

Rajiv Gandhi University of Health Sciences, Karnataka
I Year B.Sc. Optometry Degree Examination - 16-Dec-2022

Time: Three Hours

Max. Marks: 100 Marks

OCULAR ANATOMY, OCULAR PHYSIOLOGY AND OCULAR BIOCHEMISTRY
(REVISED SCHEME – 4)

Q.P. CODE: 3343

Your answers should be specific to the questions asked
Draw neat, labeled diagrams wherever necessary

LONG ESSAYS (Second Question Choice)

2 x 10 = 20 Marks

1. Mention the blood supply of nervous coat of eyeball. Brief on structure of fovea centralis.
2. Describe the layers of cornea and factors affecting its transparency.

Or

Explain the biochemical composition and functions of tear film. Describe the structure of tear film with the help of neat labeled diagram.

SHORT ESSAYS (Question No 5 & 10 choice)

10 x 5 = 50 Marks

3. Draw a neat labeled diagram of eyeball and elaborate on coats of eyeball.
4. Describe the aqueous outflow system.
5. Explain Glucose metabolic pathways of crystalline lens.

Or

Describe the photoreceptor layer of retina.

6. Explain Wald's visual cycle.
7. Explain blood aqueous barrier.
8. What are yoke muscle, synergist and antagonists?
9. Mention the action and nerve supply of muscles present in eyelids.
10. Explain the lesions of visual pathway.

Or

Describe the circulation and drainage of aqueous humour.

11. Brief on superior oblique muscle-origin, course, action and nerve supply.
12. What is binocular vision? Mention prerequisites of binocular vision.

SHORT ANSWER (Question No 15 & 20 choice)

10 x 3 = 30 Marks

13. Ciliary processes.
14. Refractive errors.
15. Muscles present in iris and its actions.

Or

Orbicularis oculi muscle action and nerve supply.

16. Henles layer and crypts of henle.
17. Protanopia.
18. Factors affecting IOP.
19. Composition of vitreous humour.
20. Glands of eyelids.

Or

Mention the parts of conjunctiva.

21. Schirmers test 1
22. What is hue and saturation?