



**PAMIBIA UNIVERSITY**  
**OF SCIENCE AND TECHNOLOGY**

FACULTY OF HEALTH, APPLIED SCIENCES AND NATURAL RESOURCES

DEPARTMENT OF HEALTH SCIENCES

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| QUALIFICATION : BACHELOR OF SCIENCE IN HEALTH INFORMATION SYSTEM MANAGEMENT |                      |
| QUALIFICATION CODE: 07BHIS  | LEVEL: 5             |
| COURSE NAME: BASIC PATHOPHYSIOLOGY  | COURSE CODE: BPP521S |
| SESSION: JANUARY 2023   | PAPER: THEORY        |
| DURATION: 3 HOURS   | MARKS: 100           |

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|---|---------------------------|
| SECOND OPPORTUNITY EXAMINATION QUESTION PAPER |                           |
| EXAMINER:                                     | Dr Roswitha Mahalie       |
| MODERATOR:                                    | Dr Elizabeth Van Der Colf |

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| INSTRUCTIONS  |  |
| <ol style="list-style-type: none"><li>1. Answer ALL the questions.</li><li>2. Write clearly and neatly.</li><li>3. Number the answers clearly.</li><li>4. Write all answers in the answer booklet provided.</li></ol> |  |

PERMISSIBLE MATERIALS

1. SCIENTIFIC CALCULATOR.

THIS QUESTION PAPER CONSISTS OF 5 PAGES (Including this front page)

## SECTION A

### QUESTION 1

[10 MARKS]

Evaluate the statements in each numbered section and select the most appropriate answer or phrase from the given possibilities. Each question carries 1 – mark.

1.1 The death unwanted cells resulting from activation of intracellular signalling cascades is referred to as:

- A. Anaplasia
- B. Apoptosis
- C. Chloasma
- D. Melasma

1.2 An overall weight loss and generalized weakness in the body is also referred to as?

- A. Hypolipidemia
- B. Cachexia
- C. Intracellular accumulation
- D. adipose tissue disorder

1.3 Which of the following is not part of the aetiology of haemorrhage?

- A. Haematoma
- B. Petechiae
- C. Ecchioses
- D. Purpura

1.4 A replacement of a mature cell type by a different mature cell type, is called:

- A. Dysplasia
- B. Hyperplasia
- C. Hypertrophy
- D. Metaplasia

1.5 An active process resulting from arteriolar dilation and increased blood flow to an organ is called:

- A. Viremia
- B. Osmosis
- C. Hyperemia
- D. Haemostasis

1.6 Study of all factors that cause a disease, is called:

- A. Clinical Manifestation
- B. Pathology
- C. Aetiology
- D. Prognosis

1.7 A mild degree of unconsciousness from which the patient can be awakened with words or shaking is called:

- A. Stupor

- B. Drowsiness
- C. Syncope
- D. Gait disorders

1.8 The adult person has approximately \_\_\_ bones of various shapes and sizes:

- A. 3000
- B. 206
- C. 300
- D. 250

1.9 The presence of many microorganisms in health facilities is referred to as:

- A. Subclinical Infection
- B. Nosocomial infections
- C. In-hospital infections
- D. Clinical Infection

1.10 Examples of genetic de-arrangement includes the following except:

- A. Down Syndrome (trisomy 21)
- B. Haemophilia
- C. Paget Disease
- D. Sickle cell Anaemia

## **QUESTION 2**

**[10 MARKS]**

Fill the missing words in the statements below. Each answer earns one (1) mark.

- 2.1 \_\_\_\_\_ is an infection affecting the renal tubules, pelvis, and calices.
- 2.2 \_\_\_\_\_ is a condition caused by abnormal accumulation of cerebrospinal fluid (CSF) in the cerebral ventricular system.
- 2.3 \_\_\_\_\_ is when the roof of the mouth develops in two separate halves (before birth)
- 2.4 \_\_\_\_\_ disorders are found in children, especially when there is an interference with the deposition of bone in the growth plates.
- 2.5 \_\_\_\_\_ is defined as bleeding from the nose usually due to rupture of small blood vessels in the anterior part of the nasal septum
- 2.6 \_\_\_\_\_ is farsightedness that develops if the eyeball and the image is focussed behind the retina.
- 2.7 \_\_\_\_\_ are painless, cystic masses containing sperm.
- 2.8 \_\_\_\_\_ happens when supporting pelvic structures relaxes and the cervix sags downward into the vagina.
- 2.9 \_\_\_\_\_ refers to a loss of lung volume caused by inadequate expansion of air spaces.
- 2.10 \_\_\_\_\_ is an infection of the larynx with accompanying hoarseness, leading to the inability to talk in an audible voice.

**QUESTION 3**

**[30 MARKS]**

3.1 Disease develops when cell structure and function change. Describe the types of cellular adaptation (14)

3.2 Figure 1 below illustrates one of the different vascular disorders. Respond to the following questions.

3.2.1 Identify and define the vascular disorder depicted below. (4)

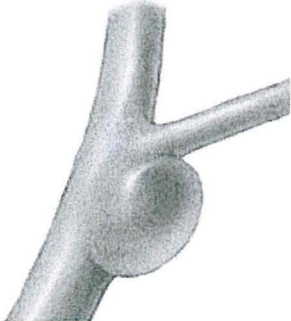


Fig 1: Example of a vascular disorder

3.2.2 Type the identified vascular disorder. (6)

3.2.3 Six (6) clinical manifestations of disorder. (6)

**SECTION B**

**QUESTION 4**

**[30 MARKS]**

4.1 Briefly define the following concepts: (8)

4.1.1 Blood-brain-barrier (2)

4.1.2 Active immunity (2)

4.1.3 Inflammation (2)

4.1.4 Glaucoma (2)

4.2 Briefly describe the stages of the General Adaptation Syndrome (GAS) which is caused by a general stress response. (6)

4.3 Pain is experienced when specific nerve endings are stimulated.

4.3.1 Discuss the 3-step process of pain in the human body. (6)

4.3.3 Classification of pain. (10)



## SECTION C

### QUESTION 5

[20 MARKS]

- 5.1 Indicate whether the following statements are True or False. Each answer earns one (1) mark. (5)
- 5.1.1 The brachial artery in the arm is used to measure blood pressure.
  - 5.1.2 Nephroptosis occurs when the kidney becomes detached from its position and moves freely beneath the diaphragm.
  - 5.1.3 Astigmatism develops from an irregular curvature in the cornea or lens
  - 5.1.4 Osteoporosis is referred to as the degenerative or 'wear-and-tear' non-inflammatory joint disease
  - 5.1.5 Hyperaldosteronism (Conn syndrome) is defined as an excessive excretion of aldosterone by the pituitary gland.
- 5.2 Ms. Pearl, a 44-year-old mother of 5 children, was caught in a fire in her corrugated house whilst they were all asleep. The whole family was rescued from the house, but she had mixed burns on her arms, chest and back except her hands and face. It was determined by the paramedics that she had full-thickness burns.
- 5.2.1 Using the rules-of-nines, calculate the approximate area of full-thickness burns on her right arm, chest and back. (5)
  - 5.2.2 Differentiate between deep partial-thickness and full thickness burns. (10)

All the best!!!!