

FRCOphth Part 1 May 2015

| | Anatomy/Embryology | Physiology/Biochemistry | Pathology/Microbiology | Pharmacology/genetics | Optics | Miscellaneous/statistic |
|----|--------------------------|--------------------------------|-------------------------|--|------------------------------|--|
| 1 | SOF | SO introcyclotorsion | Peripapillary atrophy | Optic neuropathy ethambutol | Diffraction | Continuous data reduce type 1 error ?student T test |
| 2 | Lacrimal duct | Sherington law | Vasculitis | Bezalconium action | Reflection concave mirror | Receiver Operating characteristic ? Sensitivity vs specificity |
| 3 | Ciliary artery to sclera | Sclera water flow | Sarcoidosis | Vancomycin action | Jackson cross cylinder | Linear regression ?variable is time ?rate changes know |
| 4 | Heart valve | Amino acid glycine | Dystrophic Calcium | Penicillin | Maddox rod | ?10 yr 100k. using gamble chance 0.5 what QL per year |
| 5 | Ciliary nerve | RNA | Hyaline masson granular | Steroid | Indirect ophthalmo | |
| 6 | Corneal epithelium | Lens metabolism | Wound healing | Arachidonic acid | Aphakia image | Anomaloscope |
| 7 | Descemet membrane | Rhodopsin stimulated by photon | Autoimmune ? type III | Autoclave? Rubber, alcohol disinfect HIV | Irregular astigma | FFA |
| 8 | Iris band | Anterior pituitary hormone | Immunoglobulin | SJS acetazolamide | BVP calculation | Middle cranial fossa foramen |
| 9 | Lens | Pancreatic hormone insulin | HLA | Edrophonium myasthenia | Amplitude accomo calculation | |
| 10 | Orbit blood supply | ABG resp acidosis | BCC | Cocaine in Horner | Compound | |

| | | | | | | |
|----|----------------------|--|------------------------|--|--|---|
| | | | | | microscope | |
| 11 | Orbit medial wall | IOP formula F=C+M-N/A? | Melanoma | Cornea polar drug absorption | Captopric image | |
| 12 | Optic canal | IOP reduce blood supply ?retina?ciliary?choroid | Protein - Western blot | Dexamethasone acetate or phosphate better absorption | SRK formula | |
| 13 | Lacrimal gland | Cornea transparency | Pterygium histopath | SNP | | |
| 14 | Periocular embryo | 2 nd messenger ?NO arach acid G protein | | Complement factor H | Total internal reflection | |
| 15 | Vitreous body | | | Loss of heterozyg ?RP ?RB CHRPE Stickler | Refraction to denser medium | |
| 16 | Retina layer | | | Marfan EDS stickler syndrome which collagen | Prism apparent Angle deviation | |
| 17 | Bruch membrane layer | Intermediate filament ?actin myocin desmocolin | ESR | LeberHON | Retinoscopy with accomo | |
| 18 | Foramen ovale | | Herpes simplex mouth | X-linked recessive | RSM | |
| 19 | | | Varicella zoster | | Linear magnify | |
| 20 | Conjunctival mucin | | Herpes simplex 1 | | Chromatic aberration | |
| 21 | Myelination ON | | Pseudomonas | | Reduce eye | |
| 22 | Fissure Coloboma | Mitochondria ADP | Toxoplasmosis | | Bifocal jump | |
| 23 | Embryo origin 1 | | Chlamydia trachomatis | | Slit lamp view corneal endo ?retroillumination | |
| 24 | Embryo origin 1 | | | | Transpose spectacle | |
| | 24 | 23 | 23 | 18 | 24 | 8 |

FRCOphth Paper 2 CRQ May 2015

- 1) Draw sagittal view of brain -6m
 - 2 ocular clinical feature of cerebellar disorder -2m
 - 2 Non ocular clinical feature of cerebellar disorder -2m

- 2) Diagram : brain, hypothalamus, pituitary, adrenal, Hormone A,B,C stress steroid hypothalamic pituitary adrenal axis draw the feedback loop with day and night pattern (Hormone A) – 3m
 - Name 3 hormone -3m
 - Steroid 2 receptors and their classification – 2m
 - 2 clinical feature of glucocorticoid excess beside HPT and DM -2m

- 3) Photograph A (BCC) and B (SCC) (Histopathology)
 - Describe the feature – 1m
 - What pathological term -1m
 - What diagnosis -1m
 - Why brown colour below the slide – 1m
 - Photo B 2 label what is it -2m
 - What different between photo A and B -2m
 - What feature photo B worse -2m

- 4) Draw concave mirror (image inside focal point) -4m
 - Draw concave mirror (image outside focal point) -4m

Why mirror in optical instrument no chromatic aberration – 1m

What optical instrument using concave mirror as part of the component -1m

5) Photo – lens (koepple) use in gonioscopy

What is it use for – 2m

Draw a diagram to show how to work this optical principal – 6m

What is the other 2 optical instrument using this principal – 2m

6) Spectacle 10D 10mm then move to 8mm BVD, calculate the power – 4m

What is the induced phoria if centre move down 8mm (right 3D left eye plano) -3m

Transpose the right and left eye power -2m

7) 3 colour pictures

What is 1st picture showed? (Sturm Conoid) -1m

Why? -1m

How to reduce it -1m

What 2nd picture showed (Chromatic aberration) -1m

Why? -1m

How to reduce it -1m

What 3rd picture (Oblique astigmatism) -1m

Why? – 1m

8) Biometry list 2 formula -2m

What measurement required – 3m

If AL 27mm what formula – 1m

Given OD -2D/-1.0 OS -3.5D/-1.5D, what left eye expected to be corrected if undergo cataract surgery – 1m
Where is the surgical incision – 1m

9) FFA given 9 fundal photo in 1 diagram

Diagram 1,4,7 what filter to use -3m

Describe diagram lesion (do not give diagnosis) -2m

What phase -1m

What is the vertical dark streak in diagram 9 -1m

Give 2 side effect of sodium fluorescence -2m

Give 2 emergency medications to stand by -2m

10) Picture showing right and left eye HVF

Humphrey visual field what kind of perimetry test -1m

Why SITA better -1m

Which test more reliable -1m

Describe the result -1m

Where is the lesion – 1m

Pattern deviation useful in which two clinical conditions – 2m

11) ERG diagram

Label 1-4 and 1-2 cell location -4m (1-a wave 2-b wave 3-a wave and oscillatory segment? 4- oscillatory wave)

What does Pattern ERG test for -1m

What 2 clinical conditions make PERG inaccurate -2m

What is 30Hz flicker for -1m

12) WHO (1969) 10 Screening principal -10m