



**NAMIBIA UNIVERSITY
OF SCIENCE AND TECHNOLOGY**

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| QUALIFICATION : BACHELOR OF SCIENCE IN HEALTH INFORMATION SYSTEM MANAGEMENT | |
| QUALIFICATION CODE: 07BHIS | LEVEL: 5 |
| COURSE: BASIC PATHOPHYSIOLOGY | COURSE CODE: BPP521S |
| DATE: JANUARY 2024 | SESSION: 2 |
| DURATION: 3 HOURS | MARKS: 100 |

SECOND OPPORTUNITY / SUPPLEMENTARY: EXAMINATION QUESTION PAPER

EXAMINER: Dr Roswitha Mahalie

MODERATOR: Dr Elizabeth Van Der Colf

INSTRUCTIONS:

1. Answer all questions on the separate answer sheet.
2. Please write neatly and legibly.
3. Do not use the left side margin of the exam paper. This must be allowed for the examiner.
4. No books, notes and other additional aids are allowed.
5. Mark all answers clearly with their respective question numbers.

PERMISSIBLE MATERIALS:

1. None

ATTACHMENTS

1. None

This paper consists of 6 pages including this front page

QUESTION 1: MULTIPLE CHOICE QUESTIONS**(15 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 A cell whose functions include ingesting foreign or invading cells is a (an):

- A. T-cell.
- B. B-cell.
- C. Macrophage.
- D. Erythrocyte.

1.4 Jane is a data entry clerk who types most of the day. She has an increased risk for:

- A. Osteomyelitis.
- B. Osteoporosis.
- C. Fracture of the overused area.
- D. Carpal tunnel syndrome.

1.5 Patients with rheumatoid arthritis typically have pain:

- A. Late in the evening.
- B. Only upon awakening
- C. With activity.
- D. All day without remission.

1.6 Small ulcers that occur singly or in groups on the inside of the cheek, lip or underneath the tongue are called:

- A. Mumps
- B. Aphthae
- C. Vincent Disease
- D. Aphthous stomatitis

- 1.7 A patient with a moon face, cervical fat pad, central obesity, thin extremities, weight gain, thin skin, striae, hypertension, and hyperglycemia, has which disease
- Addison's Disease
 - Cushing Syndrome
 - Conn Syndrome
 - Diabetes Insipidus
- 1.8 An overactive thyroid gland is referred to as:
- Graves disease.
 - Cretinism.
 - Myxoedema.
 - Diabetes Insipidus.
- 1.9 Increased amount and duration of menstrual flow, is called:
- Oligomenorrhea
 - Menorrhagia
 - Metrorrhagia
 - Polymenorrhagia
- 1.10 The cardinal signs of inflammation include all except:
- Loss of function (functio laesa)
 - Redness (rubor)
 - Necrosis (dead cells)
 - Pain (dolor)
- 1.11 A patient asks you why the clip on his finger is for. The best response is:
- This measures your temperature.
 - This is a cardiac monitor that alerts one too any arrhythmias that you might experience during the night.
 - This is a pulse oximetry and is used to give an idea of how much oxygen is in your blood.
 - This tells us the number of red blood cells you have which are needed to provide oxygen throughout your body.
- 1.12 Examples of genetic de-arrangement includes the following except:
- Down Syndrome (trisomy 21)
 - Haemophilia
 - Paget Disease
 - Sickle cell Anaemia
- 1.13 A condition where there is an abnormal permanent enlargement of the alveolar walls is known as?
- Pleural Effusion.
 - Lung Cancer.
 - Emphysema.
 - Pneumonitis.

1.14 A low arterial oxygen concentration is called:

- A. Hypoxemia.
- B. Hypercarbia.
- C. Hypothyroidism.
- D. Tidal volume.

1.15 Cyanosis is a discoloration of the skin

- A. Yellowish.
- B. Pale.
- C. Reddish.
- D. Bluish.

QUESTION 2: FILL IN THE BLANKS

(10 MARKS)

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

- 2.1 _____ is characterized by high levels of sugar (glucose) in the blood, resulting in the inability of the body's cells to take up glucose, especially liver and muscle cells.
- 2.2 _____ occurs when cells lining the bronchi appears to be thickened and callused.
- 2.3 _____ is an infection affecting the renal tubules, pelvis, and calices.
- 2.4 _____ is defined as bleeding from the nose usually due to rupture of small blood vessels in the anterior part of the nasal septum
- 2.5 _____ happens when supporting pelvic structures relaxes and the cervix sags downward into the vagina.
- 2.6 _____ is an infection of the larynx with accompanying hoarseness, leading to the inability to talk in an audible voice.
- 2.7 A _____ is a collection of signs and symptoms that occur together in response to a certain condition
- 2.8 _____ refers to water accumulation in/around the retroperitoneal area (kidney).
- 2.9 _____ is a syndrome characterized by progressive deterioration and continuing decline of memory and other cognitive changes.
- 2.10 _____ means leukocyte redistribution.

QUESTION 3: TRUE/FALSE QUESTIONS**(5 MARKS)**

3.1 Evaluate the statements and select whether the statement is true or false. Write the word 'True' or 'False' next to the corresponding number on your ANSWER SHEET.

Each question earns 1 mark.

- 3.1.1 The peripheral nervous system (PNS) which consist of the spinal cord and the brain where sensory information is received, is known for motor control activities such as measuring blood pressure at brachial artery in the arm.
- 3.1.2 The skin, liver and kidney produce vitamin D which has certain endocrine functions.
- 3.1.3 Astigmatism develops from an irregular curvature in the cornea or lens.
- 3.1.4 Fusiform involves the entire circumference of the vessel the reason for this, is that there is a weak spot in both sides of that blood vessel.
- 3.1.5 Polydipsia refers to dehydration resulting in thirst.

SECTION B SHORT/LONG ANSWER QUESTIONS**[25 MARKS]****QUESTION 4: SHORT/LONG ANSWER QUESTIONS****(25 MARKS)**

- 4.1 Briefly define the following concepts: **(5)**
 - 4.1.1 Nasal Polyp **(1)**
 - 4.1.2 Asystole **(1)**
 - 4.1.3 Glaucoma **(2)**
 - 4.1.4 Transcytosis **(1)**
- 4.2 Fractures is a break in the rigid structure and continuity of a bone as a result of direct, indirect trauma, underlying disease or repeated stress on a bone. Write notes on the inflammatory phase of bone healing. **(7)**
- 4.3 Pain is experienced when specific nerve endings are stimulated. Discuss the 3-step process of pain in the human body. **(6)**
- 4.4 Briefly describe the stages of the General Adaptation Syndrome (GAS) which is caused by a general stress response. **(7)**

SECTION C SHORT/LONG ANSWER QUESTIONS

[45 MARKS]

QUESTION 5: SHORT/LONG ANSWER QUESTIONS

(25 MARKS)

- 5.1 Disease develops when cell structure and function change. Describe the types of cellular Adaptation. (14)
- 5.2 Figure 1 below illustrates a disease condition caused by malfunctioning of the principal endocrine glands. Identify and define the disorder depicted in figure 1 below. (4)

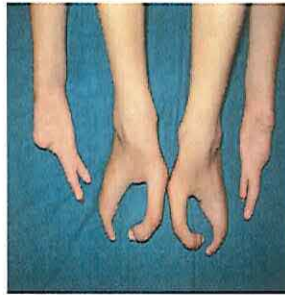


Figure 1

- 5.3 Write notes on the three (3) types of memory. (7)

QUESTION 6: SHORT/LONG ANSWER QUESTIONS

(20 MARKS)

- 6.1 Amnesia results from disruption of the memory pathways and can be temporary or permanent. Differentiate between Anterograde and Retrograde amnesia (4)
- 6.2 Enumerate the effects of burn wounds. (6)
- 6.3 Differentiate between deep partial-thickness and full thickness burns. (10)

Total: 100 marks

All the best!!!!