



**The University of Zambia
School of Medicine
Department of Biomedical Sciences**

GENERAL AND SYSTEMIC PATHOLOGY, BMS3310

THEORY TEST IV

(Year Three BSc Biomedical Sciences)

SECTION A: MULTIPLE CHOICE QUESTIONS (19 Marks). There are 20 questions in this section. Answer ALL questions by indicating True (T) or False (F) against each stem. A wrong answer will attract a negative mark (0.1 mark).

1. Which of the following is true regarding adult polycystic kidney disease
 - a) It is an autosomal recessive disorder
 - b) It produces a symmetrical bilateral enlargement of the affected kidney**
 - c) Produces microcysts radiating from the medulla
 - d) Is more common in females
 - e) Is associated with renal cell carcinoma**
2. The following are risk factors of Acute Pyelonephritis **EXCEPT**
 - a) Catheterization
 - b) Pregnancy
 - c) Neurogenic bladder dysfunction
 - d) Age
 - e) Male gender
3. Which of the following are congenital anomalies of the urinary tract
 - a) Spina bifida
 - b) Cyclopia
 - c) Pterygium
 - d) Destoses
 - e) Proptosis
4. The following kidney stones are associated with urinary tract infections EXCEPT
 - a) Struvite stones
 - b) Uric acid stones**
 - c) Calcium stones**
 - d) Cysteine stones**
 - e) Magnesium stones**

5. Which of the following microorganisms are aetiological agents of cystitis
 - a) *Klebsiella*
 - b) *Enterobacter*
 - c) *Proteus*
 - d) *Escherichia coli*
 - e) *Candida albicans*

6. Cerebral Edema
 - a) Is the accumulation of cerebrospinal fluids in the spinal cord
 - b) Is a risk factor of polymicrogyria
 - c) May cause a coup injury
 - d) Is more common in males
 - e) Is associated with hydrocephalus ex vacuo

7. Which of the following are malignant tumors of the peripheral nervous system
 - a) Gliomas
 - b) Meningioma
 - c) Glioblastoma multiforme
 - d) Medulloblastoma
 - e) Schwannoma

8. Coup Injury of the brain
 - a) **Is a contusion**
 - b) Is prominent when mobile object hits the head which is in motion
 - c) Is synonymous laceration
 - d) Is prominent when a stationary head collides with a stationary object
 - e) **Is prominent when a mobile object hits a stationary head**

9. The following Prion disease are seen in Animals
 - a) Kuru
 - b) **Mink-transmissible encephalopathy**
 - c) Gerstmann-Sträussler-Scheinker syndrome
 - d) Fatal familial insomnia
 - e) **Bovine spongiform encephalopathy**

10. Which of the following are congenital anomalies of the spinal cord
 - a) Lissencephaly
 - b) Dandy-walker syndrome
 - c) Arnold-Chiari malformation
 - d) **Hydromyelia**
 - e) **Syringomyelia**

11. Which of the following is true?

- a) Macule is a circumscribed, non-palpable spot up to 1cm in diameter with a change in colour of the skin.
- b) Papule is a small solid elevation of skin up to 1cm in diameter that can be palpated as a solid mass
- c) Pustule is a small, circumscribed elevation of the epidermis that is filled with pus
- d) Vesicle is a sharply circumscribed elevation of the epidermis filled with clear fluid
- e) Wheal is a sharply circumscribed, raised lesion consisting of oedema that usually disappears within minutes or hours.

12. Which of the following is true?

- (a) Scar is an area of fibrous tissue that has replaced the damaged dermis of subcutaneous tissue
- (b) Erosion is an epidermal defect that penetrates the basal laminar zone and consequently heals with scarring
- (c) Excoriation are erosions or ulcers caused by systemic diseases
- (d) Fissure is a shallow epidermal defect
- (e) Lichenification is an area of hyperpigmented skin

13. Of the following, which is true?

- (a) Scale is an accumulation of loose fragments of the horny layer of the skin
- (b) Crust is formed when dried exudates, serum, pus, blood, cells, scales, or medications adhere to the surface
- (c) Leukotrichia is a lack of pigment in hair.
- (d) Leukoderma is a general term for white skin
- (e) Melanotrichia is excess pigment in hair

14. Which of the following are true?

- (a) Molluscum contagiosum is common self-limiting viral skin disease caused by pox virus
- (b) Impetigo is a common superficial infection of the skin caused by staphylococci or streptococci
- (c) Superficial fungal infections are confined to the stratum spinosum
- (d) Tinea capitis is a dermatophytosis of the scalp.
- (e) Tinea cruris occurs most frequently on the palms

15. The following are classifications of eczema

- (a) Allergic contact dermatitis
- (b) Atopic dermatitis:
- (c) Drug related eczematous dermatitis
- (d) Photoeczematous dermatitis

(e) Secondary irritant dermatitis

16. Which of the following muscle diseases is characterized by a reduction in the number of acetylcholine receptors (AChRs)?
- a) Myotonic Dystrophy
 - b) Muscular Dystrophy
 - c) Myasthenia Gravis
 - d) Rhabdomyosarcoma
17. Which age group is mostly affected by rhabdomyosarcoma?
- a) Before the age of 20
 - b) Around 50 years old
 - c) Above the age of 70
 - d) None of the above
18. Name the major clinical manifestation of achondroplasia?
- a) Arthritis
 - b) Dwarfism
 - c) Osteoporosis
 - d) Lordosis
19. Name the disease that is commonly associated with hyperuricemia?
- a) Rickets
 - b) Ganglion
 - c) Rheumatoid arthritis
 - d) Gout
20. A child is brought to the hospital with bone deformities including frontal bossing and rachitic rosary? What would be your diagnosis?
- a) Osteoarthritis
 - b) Fractures
 - c) Osteomalacia
 - d) Rickets

SECTION B SHORT NOTES: 30 MARKS. There are Five (5) short-essay questions in this section. Each question in this section carries equal marks (10 marks). Answer ONLY THREE questions in this section

1. Compare and contrast the Nephrotic and Nephritic Syndromes
2. List and give short descriptions of any five congenital anomalies of the Urinary System
3. Discuss malignant melanoma
4. Gout
5. Osteoarthritis

SECTION C LONG ESSAYS: 40 MARKS. There are two (2) questions in this section and each question carries 20 marks. Answer ALL the questions in this section.

1. Osteoporosis
2. An 86-year-old man resident of a nursing home is found wandering the streets, looking for his way "home." The patient's family describes deteriorating cognitive function that has been worsening progressively over the last several years. He does not have a history of head trauma or cardiovascular disease. In addition to the disorientation, the patient has demonstrated significant language impairment.
 - a) What is the most likely diagnosis of this patient's symptoms and give the reasons for your answer? (5 marks)
 - b) Briefly discuss any five risk factors associated with the disease you have mentioned above (5 marks)
 - c) Briefly discuss the pathogenesis of this disease you mentioned above (5 marks)
 - d) What are the distinctive pathologic findings in this disorder you mentioned? (5 marks)

End of Test