **THERE ARE THREE (3) PRINTED PAGES EXCLUDING COVER PAGE**

***DO NOT OPEN THIS QUESTION PAPER UNTIL YOU ARE TOLD TO DO SO  
BY THE INVIGILATOR***

## QUESTION 1

- 1.1 Beauty has a new hairstyle for the summer for which she uses a new hairspray. She presents to the clinic with itchy skin lesions on the forehead and nape of neck. You diagnose her with allergic contact dermatitis
- (a) Which type of hypersensitivity disorder is allergic contact dermatitis? [1]
- (b) Discuss the two-phased pathology for the development of allergic contact dermatitis [8]
- 1.2 Define the following terms
- (c) Leukopenia [1]
- (d) Neutropenia [1]
- (e) Aplastic anaemia [1]
- 1.3 Compare and contrast acute lymphocytic leukemia and acute myelocyticleukemia [8]

[Sub-total 20marks]

## QUESTION 2

- 2.1 A couple with normal skin colour gave birth to an albino daughter. With the aid of a diagram,
- a) Discuss the possible genotype(s) of the couple [8]
- b) State, with rationale, the probability of them giving birth to:
- i. An albino son [1]
- ii. A child with normal skin colour [1]
- iii. A carrier of albinism [1]
- 2.2 Give a brief pathophysiological explanation to each of the following:
- (a) Otitis media may cause temporary hearing loss [5]
- (b) Visceral pain is often dull, poorly localised and often perceived on sites different from their sites of origin. [4]

[Sub-total 20marks]

## QUESTION 5

5.1 A 5 year old child present to the clinical area with difficulty breathing, and hives on the body. The caregiver gives a history of eating ice cream which had fragments of almonds

(a) State the most likely diagnosis for this child [1]

(b) Discuss the cascade of events that occurred leading to the development of signs and symptoms in this child. [5]

(c) What grading would you assign to this child's clinical manifestations? [1]

5.2 Zodwa a 39year old patient is due for initiation of anti-tuberculosis treatment today. Using your knowledge of pathology, explain the type of inflammation on the lung parenchyma this patient is experiencing

[5]

5.3 Clients taking Zidovudin (AZT)-based ARV regimens for a prolonged period of time would need strict monitoring of their cardiovascular function, otherwise they may end up developing complication up to as severe as heart failure and eventually pleural effusion. Discuss pathophysiologically the practicality of the occurrence of the stated complications as a result of the said regimen.

[8]

**[Sub-total 20marks]**