HOSA Pathophysiology Assessment Practice Test (Sample)

Study Guide



Everything you need from our exam experts!

Copyright © 2025 by Examzify - A Kaluba Technologies Inc. product.

ALL RIGHTS RESERVED.

No part of this book may be reproduced or transferred in any form or by any means, graphic, electronic, or mechanical, including photocopying, recording, web distribution, taping, or by any information storage retrieval system, without the written permission of the author.

Notice: Examzify makes every reasonable effort to obtain from reliable sources accurate, complete, and timely information about this product.



Questions



- 1. What condition is characterized by a white, cheesy patch on the buccal mucosa caused by a fungal infection?
 - A. Candidiasis
 - **B. Stomatitis**
 - C. Herpes
 - D. Glossitis
- 2. Which substance is a waxy, starchlike protein that accumulates in tissues and organs under certain pathological conditions?
 - A. Glycogen
 - **B.** Amyloid
 - C. Keratin
 - D. Collagen
- 3. What is an electrodiagnosis assessment of the activity of skeletal muscles called?
 - A. Electromyography
 - **B.** Electrocardiography
 - C. Electroencephalography
 - **D.** Ultrasonography
- 4. What do you call the fluid that passes through a semipermeable membrane during dialysis?
 - A. Dialysate
 - **B.** Hemodialysate
 - C. Urine
 - D. Filtrate
- 5. Which of the following terms is associated with non-inflammatory eye disorders?
 - A. Retinopathy
 - B. Conjunctivitis
 - C. Glaucoma
 - D. Diabetic Macular Edema

- 6. Which of the following terms signifies a lack of speech due to psychological reasons?
 - A. Nonverbalism
 - **B.** Mutism
 - C. Aphasia
 - D. Vocophobia
- 7. What term describes the excessive secretion of sebum from the sebaceous glands?
 - A. Seborrhea
 - **B.** Dermatitis
 - C. Acne
 - D. Psoriasis
- 8. What does the term psychosexual refer to?
 - A. Relating to the surgical removal of reproductive organs
 - B. The relationship between psychological and emotional aspects of sex
 - C. A disease caused by microorganisms in the blood
 - D. A method for imaging deep structures in the body
- 9. What is a common result of surgical removal of the prostate?
 - A. Painful menstruation
 - B. Inflammation of the testes
 - C. Changes in urination
 - D. Imaging deep body structures
- 10. What term describes a deficiency from what is considered normal?
 - A. Delusion
 - B. Hypoxia
 - C. Ischemia
 - D. Deficit

Answers



- 1. A 2. B 3. A 4. A 5. A 6. B 7. A 8. B 9. C 10. D



Explanations



- 1. What condition is characterized by a white, cheesy patch on the buccal mucosa caused by a fungal infection?
 - A. Candidiasis
 - **B. Stomatitis**
 - C. Herpes
 - D. Glossitis

Candidiasis, commonly known as oral thrush, is an infection caused by the overgrowth of the fungus Candida, typically Candida albicans. This condition is characterized by the presence of white, creamy patches on the buccal mucosa, tongue, and other areas of the mouth. The patches can appear as white or yellowish lesions and may resemble cottage cheese. They are often soft and may be wiped away, potentially revealing an underlying red, inflamed surface. Candidiasis often occurs in individuals with weakened immune systems, those taking antibiotics, or individuals with diabetes. It can cause soreness and discomfort in the mouth, making it difficult to eat or swallow. Other conditions listed, like stomatitis, may involve inflammation of the mucous membrane in the mouth but do not specifically present the characteristic white patches associated with candidiasis. Herpes produces blisters rather than patches, and glossitis refers to inflammation of the tongue, without the distinctive fungal infection features.

- 2. Which substance is a waxy, starchlike protein that accumulates in tissues and organs under certain pathological conditions?
 - A. Glycogen
 - **B.** Amyloid
 - C. Keratin
 - D. Collagen

The correct choice is amyloid, which is a waxy, starchlike protein that can accumulate in tissues and organs due to various pathological conditions, such as amyloidosis. When these proteins misfold, they aggregate into fibrils that deposit in organs, disrupting normal function. This accumulation is often associated with chronic inflammatory diseases and certain types of cancers, leading to significant health issues depending on the organs affected. In contrast, glycogen is a polysaccharide that serves as a form of energy storage in animals. It does not have the waxy or starchlike characteristics associated with amyloid. Keratin is a structural protein found in hair, nails, and the outer layer of skin, and is not typically associated with pathological accumulation in the same manner as amyloid. Collagen is a critical structural protein that provides strength and support to tissues and organs, but it does not have the same waxy, starchlike properties or pathological implications related to misfolding and accumulation as observed with amyloid.

3. What is an electrodiagnosis assessment of the activity of skeletal muscles called?

- A. Electromyography
- **B.** Electrocardiography
- C. Electroencephalography
- D. Ultrasonography

The assessment of the activity of skeletal muscles through an electrodiagnostic evaluation is referred to as electromyography. This technique involves using small electrodes to detect and record the electrical activity of muscle fibers as they contract and at rest. The data collected can help in diagnosing various neuromuscular disorders and injuries by identifying abnormalities in muscle function and signaling. In contrast, electrocardiography is the measurement of electrical activity in the heart, which is not related to muscle activity in the skeletal system. Electroencephalography records electrical activity in the brain, and while it's also an important diagnostic tool, it focuses on neurological functions rather than muscular activity. Ultrasonography employs sound waves to visualize structures within the body, particularly soft tissues, but does not measure electrical activity. Thus, electromyography is distinct in its focus on the electrical signals of skeletal muscles, making it the correct answer.

- 4. What do you call the fluid that passes through a semipermeable membrane during dialysis?
 - A. Dialysate
 - **B.** Hemodialysate
 - C. Urine
 - D. Filtrate

The fluid that passes through a semipermeable membrane during dialysis is known as dialysate. In the context of dialysis, dialysate serves as a cleansing solution that facilitates the removal of waste products, excess fluids, and toxins from the blood when the kidneys are unable to perform these functions effectively. During the dialysis process, blood is drawn from the body and filtered using a dialyzer, which contains the semipermeable membrane. As the blood flows on one side, the dialysate, which is a carefully balanced solution of electrolytes and other substances, flows on the opposite side of the membrane. The semipermeable nature of the membrane allows for diffusion. This means that harmful substances and excess electrolytes from the blood can pass into the dialysate, while essential components like proteins and blood cells are retained in the blood. Understanding the role of dialysate is crucial for comprehending how dialysis treatments work to maintain the balance of chemicals in the body and help patients with renal failure.

5. Which of the following terms is associated with non-inflammatory eye disorders?

- A. Retinopathy
- **B.** Conjunctivitis
- C. Glaucoma
- D. Diabetic Macular Edema

The term that is associated with non-inflammatory eye disorders is glaucoma. Glaucoma refers to a group of eye conditions that damage the optic nerve, often due to high intraocular pressure, and is characterized by progressive vision loss. It is considered a non-inflammatory condition because it does not involve the typical signs of inflammation, such as redness, swelling, or pain in the eye. Instead, glaucoma primarily affects the drainage system of the eye, leading to increased pressure without an inflammatory response. In contrast, retinopathy—specifically, diabetic retinopathy—often involves damage to the blood vessels in the retina and can be inflammatory in nature. Conjunctivitis, commonly known as pink eye, is an inflammatory condition affecting the conjunctiva of the eye, typically caused by infection or allergens. Diabetic macular edema is a complication of diabetic retinopathy, leading to leakage of fluid and swelling in the retina, indicative of inflammation. Therefore, glaucoma stands out as a condition that is non-inflammatory, focusing on optic nerve health and intraocular pressure rather than any inflammatory processes.

6. Which of the following terms signifies a lack of speech due to psychological reasons?

- A. Nonverbalism
- **B.** Mutism
- C. Aphasia
- D. Vocophobia

The term that signifies a lack of speech due to psychological reasons is mutism. Mutism can occur when an individual is physically capable of speaking but chooses not to do so, often in response to psychological stress, trauma, or other emotional factors. This condition is distinct from other speech disorders because it fundamentally involves the absence of speech rather than a loss of the ability to produce language. Nonverbalism generally refers to communication without words, often encompassing nonverbal cues like gestures or facial expressions, rather than a deliberate absence of speech. Aphasia involves language deficits due to brain injury or damage affecting language centers, leading to difficulties in speaking, understanding, reading, or writing but does not typically arise from psychological factors. Vocophobia, on the other hand, is an irrational fear of speaking, which could prevent speech but differs from mutism as it is driven by anxiety rather than a deliberate choice to refrain from speaking.

7. What term describes the excessive secretion of sebum from the sebaceous glands?

- A. Seborrhea
- **B.** Dermatitis
- C. Acne
- D. Psoriasis

The term that describes the excessive secretion of sebum from the sebaceous glands is seborrhea. Seborrhea is characterized by an overproduction of sebum, which can lead to oily skin and is often associated with conditions that affect the scalp, such as dandruff or seborrheic dermatitis. In this context, the sebaceous glands produce more oil than normal, which can contribute to various skin issues, including a shiny appearance and potential inflammation. Understanding this term is important in the field of pathophysiology, as it relates to skin health and the function of sebaceous glands. Seborrhea is a key term when discussing conditions that involve oil production and the skin's responses, highlighting the balance necessary for maintaining healthy skin. Other terms, like dermatitis, acne, and psoriasis, refer to different skin conditions or responses and do not specifically define the excessive oil production associated with seborrhea.

8. What does the term psychosexual refer to?

- A. Relating to the surgical removal of reproductive organs
- B. The relationship between psychological and emotional aspects of sex
- C. A disease caused by microorganisms in the blood
- D. A method for imaging deep structures in the body

The term psychosexual pertains to the interplay between psychological and emotional factors and sexual behavior and identity. It encompasses how individuals perceive and experience their sexuality, which is influenced by various psychological aspects such as emotions, attitudes, and social contexts. This concept is central to many theories of human development and psychology, particularly in understanding how early experiences and personal development can shape an individual's sexual identity and function. In this context, the focus on the relationship between psychological processes and sexual behavior is crucial. Psychosexual development, for example, is a concept introduced by Sigmund Freud, where he proposed stages of development that influence adult sexuality and personality. Other choices refer to concepts that do not align with the definition of psychosexual. The surgical removal of reproductive organs, diseases caused by microorganisms, and imaging techniques do not involve the psychological or emotional components related to sexual behavior, thus making them unrelated to the core meaning of psychosexual.

9. What is a common result of surgical removal of the prostate?

- A. Painful menstruation
- B. Inflammation of the testes
- C. Changes in urination
- D. Imaging deep body structures

The surgical removal of the prostate, known as a prostatectomy, often results in changes in urination. This occurs because the prostate gland plays a significant role in urinary function, impacting urinary flow and control. After the removal of the prostate, patients frequently experience symptoms such as increased frequency of urination, urgency, and in some cases, incontinence or difficulty starting the flow of urine. These alterations can be attributed to not only the loss of the prostate itself but also to potential effects on the surrounding structures, including the bladder and urethra. The surgical procedure may disrupt the neural pathways that control bladder function, leading to a variety of urinary symptoms. The other options do not relate directly to the consequences of prostate removal. Painful menstruation is unrelated as it pertains to female physiology, inflammation of the testes is not directly relevant since it involves a different reproductive organ, and imaging deep body structures does not connect to the physiological changes or aftermath of prostate surgery.

10. What term describes a deficiency from what is considered normal?

- A. Delusion
- B. Hypoxia
- C. Ischemia
- D. Deficit

The term that describes a deficiency from what is considered normal is "deficit." In medical terminology, a deficit implies a lack or deficiency in a specific function, substance, or process that is expected to be present at a certain level. For example, a nutrient deficit indicates that the body isn't receiving or absorbing sufficient amounts of that nutrient, which could lead to various health issues. Understanding this term is vital in health assessments because recognizing a deficit can guide interventions aimed at restoring normal levels or functions. In contrast, the other terms listed refer to specific conditions: delusions are false beliefs despite evidence to the contrary, hypoxia relates to a deficiency of oxygen in tissues, and ischemia denotes an inadequate blood supply to an organ or part of the body. While all these terms describe deficiencies in some manner, "deficit" is the most general and directly speaks to the concept of lack relative to a norm.