



THE COLLEGES OF MEDICINE OF SOUTH AFRICA

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Final Examination for the Fellowship of the
College of Ophthalmologists of South Africa

28 February 2020



Paper 2

Clinical Ophthalmology

(3 hours)

All questions are to be answered. Each question to be answered in a separate book (or books if more than one is required for the one answer)

- 1 a) A 62-year-old man presents with cataract in both eyes. Significant in his history is that he underwent myopic refractive laser surgery 20 years ago
- i) Discuss the problems associated with use of standard IOL formulae and your approach to the patient. (10)
- b) After a routine cataract operation, you encounter a refractive surprise. The patient is overcorrected by 1.5 dioptres
- i) Discuss your approach to this surprise. (15)
- [25]
- 2 a) Discuss the role of Optical Coherence Tomography (OCT) in neuro-ophthalmology under the following headings
- i) Pseudo disc swelling. (4)
- ii) Papilloedema. (4)
- iii) Optic neuritis. (4)
- iv) Compressive optic neuropathy. (3)
- b) Discuss the clinical features, possible causes, investigation and treatment of Neuroretinitis. (10)
- [25]
- 3 a) Provide short notes on the various corneal endothelial dystrophies. (5)
- b) Discuss the differences between the corneal endothelial transplant techniques in terms of
- i) Selection criteria. (5)
- ii) Intra-operative challenges. (5)
- iii) Post-operative complications. (5)
- iv) Long and short-term outcome. (5)
- [25]
- 4 a) An optometrist referred a 13-year-old child for a "pigmented fundus lesion" which was noted following a routine examination at the school's eye-screening project. The child had neither significant medical history nor prior ocular problems. Best-corrected visual acuity was 6/6 OD and 6/7.5 OS. Pupils were equally round and reactive
- i) List and discuss the differential diagnoses. (15)

- b) On fundus examination, each lesion had a peculiar fishtail shaped hypopigmented change at one end. Optical coherence tomography of the lesion showed intra-retinal abnormalities between the retinal pigment epithelium (RPE) and photoreceptor layers
- i) What is the most likely diagnosis? (2)
 - ii) What will the Fundus Fluorescein Angiography of this lesion show? (2)
 - iii) Which systemic condition is associated with this lesion? (2)
 - iv) Which gene is implicated in this condition? (2)
 - v) What is its inheritance pattern? (2)
- [25]