



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

**MAIN CAMPUS**

**UNIVERSITY EXAMINATIONS**

**2022/2023 ACADEMIC YEAR**

**THIRD YEAR**

**SECOND SEMESTER EXAMINATIONS**

**MAIN EXAM**

**FOR THE DEGREE**

**OF**

**BACHELOR OF SCIENCE CLINICAL MEDICINE, SURGERY AND COMMUNITY  
HEALTH**

**COURSE CODE: HCM 416**

**COURSE TITLE: OPHTHALMOLOGY**

**DATE: MONDAY 17<sup>TH</sup> APRIL 2023      TIME: 8:00-10:00 AM**

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**INSTRUCTIONS TO CANDIDATES**

- 1. Answer all questions in the three sections**
- 2. Section A comprises 20 Multiple choice questions**
- 3. Section B comprises 4 short essay questions**
- 4. Section C comprises 1 long essay questions**

**TIME: 3 Hours**

**MMUST observes ZERO tolerance to examination cheating**  
Include page numbers and indicate if student will be required to answer questions on the question paper or a separate booklet will be provided for them to answer on.

**SECTION A: Multiple choices questions {20MKS}**

Q1. Which one of the following is true about lashes?

- A. Poliosis is decrease in number of lashes
- B. Madarosis is whitening of lashes
- C. Distichiasis is an extra row of lashes
- D. Trichiasis may be associated with ectropion

Q2. Which one of the following is true about abnormal lid positions?

- A. Involutional ectropion is age related
- B. Cicatricial ectropion is caused by facial palsy
- C. Mechanical ectropion is caused by scarring
- D. Paralytic ectropion is caused by tumor

Q3. All the following are components of ptosis assessment except?

- A. Bell's phenomenon
- B. Vertical fissure height
- C. Upper lid excursion
- D. Anterior chamber depth

Q4. Follicles are present in all of the following except

- A. Trachoma
- B. Gonococcal conjunctivitis

- C. Mollucum contagiosum conjunctivitis
- D. Herpes simplex conjunctivitis

Q5. The following are malignant conjunctival tumors EXCEPT

- A. Nevus
- B. Melanoma
- C. Kaposi sarcoma
- D. Squamous cell carcinoma

Q6. The following are causes of peripheral corneal ulcer EXCEPT

- A. Mooren ulcer
- B. Rheumatoid ulcers
- C. Terrien marginal degeneration
- D. Vernal keratitis

Q7. Which one of the following corneal ulcers are associated with satellite lesions

- A. Bacterial
- B. Acanthameba
- C. Herpes simplex
- D. Herpes zoster

Q8. Regarding congenital corneal anomalies

- A. Microcornea : corneal diameter is less than 13mm
- B. Megalocornea : corneal diameter greater than 10mm
- C. Sclerocornea : peripheral opacification

D. Cornea plana : increased corneal curvature

Q9. What is chalazion?

- A. Inflammation of the meibomian glands
- B. Inflammation of the glands of Moll and Zeis
- C. Inflammation of the lacrimal sac
- D. Inflammation of the lacrimal glands

Q10. The following describes the anatomical classification of uveitis EXCEPT

- A. Anterior uveitis
- B. Intermediate uveitis
- C. Posterior uveitis
- D. Chronic uveitis

Q11. Which of the following is a sign of anterior uveitis?

- A. Lid oedema
- B. Circumcorneal congestion
- C. Photophobia
- D. Corneal oedema

Q12. The following are factors associated with development of cataract EXCEPT

- A. Heredity
- B. Maternal factors
- C. Foetal or infantile factors
- D. Glaucoma

Q13. Which of the following is NOT a factor of posterior vitreous detachment?

- A. Flashes of light and floaters
- B. Collapsed vitreous
- C. A hole in the posterior hyaloid membrane
- D. Degenerations

Q14. Which part of the eye has the highest concentration of cones?

- A. Ora serrata
- B. Optic disc
- C. Macula
- D. Peripheral retina

Q15. Where is the levator palpebrae located?

- A. Roof of the orbit
- B. Floor of the orbit
- C. Eyelid
- D. Non of the above

Q16. Trabecular mesh is located in which part of the eye?

- A. Peripheral angle of the anterior chamber
- B. Posterior chamber
- C. Ciliary body
- D. Anterior surface of the iris

Q17. The uveal tract is composed of the following except

- A. Choroid
- B. Ciliary body
- C. Iris
- D. Cornea

Q18. Which of the following sequence is correct order of refractory media of the eye?

- A. Vitreous humor, lens, aqueous humor, cornea
- B. Cornea, aqueous humor, lens vitreous humor
- C. Cornea, vitreous humor, lens, aqueous humors
- D. Lens, aqueous humor, cornea, vitreous humor

Q19. Which one of the following is not a gland of the eyelid?

- A. Meibomian glands

- B. Glands of moll
- C. Glands of zeis
- D. Lacrimal gland

Q20. The following factors all contribute towards corneal transparency except?

- A. Regulation arrangement of stromal lamellae
- B. Corneal avascularity
- C. Myelinated nerve fibres
- D. Relative state of corneal dehydration

### SECTION B {30MKS}

Q1. Describe the following disorders of the eye lashes and management {10mks}

- I. Trichiasis
- II. Metaplastic lashes
- III. Phthriasis palpebrarum
- IV. Madarosis
- V. Poliosis

Q2. Name 4 types of anterior scleritis and their management {4mks}

Q3. Name the 6 extra ocular muscles of the eye (6 mark).

Q4. Using a diagram describe the 10 layers of the retina. (10 marks)

### SECTION C {20MKS}

1. Q1. Discuss the various **types and management** of corneal microbial infections {20mks}