



**PAMIBIA UNIVERSITY
OF SCIENCE AND TECHNOLOGY**

FACULTY OF HEALTH, APPLIED SCIENCES AND NATURAL RESOURCES

DEPARTMENT OF HEALTH SCIENCES

QUALIFICATION : BACHELOR OF SCIENCE IN HEALTH INFORMATION SYSTEM MANAGEMENT	
QUALIFICATION CODE: 07BHIS	LEVEL: 5
COURSE NAME: BASIC PATHOPHYSIOLOGY	COURSE CODE: BPP521S
SESSION: NOVEMBER 2022	PAPER: THEORY
DURATION: 3 HOURS	MARKS: 100

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

PERMISSIBLE MATERIALS

1. SCIENTIFIC CALCULATOR.

THIS QUESTION PAPER CONSISTS OF 6 PAGES (Including this front page)

SECTION A

QUESTION 1

[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. (15)

- 1.1 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
- 1.2 A patient with a moon face, cervical fat pad, central obesity, thin extremities, weight gain, thin skin, striae, hypertension, and hyperglycemia, has which disease
- A. Addison's Disease
 - B. Cushing Syndrome
 - C. Conn Syndrome
 - D. Diabetes Insipidus
- 1.3 The death unwanted cells resulting from activation of intracellular signalling cascades is referred to as:
- A. Anaplasia
 - B. Apoptosis
 - C. Chloasma
 - D. Melasma
- 1.4 Detached intravascular solid, liquid, or gaseous mass that is carried in the circulation to a site distant from its point of origin where it often causes tissue dysfunction is referred to as:
- A. Thrombosis
 - B. Embolism
 - C. Infarction
 - D. Oedema
- 1.5 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
- 1.6 An overactive thyroid gland is referred to as:
- A. Graves disease.
 - B. Cretinism.
 - C. Myxoedemma.
 - D. Diabetes Insipidus.

- 1.7 A replacement of a mature cell type by a different mature cell type, is called:
- A. Dysplasia
 - B. Hyperplasia
 - C. Hypertrophy
 - D. Metaplasia
- 1.8 An active process resulting from arteriolar dilation and increased blood flow to an organ is called:
- A. Viremia
 - B. Osmosis
 - C. Hyperemia
 - D. Haemostasis
- 1.9 Inflammation of the testis caused by trauma or the reflux of sterile urine up the vas deferens is called:
- A. Cryptorchidism
 - B. Epididymitis
 - C. Epididymosis
 - D. Fournier gangrene
- 1.10 Increased amount and duration of menstrual flow, is called:
- A. Oligomenorrhea
 - B. Menorrhagia
 - C. Metrorrhagia
 - D. Polymenorrhagia
- 1.11 Which of the following is known as a short episode of pain:
- A. Referred pain
 - B. Acute pain
 - C. Transient pain
 - D. Phantom pain
- 1.12 Ringing, buzzing or whistling noise heard in the ear resulting when the acoustic nerve never transmits nerve impulses to the brain in the absence of vibrations from external sources is called
- A. Hearing Loss
 - B. Tinnitus
 - C. Tinalgia
 - D. Otitis Media
- 1.13 _____ occurs when the placenta is implanted over the cervical os is called:
- A. Abruptio placentae
 - B. Placenta absentia
 - C. Placenta previa
 - D. Placentalrhagia

- 1.14 The cardinal signs of inflammation include all except:
- A. Loss of function (functio laesa)
 - B. Redness (rubor)
 - C. Necrosis (dead cells)
 - D. Pain (dolor)

- 1.15 The farsightedness associated with aging:
- A. Myopia
 - B. Presbyopia
 - C. Astigmatism
 - D. Nystagmus

QUESTION 2

[10 MARKS]

Assess the following statements and decide whether they are True or False. Each question earns 1 mark.

- 2.1 Cranial nerves take impulses to and from the brain while spinal nerves take impulses to and from the spinal cord.
- 2.2 When the cause of the disease is unknown it is called idiopathic.
- 2.3 The aetiology of oedema includes adipose tissue disorder, increased hydrostatic pressure and hypoproteinemia.
- 2.4 The lower respiratory tract consists of the pharynx, trachea, the bronchial tree, and the lungs.
- 2.5 Chemotaxis is the unidirectional attraction of leukocytes from vascular channels towards the site of inflammation within the tissue space.
- 2.6 The pineal gland produces calcitonin.
- 2.7 Vasopressin causes milk ejection and contraction of the uterus in labour.
- 2.8 Sacular aneurysm appears only on one part or side of a vessel where the weakness is found in the blood vessel.
- 2.9 Lesions in cerebrum lead to difficulty recognizing written words is referred to as alexia.
- 2.10 Frostbite is not an example of chemical injury.

QUESTION 3

[15 MARKS]

3.1 Match the appropriate answer from Column A with a meaning in Column B by inserting the appropriate, e.g., 3.1.1 A. Each question earns 1 mark. (10)

Nr	Item A	Item B
3.1.1	Bruit	A. Involved in the development of diseases based on the basic reactions of cells and tissues to abnormal stimuli.
3.1.2	Fomites	B. A build-up of fatty deposits on the walls of the coronary arteries.

3.1.3	Iatrogenic	C. Probability or likelihood for recovery or other outcomes.
3.1.4	Prognosis	D. Is the process whereby cancer cells escape their tissue of origin and initiate new colonies of cancer in distant sites.
3.1.5	Atheroma	E. Deposition of calcium at sites of cell injury and necrosis e.g., aortic stenosis.
3.1.6	Increased Intracranial Pressure	F. Inhibits prolactin release.
3.1.7	Dystrophic calcification	G. Disease resulting from an unintended or unwanted medical intervention.
3.1.8	Autophagy	H. It is the pressure exerted by blood when ejected from the left ventricle.
3.1.9	Systolic blood pressure	I. An adaptation to nutrient deprivation in which cells digest their own organelles and recycle them to provide energy and substrates.
3.1.10	Metastasis	J. Abnormal sound on auscultation of the heart
		K. It is the pressure exerted by the contents of the cranium, and it normally ranges from 0 to 15 mm Hg.
		L. Any inanimate object capable of being an intermediate in the indirect transmission of an infectious agent.

3.2 Encephalitis is defined as an acute inflammation of the brain parenchyma, caused by viruses, bacteria, fungi, and parasites. Enumerate five (5) clinical manifestations of encephalitis.

(5)

SECTION B

QUESTION 4

[30 MARKS]

4.1 Shock is a pathological process in which diminished cardiac output or reduced effective circulating blood volume impairs tissue perfusion and leads to cellular hypoxia. Discuss shock under the following headings:

4.1.1 Types of shock with one example for each type

(10)

- 4.1.2 Stages of shock (6)
- 4.2 Briefly define the following concepts: (7)
- 4.2.1 Extravasation: (1)
- 4.2.2 Glasgow Coma Scale (2)
- 4.2.3 Keloid (2)
- 4.2.4 Cardiac Tamponade (2)
- 4.3 One of the disease-causing microorganisms is bacteria. Describe the characteristics of bacteria and provide an example of each type. (7)

SECTION C

QUESTION 5

[30 MARKS]

- 5.1 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. Describe the phases of fracture healing and the bone activity that takes place during the healing process. (15)
- 5.2 Ms. Bevel, a 45-year-old mother of 4 children, obtained burn wounds when their corrugated house caught fire whilst they were all asleep. The whole family was rescued from the house, but she had burns on her upper/mid/low back, buttocks, left arm and both legs. Her 10-year-old daughter Britney had burn wounds on her left arm, foot and both legs. It was determined by the paramedics that Ms. Bevel had full-thickness burns and her daughter second degree burns.
- 5.2.1 Using the rules-of-nines, calculate the approximate area of full-thickness burns on her on her left arm, upper/mid/low back, buttocks and both legs. (5)
- 5.2.2 What measurement assessment will you use to determine the percentage area burnt in Britney? (1)
- 5.2.3 Use the measurement identified in 5.2.2 and calculate the percentage burn wounds of Britney. (6)
- 5.2.4 State the reasons why full-thickness burns are considered more serious than second-degree burns. (3)

All the best!!!!