



(University of Choice)

**MASINDE MULIRO UNIVERSITY OF
SCIENCE AND TECHNOLOGY
(MMUST)**

MAIN CAMPUS

UNIVERSITY MAIN EXAMINATIONS

2021/2022 ACADEMIC YEAR

FOURTH YEAR, SECOND SEMESTER EXAMINATIONS

FOR THE DEGREE

OF

BACHELOR OF OPTOMETRY AND VISION SCIENCES

COURSE CODE: BOV 425

COURSE TITLE: CASE ANALYSIS: COMPREHENSIVE

DATE: 27/04/2022

TIME: 12-2PM

INSTRUCTIONS TO CANDIDATES

Answer all Questions

SECTION A SHORT ANSWERED QUESTIONS 50 marks

TOTAL 50 MARKS

TIME: 2 Hours

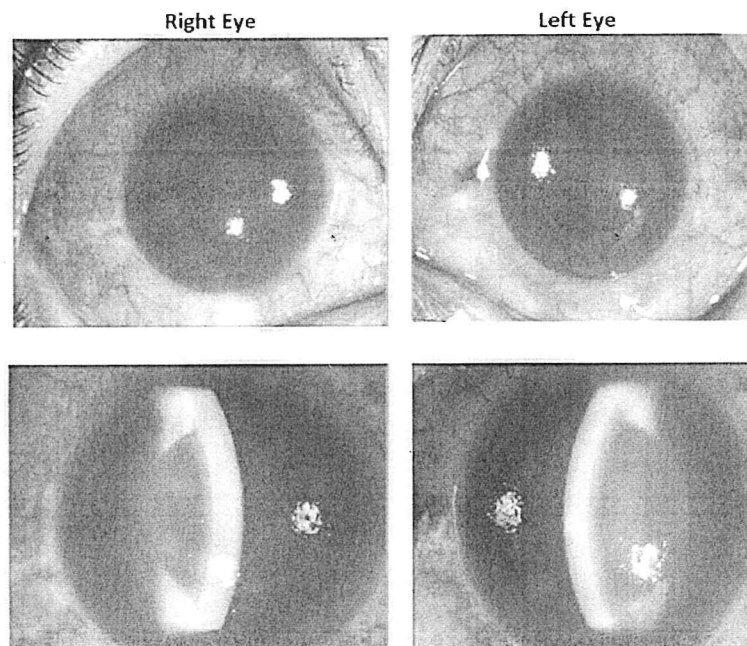
MMUST observes ZERO tolerance to examination cheating

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

SECTION A SHORT ANSWERED QUESTIONS

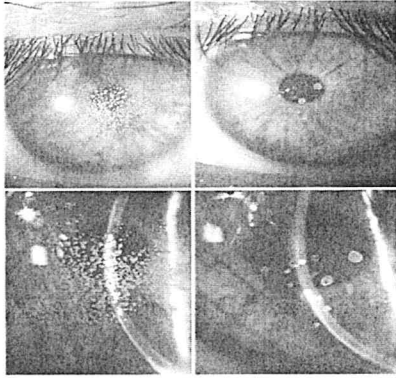
QUESTION ONE

A 50-year-old female presented with a one-week history of progressive vision loss, headache, and pain in both eyes. Four days prior to examination she noticed a worsening of the vision loss and was evaluated by a general doctor who gave her some unidentified eye drops which did not help. She then presented to an ophthalmologist for further evaluation and treatment. She has no previous ophthalmic, surgical, or relevant medical history.



1.
 - A. Based on the information that you have so far, what is your working diagnosis?
2marks
 - B. Citing reasons, what additional exam element would be the most helpful to obtain next?4 marks
 - C. With reasons, suggests how you would urgently treat this patient? 4 marks

QUESTION TWO



- What is the most likely diagnosis? (1marks)
- As seen in these slit-lamp images, the corneal opacities of this patient are predominantly in what layer of the cornea? (1mark)
- Identified cause(s) of the above-named diagnosis include? (1marks)
- What is the likely cause of management? (2marks)
- Write a brief case report on this case(5marks)

QUESTION THREE

PATIENT HISTORY

HPI: The patient is a 43-year-old female insurance sale agent who presents for her annual eye exam. She admits to symptoms of ocular irritation and burning when she wakes up in the morning. The eyes also feel dry in the afternoon and look red. She has also noted that her eyelids are of different height; noticed it when putting make-up on. She denies significant problems with driving, TV watching, computer use or reading. She also denies flashes, floaters or diplopia.

Past Ocular History: Myopia. No prior eye surgeries, hx of eye trauma, amblyopia or strabismus.

Ocular Medications: None **Past Medical History:** None **Surgical History:**None

Past Family Ocular History: Negative for macular degeneration, glaucoma or blindness

Social History: Non-smoker **Medications:** None **Allergies:** None

ROS: Patient admits to mild anxiety and to unexplained palpitations. Has not seen a doctor for this. Otherwise, she denies any recent illness or any new CNS, heart, lungs, GI, skin or joint symptoms.

OCULAR EXAM

Visual Acuity (cc): OD: 20/20 OS: 20/20

IOP (tonoapplantation): OD: 18 mmHg OS: 16 mmHg

Pupils: Equal, round and reactive to light, no APD OU

Extraocular Movements:

Limited downward gaze OU with eyelid elevation (eyelid lag). No other restrictions. No nystagmus OU.

Confrontational Visual Fields:

Full to finger counting OU

External:

Mild upper eyelid fullness OU

Slit Lamp:

Lids and Lashes Mild lacrimal gland enlargement OU

Conjunctiva/Sclera Mild chemosis and 1+ conjunctiva injection OU

Cornea: Slight punctate epithelial erosions in the inferior cornea OU

Anterior Chamber: Deep and quiet OU

Iris Normal OU

Lens Clear OU

Anterior Vitreous Clear OU

Dilated Fundus Examination:

OD: Clear view, CDR 0.3 with sharp optic disc margins; flat macula with normal foveal light reflex; normal vessels and peripheral retina

OS: Clear view, CDR 0.3 with sharp optic disc margins; flat macula with normal foveal light reflex; normal vessels and peripheral retina

Other:

Hertel exophthalmometry: 23mm OD, 22mm OS at 108

- A. Briefly explain your tentative diagnosis 2marks
- B. Highlight the differential diagnosis
- C. What are the likely cause of the condition?
- D. What are the preferred management options management?

QUESTION FOUR**Patient history**

Age: 58

Gender: male

Patient history

The patient is having a regular check of his blood pressure. Last time, his blood pressure was 180/100. He is taking part in a hypertension study, and you think that his blood pressure has been somewhat high recently. In addition, he tells you that over the last two weeks he has had disturbed vision, with a shadow in his left eye. When you ask a bit more you elicit that there is a relative scotoma that is located Para centrally in the left eye.

Additional examinations

Blood pressure today is 170/95.



1. What is the diagnosis? 2 marks and why
2. Does the condition warrant auscultation of the carotid artery (3 marks) and why
3. How will you manage the condition? (3 marks)
4. What is the possible prognosis? (2 marks)

QUESTION FIVE

A patient reported to your local clinic with an acute onset of left eye pain of 1 week duration. She also complains of eye redness in the L.E, blurry vision that worsened over the last 3 months prior visit and photophobia in the in the left eye. Patient had been previously diagnosed with hyperthyroidism but is no longer in an active state. Patient has no other significant ocular and medical history.

Further examination revealed:

Visual Acuity: OD 0.8, OS 0.6

Slit lamp bio microscopy.

OD: anterior segment and posterior segment unremarkable

OS: Diffuse conjunctival injection,
diffuse fine keratic precipitates,

3+ anterior chamber cell.

- a) According to the signs and symptoms of the patient what is your diagnosis? (1 mark)
- b) Explain at least 3 differential diagnosis. (6 marks)
- c) What will be your course of action? (2 marks)
- d) State two causes of the above diagnosis. (1 mark)