

2019 Admission

Q.P. Code: 314001

Reg. no.:

III Professional MBBS Part I Degree Supplementary Examinations February 2025 Ophthalmology

Time: 3 Hours

Total Marks: 100

- Answer all questions to the point neatly and legibly • Do not leave any blank pages between answers
- Indicate the question number correctly for the answer in the margin space
- Answer all parts of a single question together • Leave sufficient space between answers
- Draw table/diagrams/flow charts wherever necessary

1. Multiple Choice Questions

(20x1=20)

The MCQ questions (Q.No. i to Q.No. xx) shall be written in the space provided for answering MCQ questions at page No. 51 of the answer book (the inner portion of the back cover page (PART III)). Responses for MCQs marked in any other part/page of the answer book will not be valued

Question Numbers i - v are case scenario-based questions.

A 45 year old farmer present with complaints of left eye pain, blurring of vision with photophobia for past 2 weeks. Patient gives history of fall of vegetative matter in left eye. He is a known case of diabetes mellitus on treatment for past 6 years.

- Which of the following is the most likely cause of the patient's eye symptoms
 - Bacterial corneal ulcer
 - Fungal corneal ulcer
 - Viral keratitis
 - Foreign body reaction
- Which of the following diagnostic test is most useful to confirm this condition
 - Corneal scraping with culture
 - Fluorescein staining
 - Blood culture
 - PCR for viral DNA
- Which of the following is a common complication of this condition if untreated
 - Glaucoma
 - Cataract formation
 - Retinal detachment
 - Corneal perforation
- Which of the following treatment is most appropriate
 - Topical anti fungal therapy
 - Topical corticosteroids
 - Oral antibiotics
 - Oral antivirals
- What is the characteristic slit lamp finding
 - Grayish white colour with feathery margin with satellite lesion
 - Dendritic ulcer with terminal bulb
 - Well defined round ulcer with smooth edge
 - Fleisher ring with Vogt's striae

For questions vi - x, there are two statements marked as Assertion (A) and Reason (R). Mark your answers as per the options provided:

- Assertion (A): Nuclear sclerosis cataracts often lead to a "second sight" phenomenon in elderly patients.
Reason (R): The refractive index of the lens increases due to nuclear sclerosis, leading to improved near vision.
 - Both A and R are true, R is the correct explanation of A
 - Both A and R are true, R is not the correct explanation of A
 - A is false, but R is true
 - A is true, but R is false
- Assertion (A): Diabetic patients are at a higher risk of developing cataracts.
Reason (R): Hyperglycemia leads to the accumulation of sorbitol in the lens, causing osmotic damage.
 - Both A and R are true, R is the correct explanation of A
 - Both A and R are true, R is not the correct explanation of A
 - A is false, but R is true
 - A is true, but R is false
- Assertion (A): Glaucoma can cause blindness which is reversible
Reason (R): The optic nerve damage caused by glaucoma is permanent and progressive
 - Both A and R are true, R is the correct explanation of A
 - Both A and R are true, R is not the correct explanation of A
 - A is false, but R is true
 - A is true, but R is false
- Assertion (A): Central serous retinopathy primarily affects newborn
Reason (R): High levels of cortisol and stress are associated with CSR development.
 - Both A and R are true, R is the correct explanation of A
 - Both A and R are true, R is not the correct explanation of A
 - A is false, but R is true
 - A is true, but R is false
- Assertion (A): The cornea is avascular.
Reason (R): The cornea derives its nutrition from the tear film and aqueous humor.
 - Both A and R are true, R is the correct explanation of A
 - Both A and R are true, R is not the correct explanation of A
 - A is false, but R is true
 - A is true, but R is false

(PTO)

Question numbers xi-xv are multiple-response type questions. Read the statements & mark the correct answers appropriately.

- xi. Clinical features of keratoconus
 - 1) Munson sign 2) Vogt's striae 3) KF ring 4) Rizutti sign
 - a) 1, 2 and 3 are correct b) 1 and 3 are correct c) 1 only is correct d) 1, 2 and 4 are correct
- xii. Which of the following are symptoms of retinal detachment
 - 1) Flashing lights 2) Floaters 3) Sudden loss of vision 4) Tunnel vision
 - a) 1, 2 and 3 are correct b) 1 and 3 are correct c) 1 only is correct d) 1, 2 and 4 are correct
- xiii. Signs of thyroid eye disease
 - 1) Von Graefe's sign 2) Stellwag's sign 3) Dalrymple's sign 4) Munson sign
 - a) 1, 2 and 3 are correct b) 1 and 3 are correct c) 1 only is correct d) 1, 3 and 4 are correct
- xiv. Fourth cranial nerve supplies
 - 1) Medial rectus 2) Inferior rectus 3) Superior oblique 4) Inferior oblique
 - a) 2 and 3 are correct b) 1, 2 and 4 are correct c) 3 only is correct d) 4 only is correct
- xv. Syndromes associated with retinitis pigmentosa
 - 1) Usher's syndrome 2) Kearns – Sayre syndrome
 - 3) Refsum's syndrome 4) Alport syndrome
 - a) 1, 2 and 3 are correct b) 1 and 3 are correct c) 1 only is correct d) 1, 2 and 4 are correct

Question numbers xvi-xx are single-response type questions

- xvi. D shaped pupil is seen in
 - a) Glaucoma c) Retinal detachment
 - b) Traumatic iridodialysis d) Iridocyclitis
- xvii. Snowflake cataract is seen in
 - a) Diabetes b) Trauma c) Galectosemia d) Wilsons disease
- xviii. Tear drop sign is seen in fracture of
 - a) Floor of orbit b) Roof of orbit c) Medial wall of orbit d) Mandibular fracture
- xix. Tomato splash appearance is seen in
 - a) CRVO b) CRAO c) ARMD d) Retinoblastoma
- xx. Causative organism of angular conjunctivitis
 - a) Streptococcus epidermidis c) Pneumococcus
 - b) Moraxella d) Chlamydia trachomatis

Long Essays:

(2x10=20)

- 2. A 2-year-old child is brought to the ophthalmology clinic by her parents after noticing a whitish reflex in the left eye while taking photographs. The parents report no history of trauma or infection but mention occasional misalignment of the left eye. On examination, the child has leucocoria in the left eye and strabismus.
 - a) What is the most probable diagnosis
 - b) Mention two differential diagnoses for leucocoria in a child
 - c) Describe pathogenesis and investigations you would perform to confirm the diagnosis
 - d) Describe the management plan for this child
- 3. Describe the etiopathogenesis, clinical features, complications and management of trachoma

(1+2+3+4)

**(2+3+2+3)
(6x6=36)**

Short Essays:

- 4. Optic neuritis
- 5. Diabetic Retinopathy
- 6. Vernal keratoconjunctivitis
- 7. Strabismus
- 8. Primary angle closure glaucoma
- 9. Myopia

Short Answers:

(6x4=24)

- 10. Pterygium
- 11. Central retinal vein occlusion
- 12. Ectropion
- 13. Describe the nerve supply and actions of intraocular muscles
- 14. Anti glaucoma medications
- 15. Lacrimal apparatus
