



BRAINWARE UNIVERSITY

Term End Examination 2024-2025

Programme – B.Optomety-2021/B.Optomety-2022

Course Name – Systemic Conditions & Eye

Course Code - BOPTOC505

(Semester V)

Full Marks : 60

Time : 2:30 Hours

[The figure in the margin indicates full marks. Candidates are required to give their answers in their own words as far as practicable.]

Group-A

(Multiple Choice Type Question)

1 x 15=15

1. Choose the correct alternative from the following :

- (i) What is the normal range for fasting blood glucose levels?
 - a) 50-70 mg/dL
 - b) 70-100 mg/dL
 - c) 100-125 mg/dL
 - d) 125-150 mg/dL
- (ii) Select the correct option from the following: _____ is the mostly found in the membrane of the Herpes Virus particle that helps in attachment of it with the plasma membrane cell surface.
 - a) Glycoproteins
 - b) Lipids
 - c) Carbohydrates
 - d) Enzymes
- (iii) Which of the following is a common symptom of diabetic retinopathy?
 - a) Blurred vision
 - b) Floaters in the vision
 - c) Dark spots or empty areas in vision
 - d) All of these
- (iv) Which among the following systemic disorders is associated with passive oedema of eyelids?
 - a) Diabetes
 - b) Rheumatoid arthritis
 - c) Hyperproteinaemia
 - d) Chronic renal failure
- (v) A patient complains of sudden painless loss of vision in one eye for past 24 hours, with an associated history of atherosclerosis. Identify the possible cause.
 - a) Central retinal artery occlusion
 - b) Diabetic retinopathy
 - c) Hypertensive retinopathy
 - d) Cystoid macular oedema
- (vi) Which of the following is a common symptom of hypertensive retinopathy?
 - a) Blurred vision
 - b) Eye redness
 - c) Eye pain
 - d) Sensitivity to light

- (vii) Which of the following is NOT a treatment option for hypertensive retinopathy?
- a) Blood pressure medication
 - b) Laser therapy
 - c) Vitrectomy
 - d) Scleral Buckling
- (viii) Which of the following ocular complications is more commonly seen in cancer patients undergoing radiation therapy?
- a) Dry eye syndrome
 - b) Optic neuritis
 - c) Retinal detachment
 - d) Conjunctivitis
- (ix) Choose the correct option from the following: due to invasion of Herpes Virus on the cornea Corneal Hysteresis and Corneal Resistance Factor gets _____ than previous state.
- a) increased
 - b) decreased
 - c) unchanged
 - d) unequal
- (x) Onchocerciasis-induced river blindness is primarily caused by:
- a) Microfilariae migrating to the cornea
 - b) Inflammation of the optic nerve
 - c) Damage to the retina
 - d) Increased intraocular pressure
- (xi) The presence of microfilariae in the anterior chamber of the eye can lead to:
- a) Anterior uveitis
 - b) Macular edema
 - c) Optic disc swelling
 - d) Retinal detachment
- (xii) Which of the following is a long-term consequence of onchocerciasis-related ocular complications?
- a) Blindness
 - b) Color blindness
 - c) Night blindness
 - d) Double vision
- (xiii) Liposarcoma defines cancer of _____ of the body.
- a) Smooth muscles
 - b) Mucous membrane
 - c) Fatty tissues
 - d) Soft tissues
- (xiv) Which of the following is a common ocular complication of cysticercosis?
- a) Retinal detachment
 - b) Glaucoma
 - c) Cataract
 - d) Optic neuritis
- (xv) Which of the following is a common ocular complication of Sjogren syndrome?
- a) Cataracts
 - b) Glaucoma
 - c) Macular degeneration
 - d) Dry eyes

Group-B

(Short Answer Type Questions)

$$3 \times 5 = 15$$

2. Explain the mechanism of ocular complications in AIDS patients. (3)
3. Explain the ocular complications that can arise as a result of malaria infection. (3)
4. Explain the role of vitamin C in preventing ocular complications. (3)
5. How is diabetic retinopathy diagnosed? (3)
6. A 30 yr old male came to your clinic with the c/o U/L ocular irritation, watering and photophobia*2 weeks. The patient had ocular history of HSV epithelial keratitis*2.5 yrs for which patient have already underwent Rx .Explain with reason the possible outcomes and probable management approach in this case. (3)

OR

What is the underlying cause of rheumatoid arthritis and how does it affect the joints? (3)

Group-C

(Long Answer Type Questions)

 $5 \times 6 = 30$

7. Discuss the grading system used to classify hypertensive retinopathy and explain its significance in determining disease severity. (5)
8. Explain the potential complications of untreated hypertensive retinopathy and their impact on vision. (5)
9. Explain the role of autoimmunity in the development of Thyroid Eye Disease. (5)
10. Explain the ocular complications commonly associated with Sjogren's syndrome. (5)
11. A 50 yr old female came to your clinic with the c/o OU ocular irritation, watering, photophobia * 1week. Her systemic history shows that she was already underwent Radiation tx for Breast cancer*8 mths and currently undertaking Trastuzumab for 1 mth. Analyze the probable ocular condition in this case and provide proper management approach in this case. (5)
12. Describe the ocular manifestations of vitamin E deficiency and its potential impact on vision. (5)

OR

Explain the specific preoperative precautions and interventions required for patients with conditions such as glaucoma, cataracts, or retinal disorders undergoing ocular surgery. (5)

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