Dear colleagues,

I am **Mahmood Mekkawy** and I am from Egypt. I just want to begin with thanking God first for all his givings. After that I want to thank my professors who taught me almost everything I know in ophthalmology, my colleagues who supported me and off course my family who stood beside me all the way.

I passed the FRCS final exam which was held in Hyderabad on 14th and 16th Feb, 2016 from the 1st attempt. My advice to u is to practice as much as u can. The trick is not reading so many books, in my opinion, attending a busy clinic with a good professor is much better than spending days in studying alone. Also attending the courses which r made for better preparation for the FRCS exam is also very helpful, but again with practice. Off course before, during and after everything, always pray to God almighty to help u.

I apologize in advance as the experience is very long to read, but i felt that it is better (in my opinion) to describe everything in details to transmit the atmosphere of the examination room to u. I hope this helps more than it consumes ur valuable time.

VIVA on 14/02/2016, it was held in Taj Krishna Hotel, Banjara Hills, Hyderabad.

1st table: Ophthalmic surgery and pathology

A. 1st examiner:

1. Scenario, pt with N II cat and -16D myopia, what special in his pre operative exam? I said careful exam of the fundus periphery for degenerations like lattice or holes, the mac for myopic mac degeneration, family hist of RD and myopic foveoschesis. He said what is that? I said vitreo retinal interface maculopathy or traction. What if MMD? I'll give him guarded visual prognosis. What difficulties will face u in the surgery? Deep AC and with large Axial myopia there may be lens subluxation which will appear by exam.

2. Scenario, a 4 month infant came to u with large upper lid dark red purplish lesion, non tender, not hot and non pulsating. Diag? I asked does it blanch on pressure? He said +/- !!! I said cap haemangioma. What else? Neurofibroma. He said let's go with cap haemangioma, what to do? I said as it is large my concern will be rapid ttt for fear of amblyopia. How? I'll treat any refractive error and order specially made gls with crutches to elevate the lid and i'll refer to pediatrician to adjust the dose of «systemic beta blockers», he seemed surprised as if he never heard it b4 (after the exam I found that he asked other candidates who didn't mentioned it !). How will u treat amblyopia? Patching plus what was said b4.

B. 2nd examiner:

1. Scenario, 70 yrs old pt., uneventful phaco, after 1mth BCVA 6/12, why? Pseudophakic CME. Does it have another name? Irvin Gass. How to confirm diag? OCT and FA. What in FA? Petalloid appearance of CME and hot disc. ttt? Topical NSAIDs and dorzolamide and systemic acetazolamide. How F/U? By OCT. if not improved? Peri-ocular steroids. What else causes DV in the case ? PCO. He said after only a month?! I

said it may happen with uneventful surgery. I then said CSME. He is not diabetic. I said optic neuropathy. He said there is much more common thing, he is 70. I got it, AMD.

2. Photo of nasal pterygium covering the nasal half of the pupil. Described. What to do? Surgery. Do u advise always with surg? No, but this is threatening the visual axis, but I usually council, give lubricants and anti inflammatory drugs when troubling pts and warn that it has increased recurrence. What else? Wanted sun gls to avoid u/v rays. Describe the type of surg. u do. What other types u know? What to add? MMC.

3. How do u grade angle of AC in glaucoma? Exam by van herick and gonio. Inves? AC OCT and UBM, What else? I don't know. He said there is nothing more. Describe what u see by gonio. I told him the grades and the bell rang.

2nd table: General medicine and neurology

A. 1st examiner: General medicine

1. Pt. with chest pain, causes? I said life threatening and non life threatening, 4got pul embolism, but after I said pleurisy and empyema, he said what else in the chest and life threatening? Then I remembered. What to do? Wanted bl pr and pulse, ECG, aspirin and nitrates. What lab? Cardiac enz, cbc, u & e.

2. Scenario, Pt going to do cat, u accidentally discovered AF, what to do? Postponed untill cardiologist clears. Causes of AF? I had a mental block, but said Valvular disease. What else? He gave me a clear hint, Losing wt and intolerant to heat. I said Thyrotoxicosis. What to test? T3, T4 and TSH. What else for AF? Anti-coagulants. What to do as investigations? Echo. What is the contra indication for it in echo?!!! Wanted thrombosis.

B. 2nd examiner: Neuro

Ptosis and diplopia more towards end of day? MG. How to diag.? Hist, exam. lid fatigue, cogan twitch sign. Associations? Vitilligo, thyroid. Invest? Anti Ach recep Ab, EMG, m biopsy and tensilon. What simpler test than those? Ice pack. How? Ice pack or even a cold can for 2min over the ptotic lid, the ptosis improves, as it improves N M transmission.

Diplopia increasing in Rt. gase and less in reading? Rt LR palsy, what else? Lt MR palsy. After the exam I remembered Lt INO and Duane.

Showed me a colored fundus picture of only both discs of a 10 yrs old child with blind Lt eye. The Lt disc showed hypoplasia. What else? I said may be a compressive retro-bulbar lesion. What r the ocular associations of optic n hypoplasia? I said I cannot recall but I told him systemic de morsier syn.

3rd table: ophthalmic medicine

A. 1st examiner:

1. Photo of dendritic ulcer stained with fluorescein under cobalt blue. Which herpes? Simplex. Why? Terminal bulbs and central. How to treat? Acyclovir topical oint. 1x5. What is the concentration? I don't remember, I just prescribe zovirax oint. He got angry. What else can herpes do? Disciform keratitis, necrotizing keratitis and neurotrophic keratopathy. What else? ARN. This time he got really angry and said this causes ARN?!! I said yes it may. He asked what else I got nervous and I thought he meant other things in the cornea I couldn't think of anything more (other candidates afterwards told me that he wanted to hear recurrence). He asked me what can u give the pt to decrease the symptoms? I said do u mean systemic anti-viral? Ha said I am the one asking the questions here. At that time I really reached a point where I just wanted to pass the next few minutes without getting in a fight with this man. I said i'll give systemic acyclovir. Dose? 800mg. Here the other examiner (who was very very kind) said do u mean 400mg twice daily? I said yes. The 1st examiner continued and asked for how long? I didn't respond as I didn't have an exact time. He said, I am ur pt and I am asking u, for how long should I take this systemic drug? I said up to 1yr.

He gave me a bad quality picture of an eye showing the lower half of the cornea with the lower lid everted and the flash of the camera making the whole central area of the photo white. He covered the flash area with his fingers and pointed at the lower palpebral conj and said comment on this if I told u that this is a young man with watery mucoid discharge. I said follicular conjunctivitis. What's follic conj? Conj reaction to certain infections or drug toxicity. What infections? I said viral, but usually no mucoid discharged, trachoma. What else? I kept quite. What's the ttt of trachoma? According to WHO I'll apply the SAFE protocol, and I said the dose of the antibiotic. What is commoner than trachoma and causes this? He wanted chlamedia !! Do u have special concerns regarding this pt? Yes, i'll refer him for urologist.

B. 2nd examiner:

1. Was really very nice and quiet, he started by saying "listen carefully to what I say" and he talked really slowly as if he wants to clarify his accent as much as he can. He gave me a scenario of a child came with a hot red tender swelling in the lower lid of one eye. What to think? The most common pre-septal cellulitis or even orbital cellulitis, the most serious rhabdomyosarcoma. How to differentiate bet pre-septal and orb cellulitis? In preseptal the eye is quite and moves freely. Management of orb cellulitis. Oc emergency, admission, sys AB and F/U of optic n function every 4 hrs. What AB? Cephtazidin and metronidazole. What if not improving? CT for periosteal abscess. When? Wanted at the earliest sign of optic n. affection.

2. A fundus photo. I described dense yellowish material along the upper and lower temp arcades with a red area lower temporal to the mac. The 1st examiner interrupted me, what is the yellowish material? I said hard exudates due to leakage. I asked is the pt diabetic? No, he is a 20 yrs old healthy male. I suspected the red area to be a macro aneurysm. The 2ns examiner said not that. I said may be telangiectasia. Yes. I said then coat's. How to treat? I said cryo as ttt for coats, he said cryo cannot be used here in the posterior pole, I said off course, in this case I'll give anti VEGF. What else? Laser. What if the pt refused ttt, what will be the complication? Exudative RD.

3. A colored fundus photo of a disc, Cupping 0.8 with nasal shift of bl.vessels and peripapillary atrophy. Asked me to point the edge of the cup. I pointed it and said at the kink of bl vessels. What examinations

and invest u do if I told u this is an OAG? IOP, angle but u sir said it is open, fundus with red free filter. Invest, CCT. What for? For false high with increased thickness and false low for decreased thickness. What else? Bilat perimetry, OCT RNFL thickness.

Clinical day 16/2/2016, it was held in LV Prasad Eye Institute, Banjara Hills, Hyderabad.

Ant segment:

1st case: A central corneal opacity in the rt eye. What do u see? Is it active? No. Why? No epith defect and the eye is quiet. What do u mean with quiet? No ciliary injection, no vascularization, no infiltration around it and no AC reaction (C & F). Did u examined the pt for AC reaction. I said no, should i? No. What is u diagnosis? Healed infected ulcer. What was the cause? I'd like to test corneal sensation if decreased so it is herpetic. What would u do if u saw it at that time? In our center we do scrapping, stain and culture for any infected ulcer, he interrupted me, u do culture for this? I completed unless it has clinical signs suggesting that it is herpetic like denderetic ulcer. What will the pt complain of? DV. What to do? I replied without thinking keratoplasty. He wasn't happy to hear this as 1st step of management (I regretted it, but I corrected my answer in the next case). We heared the ring of the 6min so they asked me to examine the next case.

2nd case: Diffuse stromal opacities, I asked to see the other eye he said wait, what do u see, I said granular Reis–Bucklers dystrophy. He wasn't happy, what is the level of the lesions? I said bowmans. He said see the other eye. I said same picture, but it is stromal, it is granular (now I think it might have been macular as the spaces in between the opacities wasn't that clear!!!). He said what do u think regarding his VA? I said decresed but not much, he showed me a face, so I said about 6/60, he said OK. What to do? I said i'll council the pt and know his visual needs, treat any refractive error with gls, interrupted me, do u think gls will help? I said it is not the definitive ttt but it may help if he already has significant refractive error, the definitive ttt is keratoplasty. Which type? DALK. Do you know DSEK? Yes. Why don't u use it? I said it treats defective endothelium that causes corneal edema which is not the case here and the opacities will still be there.

3rd case: I was asked to quickly examine a case. I said as u said before sir, DESK with iris pigments on the back of the cornea, almost clear cornea, PC IOL with PCO. He got angry and said I said nothing, I didn't tell u the diagnosis and he looked at the observer. I apologized and told him I meant that u mentioned it few min ago in the previous case. Bell rang.

Post. Segment

1st case: Was asked to examine an old lady on SL using a 90D or 78D lenses, whatever I am comfortable with and to tell what I am seeing while examining her. While I am adjusting the SL i examined the AS, she had a NIII cat which made the view a little pit hazy, I said that and I said I can see an upper temporal BRVO with macular edema more upper. What did u see to say that? Flame shaped hges along the area drained

by the UT BRV. I said also the upper temporal BRA shows attenuation and sheathing with A-V crossing changes all over the fundus. How will u manage? According to her age I will take history of the common causes, HTN, DM, lipid profile, smoking, ocular HTN and I will refer to an internist to control her sys condition. How will u investigate? I said the general as above. He said ocular investigations? (I 4got to tell u the other eye had more hazy view with pale disc with vascular attenuation, the examiner didn't want more than that and began the discussion). I said OCT to assess the macular thickness and as reference for follow-up and although the BRVO looks fresh with dense hges i'd like to order FFA for both eyes as I am concerned about the signs of ischemia (arteriolar narrowing and sheathing). How to treat? Anti VEGF.

2nd case: A young male 20s with the I/O. I said bilat disc edema with peripapillary hges and scattered dot and blot hges all over the mid periphery. What do u think? I said i'd like to check his bl pr as I suspect malignant HTN, said what if it was normal? I said I will think of other causes of bil disc edema, the most serious is papilledema. What will u do? I'll ask about signs of increased ICT as headache increasing with cough, vomiting and transient visual obscuration, but this will not explain the intra-retinal hges within the periphery. Said what else? I said causes of pseudo papilledema and intraocular causes also. The examiner had mask face all the time.

3rd case: Was asked to examine quickly only the post pole OU of a male pt around 50. Showed OD large NVD with CSME, ghost vessels and faint cellophane maculopathy, OS large NVD with CSME and circnate exudates. I said HR PDR with the above. He said the pt is not diabetic, what do u think? I said other causes of proliferative retinopathy. Like what? I had a mental block as the bell rang couldn't say anything but sickle cell retinopathy!! I should have said retinal vasculitis as it fits much more than Sickle cell ret.

Neuro-ophthalmic and Ocular Motility Disorders

1st case: 1st of all I got very nervous as I saw prism bars next to the pt, as I am not familiar with them, 2nd of all the room is very narrow with the unit of the SL to the Rt of the pt, so I had to block distant vision of the pt or stand to her left where the examiner is standing also. And finally, I saw the examiner who gave me a real hard time in the last session of the VIVA also in the room, but frankly he was very helpful and decent this time.

Anyway, I was asked to examine ocular motility. I asked can I do cover/uncover test 1st? He said is this is the 1st thing to do? I got more nervous and said do u mean observation? He said what is the important test here? I said Hirschberg test? He said Ok. I said 1st by observation there is no AHP, he interrupted me as he wanted Hirschberg test only. The pt had alternating XT, 1st I said apparent rt XT, then after cover uncover I said lt, No alternating. He got angry. I asked about gls. He said she may have, but she is not wearing any now. Asked me to measure the angle with prism bar, I tried to measure it using the alternate prism cover. He said u don't need to cover both eyes. I got confused and it appeared that I am not familiar with this (afterwards I knew that he meant running krimsky test with the torch and the prism bar only). He said that's enough and took the prism bar away. He asked was the deviation more for near or far? I said can I repeat the test bec I got distracted? Said no u did it, answer. I said for near. He left me to the

other examiner. B4 leaving this pt the new examiner (who is the examiner who gave me hard tim in the VIVA, but he was very nice and helpful by the way) he asked, if this teenager had an error of refraction, what do u think it will be? I said myopia. He said OK.

2nd case: Also a female teenager. I was asked to examine ocular motility without cover test. I said defective elevation of the Rt eye in all up gazes (this is what I noticed). What do u think? Monocular elevation deficit. What is the diagnosis? Double elevator palsy. What r the affected ms? IO and SR. What if I told u it is not that? I said it may be old blow out fracture with IR restriction. Said we did forced duction and it was negative. What else? Finally I said it will be Brawn syn (afterwards I knew that old Brawn may show defective elevation in all gazes). What's it? SO tendon restriction. Where exactly? At the trochlea. Causes? What to do for her? I'll ask for his of trauma or Rh. Arthritis or it will be cong. How will u treat? Council the pt, if she has no sig complaints I'll follow-up. If she came with diplopia? I'll refer to strabismus surgeon, as she is decompensating. What will he do? SO tendon elongation. How? I don't know.

3rd case: The same examiner said u have few sec left, test ocular motility for this young man. He had Lt. mild ptosis with defective elevation and adduction. What do u want to do next? Pupils examination. Do it. I directly did the swinging flash light test as I had no time with the bell ringing, it showed Lt RAPD. I said partial 3rd N palsy, pupil affecting, surgical cause while I am walking out of the room.

Oculoplasty and lid disorders

1st case: was asked to examine an about 8 yrs child. Obs showed rt. mod to severe apparent ptosis with faint upper lid crease. I started after that with the measurements, the examiner expected the ocular motility 1st, but both were very kind and told me to do what I am used to. When I tried to compare every measurement to the other eye an examiner told me no need. The child had very poor (3mm) LFT, they agreed. I tested protective mechanisms, the rt eye showed negative bells, told me to skip cor sensation. I finally got to ocular motility, I thought the palpebral fissure changes in adduction so I repeated it. The examiner asked what r u testing? I said I suspected Duane but it was the pt I guess. When I tried to test for marcus gunn it took us over a min to teach the kid to do it properly and the examiners talked to the child in indian to help him understand. At the end, what's ur diagnosis? I said congenital Rt. ptosis.

2nd case: I was asked to gently examine a pt. around 20 yrs of age with bilat anophthalmic socket. I said deep upper lid, sulcus no shortening of the fornices, there is discharge and I'd like to take a swab, sutured globe, the examiner said sutured? It wasn't. What do u think happened? I said trauma or surgery. He said negative for both. I don't know how I 4got phthisis!!! The examiner asked if it was a tumour, what? I said retinoblastoma, but he is older than that, unless he had surgery a long time ago. What single test u want to do ? I said u/s. How does RB appear in u/s? Calcification. If this is phthisis, how will it appear in u/s? Wanted decreased axial length. Does phthisis show calcifications? I don't know. What will u do for him? Refer to an oculoplastic surgeon. To do what? Conformers. The bell rang and my experience ended.

I think it goes without saying that the Chua web page especially the past cadidates's experiences was a great help and an important reason of my success in this exam. I hope this experience helps u all. I will be more than happy to help anyone regarding the exam or even the traveling arrangements that I had to India, as I know that this may be a real concern to some people. U can reach me at mekkawy@hotmail.com.

Sorry again for the long experience and good luck.

Mahmood Mekkawy, FRCS.