Q.17 A female patient 32 years of age is referred to you during early postpartum period complaining of decrease visual acuity in both eyes after delivery. Her notes show she is non-diabetic, no past history of hypertension, but had eclamptic fits during delivery.

a) What are the possible causes for her symptoms?
b) Which structure is likely to be involved in this case and what findings do you expect?
c) What investigation would you like to order if there are no fundoscopic findings and why?
d) How would you manage this case?

Q.18 You are working in a laser room using laser photoagulator.

a) What are the different types of diseases for which a person can opt for this laser?
b) Types of contact lens used with slit lamp delivery system and their selection criteria.
c) Which type of anesthesia would you use to do laser photoagulation? What factors would help you to decide the type of anesthesia.
d) What factors will decide the laser parameter setting?

Q.19 A premature infant born at 28 wk gestation is presented for ROP screening. Examination reveals Zone 2 Stage 2 Plus disease.

a) What is the international classification of ROP?
b) What are screening guidelines for ROP?
c) What are the recommendations of Early Treatment for Retinopathy of Prematurity (ETROP) Trial for this infant?
Q.20 Parents of a 2 month baby boy noticed white pupillary reflex (Leukocoria) in his right eye. Ocular examination under anesthesia revealed a retrolental mass into which elongated ciliary processes were inserted suggestive of persistent anterior fetal vasculature.

   a) Which clinical features /Investigations will help you to differentiate this condition from Retinoblastoma?
   b) How will you manage this patient?
   c) Name other developmental abnormalities of vitreous.

   The End
Q.14 A 30 years old female presents with 2 weeks history of progressive severe visual deterioration in right eye. VA is 6/60 and examination reveals severe vitritis with focal active retinochoroiditis adjacent to a healed scar.

a) What is the probable diagnosis?
b) What is the significance of testing the patient for anti-toxoplasma antibodies?
c) How will you manage this patient?

Q.15 A female patient is diagnosed with cataract in both eyes. FFA was ordered after suspicious lesions at macula. Diagnosis of Parafoveal (juxtafoveal) retinal telangiectasia was made. Vessels showed leakage.

a) What are the histopathological findings of the disease process?
b) How do they differ from true telangiectasia?
c) What are groups?
d) How would you treat this case?
e) What is differential diagnosis?

Q.16 A female patient, aged 40 years, presents in OPD with symptoms of floaters in right eye. She has no systemic disease. On examination her visual acuity in right eye is 6/9 and 6/6 in left eye. Positive findings are punctual hemorrhage along with atrophic hole in inferior retina and operculated hole in STQ. Other eye also showed multiple holes.

a) What are the factors which will help you in deciding treatment plan for right eye?
b) What is the goal for treatment and how would you treat?
c) What considerations will you have in decision making regarding left eye?
d) What is sub-clinical retinal detachment?
Q.11 A 60 years old male suffers with sudden dimness of vision right eye. On examination VA right CF and left eye is 6/12. Fundus examination showed a greenish membrane with a subretinal bleed extending into foveal region. Fundus of left eye showed yellow coloured deposits in macular region.

a) Name structure of eye responsible for this sequence of events.
b) Enumerate different layers of this structure.
c) What are different age related changes occur in this structure?
d) Enumerate atleast 3 pathologies linked to this structure.

Q.12 A 72 years old female presents with distorted vision in her LE. OCT revealed findings synonymous with CNV in LE with multiple PEDs in her RE. Optical coherence tomography has widely become a mandatory investigation for many retinal disorders.

a) Enumerate the different types of latest OCT machines and their specific functions
b) What are the advantages of swept-source OCT over other fourier domain OCTs

c) Enumerate the OCT based classification of diabetic macular oedema
d) Enumerate the OCT based classification of vitreomacular adhesion syndrome

Q.13 A 76-year-old male presented to the clinic with distortion while reading from the left eye. He had a history of bilateral pseudophakia and had been using antihypertensive medicines with satisfactory control. He smoked 6-8 cigarettes a day and denied flashes, floaters, pain, or photophobia. Her visual acuity was 6/9 with correction in right eye and 6/24 in left. The IOP was within normal range and there was no RAPD. The right eye showed multiple drusen at the fundus, while left eye showed hemorrhage at fovea with scattered drusen.

a) Enumerate the tests used for evaluation of this condition
b) Highlight the management principles
c) What are the recent advances in drugs used for its management as per studies?
Q.1 A 66 year old female presented in OPD with a complaint of floaters in her left eye. Her right VA was 6/9 and left 6/12. On examination both eyes showed mild lens opacifications, however posterior segment of left eye showed a circular ring in the vitreous just anterior to the disc indicating a posterior vitreous detachment.

   a) Enumerate different parts of vitreoretinal interface preventing PVD?
   b) What different age related changes occur in vitreous and vitreoretinal interface?
   c) What is anamolous PVD and what are effects on vitreous, retina and macula?
   d) Enumerate 3 developmental anomalies of vitreous.

Q.2 A 70 years old lady who is a diagnosed case of wet ARMD presented with severe decrease of vision in her right eye for the last 2 days. On examination BCVA is CF 1 meter in RE. Fundus examination revealed subfoveal CNV that is obscured by thin pre-retinal hemorrhage. OCT and FFA were inconclusive. She was advised Indocyanine green (ICG) angiography.

   a) How does ICG angiography be helpful in this scenario?
   b) Enumerate the current indications of ICG angiography?
   c) Enlist the side effects and contraindications of ICG angiography.

Q.3 A 35 years male presents in eye clinic with complain of blurred and distorted vision in right eye for last five days. He also gives history of similar episode 2 years back. His vision is 6/12 in right eye and 6/6 in left eye. Fundus shows localized serous detachment of the macula in right eye. He is working as finance manager in multinational company.

   a) What is your diagnosis?
   b) What would be differential diagnosis?
   c) How will you investigate the patient?
   d) How will you manage this patient?
Q.4 A female patient aged 44 years presents with sudden painful decrease in vision in left eye for last two days. She was treated for corneal ulcer a month ago she is type 2 diabetic for last 12 years. On examination her vision is 6/9 in right eye and PL positive with faulty projection in left eye. IOP is 15mm Hg cornea is clear AC show mild flare vitritis is present Optic disc is swollen retinal vessel shows obliteration dilatations leakages and multiple areas of retinal whitening and thinning.

a) What is your provisional diagnosis and give differential diagnosis?
b) What is your management plan?
c) Write drugs with their doses you plan to give?
d) What complication can occur?

Q.5 A female patient aged 55 years is referred to you by a rheumatologist for ophthalmic examination. She is using hydroxychloroquine for treatment of rheumatoid arthritis.

a) What would you like to ask in history and why?
b) What are the earliest signs of toxicity?
c) What are the risk factors for developing retinal toxicity?
d) What is the follow up routine of this patient and at which stage the drug is to be stopped or re-evaluated?

Q.6 A 30 years old male presents to you with decreased vision and night blindness. His best corrected vision is 6/24 in both eyes and bilateral fundi shows pigmentary retinopathy.

a) How would you label it as primary or secondary pigmentary retinopathy?
b) Enumerate six systemic disease having pigmentary retinopathy.
c) Name two ocular tests that would be helpful in this patient’s diagnosis and prognosis.
d) Enumerate differential diagnosis for this patient.
Q.7 A 44 years old African American male traveler who is a known case of Sickle cell (SC) disease reported in eye OPD with sudden painless loss of vision in his left eye. On examination, BCVA is 6/9 in right eye and HM +ve in left eye. Fundus examination revealed sea fan neovascularization at mid peripheral temporal retina in right eye and retinal detachment with tear at the base of sea fan neovessels in left eye.

a) Give the pathogenesis and stages of proliferative sickle cell retinopathy.
b) Outline the management plan for this patient.
c) Enumerate the precautions that should be taken when treating retinal detachment in such patients.

Q.8 A 70 years old man presents with blurring of vision, which is 6/12 in both eyes. He is pseudophakic and has no capsular opacity. Optic discs are swollen and hyperemic. His BP is 200/120 mmHg and brain scan is normal.

a) What other findings do you look for in fundi?
b) Briefly mention the fluorescein angiography findings and ICG

c) How will you manage this patient?

Q.9 A 55 years old male with IDDM for 20 years presented with sudden painless loss of vision in right eye. On examination BCVA is HM +ve in RE and 6/24 in left eye. Fundus examination revealed dense vitreous hemorrhage in RE and high risk proliferative Diabetic retinopathy with CSMO in LE.

a) Enumerate the current indications for pars plana vitrectomy in patients with diabetes.
b) Enlist the factors associated with poor visual outcome after laser photocoagulation in diabetic patients.
c) Outline laser settings recommended for focal and Grid laser photocoagulation in DME.
Q. 10 A 62 years old pseudophakic female presents with ocular redness, discomfort, and dramatically decreased vision in left eye three days after intravitreal injection of bevacizumab for Diabetic macular oedema. The vision in the affected eye was PL+ve, there was conjunctival injection, corneal edema, and hypopyon. Further details were hazy.

a) What could be the differential diagnosis?
b) What organisms are involved in the causation of this complication?
c) How will you manage this case?