



(University of Choice)

# MASINDE MULIRO UNIVERSITY OF SCIENCE AND TECHNOLOGY

(MMUST)

#### **MAIN CAMPUS**

#### UNIVERSITY MAIN EXAMINATIONS

#### 2022/2023 ACADEMIC YEAR

#### FOURTH YEAR, SECOND SEMESTER EXAMINATIONS

#### FOR THE DEGREE OF

#### BACHELOR OF OPTOMETRY AND VISION SCIENCES

COURSE CODE:

**BOV 424** 

**COURSE TITLE:** 

GERIATIC OPTOMETRY

**DATE:** 20/4/2023

TIME:

8.00-10.00 PM

#### INSTRUCTIONS TO CANDIDATES

#### **Answer all Questions**

Section A: Multiple choice questions (MCQ) (20 marks) Section B: short Answer Questions (SAQ) (30 marks) Section C: Long Answer Questions (LAQ) (20 marks)

**TOTAL 70 MARKS** 

TIME: 2 Hours

MMUST observes ZERO tolerance to examination cheating

This Paper Consists of SIX Printed Pages. Please Turn Over.

#### SECTION A MULTIPLE CHOICE QUESTIONS

- 1) Why do some older adults not seek healthcare for their complaints?
  - A. Prefer to be left alone
  - B. Poor health literacy
  - C. Think it's a normal part of ageing
  - D. Hate clinic appointments
- 2) Which of the following is a kidney function that changes with age?
  - A. Increased renal blood flow
  - B. Increased tubular secretion
  - C. Decreased kidney size
  - D. Increased number of functional nephrons
- 3) Which one of the following is an Age-related eye change?
  - A. increased visual accommodation.
  - B. Macular degeneration.
  - C. Non-preventable blindness as a result of glaucoma.
  - D. Decreased ability of the pupil to respond to light changes.
- 4) The term 'gerontology' means
  - A. Old age
  - B. Study of healing
  - C. Study of the ageing process
  - D. Study of human beings
- 5) Polypharmacy may be defined as?
  - A. A patient who takes Multiple medications
  - B. A patient who takes other people's medications
  - C. A patient who takes medication more than once a day
  - D. A patient who takes Medication only when he or she feels the need to
- 6) Deposition of uveal pigment on the corneal endothelium with ageing is known as?
  - A. Arcus senilis
  - B. Krukenberg's spindle
  - C. Hassall-henle bodies
  - D. Marginal degeneration

- 7) What is one reason polypharmacy exists among older adults?
  - A. counter act side effects
  - B. Older adults are very good at taking medication
  - C. Older adults like taking medication
  - D. Health care providers don't coordinate the medication regimes
- 8) How can a caregiver improve communication with an older adult with hearing impairment?
  - A. Shout to the patient to hear better
  - B. Avoid light on your face to discourage lip reading
  - C. Avoid interaction
  - D. Let the person see your face when you speak
- 9) A 79-year-old woman presented with a sudden loss of vision in the right eye. She was taking warfarin and digoxin for chronic atrial fibrillation and had a history of longstanding hypertension. What is the most likely diagnosis?
  - A. A acute glaucoma
  - B. B cranial arteritis
  - C. C macular degeneration
  - D. D retinal artery occlusion
- 10) Which one of the following is a reason for non-compliance with medication among geriatric patients?
  - A. Side effects
  - B. Polypharmacy
  - C. Simple medical regimen
  - D. Physical disability
- 11) An experienced optometrist tells a younger optometrist that older adults have "outlived their usefulness." what is the term for this type of prejudice?
  - A. Racism
  - B. Ageism
  - C. Harassment
  - D. Whistleblowing

12) The family member of a patient asks if vitamin C will prevent ageing. In formulating an
appropriate response, the nurse considers the:
A. free radical theory.
B. autoimmune theory.
C. wear-and-tear theory.
D. continuity theory.
13) Which one of the following is a type of non-compliance among the elderly.

- - A. Overuse
  - B. Polypharmacy
  - C. Hoarding
  - D. Sharing
- 14) The slow onset of progressive disorientation, shortened attention span, and loss of cognitive function is known as?
  - A. Senility
  - B. Delirium
  - C. Dementia
  - D. Delusion
- 15) A 66-year-old retired professional basketball player is admitted to the hospital for a total knee replacement due to osteoarthritis. In preparing preoperative teaching for this patient, the nurse includes which theory of ageing to help him understand how the disease has progressed.
  - A. Free radical theory
  - B. Wear-and-tear theory
  - C. Gene theory
  - D. Cross-link theory

16) Which one of the following statements regarding depression in old age is true?

- A. Depression in older adults is easily diagnosed and treated.
- B. Health care providers may mistake symptoms of depression as just a natural reaction to illness or the life changes that may occur with ageing and may not treat depression.
- C. Older adults themselves often seek help for depression because they feel that they could get better with appropriate treatment
- D. Questions that assess the symptoms of depression using the patient health questionnaire are commonly used in surveys.
- 17) Which one of the following is a physiologic change that occurs during the process of ageing?
  - A. Increased elasticity of the alveoli
  - B. A gradual decrease in blood pressure
  - C. A decline in kidney function
  - D. 10% to 15% increase in brain weight
- 18) Which of the following is a characteristic of a chronic illness?
  - A. Has reversible pathologic changes
  - B. Has unpredictable clinical course
  - C. Full recovery is made
  - D. Always starts with an acute illness and then progresses slowly resulting in a permanent deviation from normal
- 19) Which is not a potential barrier to advance care planning for older people?
  - A. Unwillingness of family members to accept their relative is dying
  - B. Absence of cognitive impairment
  - C. Patients perceiving end-of-life care discussions as the responsibility of family members
  - D. patient thinking 'my doctor will decide for me'
- 20) Ageing changes in the crystalline lens may cause a condition known as?
  - A. Ptosis
  - B. Cataract
  - C. Ectropion
  - D. Sublaxation

## SECTION B SHORT ANSWER QUESTIONS

- 1. Highlight the Five intrinsic factors that may put an elderly person at risk of falling (5 marks).
- 2. Explain the effects of ageing on the following (10marks)
  - a) Glare
  - b) Contrast sensitivity
  - c) Refractive status
  - d) Binocular vision changes
  - e) Dark adaptation
- 3. Name and explain 5 types of elder abuse 10 marks
- 4. Highlight five physiological changes that occur during ageing that might alter the pharmacokinetics of drugs (5marks)

### LONG ANSWER QUESTIONS

1) Discuss the principals involved when prescribing for geriatric populations 20marks.