

POSTGRADUATE INSTITUTE OF MEDICINE
UNIVERSITY OF COLOMBO

MD (OPHTHALMOLOGY) OPHTHALMIC BASIC SCIENCES
EXAMINATION – MARCH 2019

Date:- 13th March 2019

Time:- 1.00 p.m. – 2.30 p.m.

STRUCTURED ESSAY PAPER I

Answer all three (03) questions.

Answer each question in a separate book (Question 1,2,3.1 and 3.2)

1.
 - 1.1. Describe the gross and microscopic anatomy of the retina and its blood supply. (80%)
 - 1.2. Outline the development of the retina. (20%)

2.
 - 2.1. Describe the blood supply to the orbit and its contents via the ophthalmic branch of the internal carotid artery. (80%)
 - 2.2. Describe the arterial anastomoses between branches of internal and external carotid vessels in and around the orbit. (20%)

3.
 - 3.1. A 60-year-old female patient who presented to the eye clinic with bitemporal hemianopia suspected to have the lesion in the region of optic chiasm.
 - 3.1.1. List the imaging investigations you would order in this patient to arrive at a diagnosis. (10%)
 - 3.1.2. Discuss with reasons the best imaging modality out of all you mentioned above. (20%)
 - 3.1.3. Explain giving reasons the preparation of this patient for that investigation prior to sending to Radiology Department on due date and time. (20%)

Contd..../2-

3.2. A 30-year-old man is investigated for infertility. His karyotype is 47XXY.

3.2.1. State the diagnosis. (05%)

3.2.2. Briefly outline the genetic mechanism that gives rise to this chromosomal abnormality. (30%)

3.2.3. Explain why this abnormality is tolerated better than a similar sized chromosome abnormality in an autosome (numbered chromosome). (15%)

