



SRI DEVARAJ URS ACADEMY OF HIGHER EDUCATION & RESEARCH

(A DEEMED TO BE UNIVERSITY)

B.Sc. Allied Health Sciences Third Year Semester-VI

November 2024 Examination

B.Sc. Ophthalmic Technology & Optometry

Time: 2.30 Hrs.

[Max. Marks: 80]

Subject: Optometric Optics and Dispensing Optics

Q.P Code : J6720

Your answers should be specific to the questions asked.

Draw neat labeled diagrams wherever necessary.

LONG ESSAY

2 X 10 = 20 Marks

1. Describe Bifocal lens, its types in detail.
2. Describe tinted plastic lens in detail.

SHORT ESSAY (Answer any 6)

6 X 5 = 30 Marks

3. Discuss aberrations.
4. Explain about Pantoscopic tilt.
5. Explain about Recumbent spectacle and its principle.
6. Write a note on Anti reflection coating.
7. Define Image displacement with diagram.
8. What are the measures to be taken in case of an eye injury?
9. Give the applications of Interference.
10. What are the processes of manufacturing of Ophthalmic blank?

SHORT ANSWERS (Answer any 10)

10 X 3 = 30 Marks

11. Explain impact hazard safety eye wear.
12. What are the best form lenses for near vision?
13. What is toric surface? Mention its types.
14. Define Prism and its characteristics.
15. Name the different types of spectacle frames.
16. List the frame parts.
17. Write the different types of temples.
18. Explain the uses of Pupillometer.
19. Define Cemented bifocals.
20. Give the advantages of safety eye wear.
21. Describe Aspherical surface.
22. Define materials of frame.

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B.Sc. Ophthalmic Technology & Optometry



Time: 2.30 Hrs.

[Max. Marks: 80]

Subject: Contact Lens and Occupational Optometry

Q.P Code : J6730

Your answers should be specific to the questions asked.

Draw neat labeled diagrams wherever necessary.

LONG ESSAY

2 X 10 = 20 Marks

1. Indications and Contraindications of Contact lens.
2. Describe the clinical features, evaluation & treatment of Dry eye.

SHORT ESSAY (Answer any 6)

6 X 5 = 30 Marks

3. Discuss bandage Contact lens.
4. Describe design of Contact lens in detail.
5. Therapeutic contact lens.
6. Explain writing a prescription to laboratory.
7. Name different types of safety eye wear for different occupations.
8. Differentiate Monomers and Polymers.
9. Properties of Contact lens materials.
10. Describe RGP Contact lens.

SHORT ANSWERS (Answer any 10)

10 X 3 = 30 Marks

11. Give the clinical features of Keratoconus.
12. Uses of slit lamp biomicroscope.
13. Describe Scleral contact lens.
14. Differentiate soft contact lens and RGP contact lens.
15. Different types of Illumination in slit lamp.
16. Name some of the staining methods used in contact lens.
17. Mention the materials of contact lens.
18. Contact lens staining techniques.
19. Layers of tear film.
20. Extended wear contact lens.
21. Mention layers of Cornea.
22. Push up test.

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B.Sc. Allied Health Sciences Third Year Semester-VI

November 2024 Examination

B.Sc. Ophthalmic Technology & Optometry

Time: 2.30 Hrs.

[Max. Marks: 80]

Systemic Diseases, Management of OT

Q.P Code : J6740

Your answers should be specific to the questions asked.

Draw neat labeled diagrams wherever necessary.

LONG ESSAY

2 X 10 = 20 Marks

1. Describe the procedures for sterilization of OT..
2. Describe the etiopathogenesis and clinical signs and symptoms of Thyroid eye disease.

SHORT ESSAY (Answer any 6)

6 X 5 = 30 Marks

3. Discuss fumigation.
4. Discuss autoclaving
5. Define types, signs and symptoms of hypertension
6. Explain the stages of diabetic retinopathy..
7. Discuss papilledema
8. Give the diagnostic procedures of cancer.
9. Sterilization techniques of OPD equipment.
10. Define Malaria with its life cycle.

SHORT ANSWERS (Answer any 10)

10 X 3 = 30 Marks

11. Sterilization of Applanation tonometry.
12. Define Meningitis, causes and its risk factors.
13. Explain WHO Classification of Vitamin A.
14. Mention the methods of operation theater cleaning.
15. Define Asthma, causes, triggers and symptoms.
16. Briefly explain some effects of Malnutrition.
17. Define helminthiasis and its ocular manifestations
18. What are the properties of cancer cell?
19. Name some of the Vegetables which contains Vitamin A.
20. How to sterilize contact lens?
21. Mention the treatment options for Malaria.
22. Write briefly about ethylene trioxide sterilization

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November 2024 Examination

Bachelor of Optometry

Time: 2.30 Hrs.

[Max. Marks: 80]

Optometric Optics and Dispensing Optics

Q.P Code : K6300

Your answers should be specific to the questions asked.

Draw neat labeled diagrams wherever necessary.

LONG ESSAY

2 X 10 = 20 Marks

1. What are progressive lenses? Discuss about various parameters required to fit Progressive lenses.
2. Describe the various types Aberrations in a lens and ways to reduce them.

SHORT ESSAY

6 X 5 = 30 Marks

3. Discuss Trial box and its contents
4. What are Polaroid lenses and their benefits?
5. Explain the steps of lens glazing.
6. Discuss about Bifocal lenses
7. Mention the various types of Ophthalmic lens material.
8. Difference between direct and indirect ophthalmoscope.

SHORT ANSWERS

10 X 3 = 30 Marks

9. Define refractive index and give the refractive index for CR39 and crown glass.
10. What are the benefits of antireflection coating?
11. Draw diagram of different forms of convex lens.
12. Give three uses of prism in ophthalmology.
13. What are the various Frame Materials?
14. Types of Nose bridge in spectacle frames.
15. Discuss in brief about Jackson Cross Cylinder
16. What is the advantage of aspheric lenses
17. Types of trifocal lens.
18. Draw and label the parts of a frame.

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Bachelor of Optometry

Time: 2.30 Hrs.

[Max. Marks: 80]

Contact Lens and Occupational Optometry

Q.P Code : K6310

Your answers should be specific to the questions asked.

Draw neat labeled diagrams wherever necessary.

LONG ESSAY

2 X 10 = 20 Marks

1. Discuss about the contact lens solutions, their properties and uses.
2. Classify contact lens. Discuss about the indications and contraindications of contact lenses.

SHORT ESSAY

6 X 5 = 30 Marks

3. Discuss about contact lens fitting in keratoconus.
4. Discuss properties of an ideal contact lens.
5. Write about disposable contact lens.
6. Write about insertion and removal techniques of Soft contact lens.
7. Discuss about the selection of a patient for contact lens fitting.
8. Describe CLARE in brief.

SHORT ANSWERS

10 X 3 = 30 Marks

9. Name corneal layers.
10. Mention 3 indications of therapeutic contact lenses.
11. Mention layers of tear film.
12. Define oxygen permeability and DK value.
13. Describe about Acanthamoeba keratitis.
14. Write parts of contact lens.
15. Mention causes of decentration of soft contact lens.
16. Mention 3 methods of disinfecting contact lens.
17. What is Hybrid contact lens?
18. Write types of soft contact lens materials?

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[Max. Marks: 80]

Systemic Diseases, Management of OT

Q.P Code : K6320

Your answers should be specific to the questions asked.

Draw neat labeled diagrams wherever necessary.

LONG ESSAY

2 X 10 = 20 Marks

1. Discuss the disinfection protocol for OT
2. Discuss the layout of operation theatre.

SHORT ESSAY

6 X 5 = 30 Marks

3. Enumerate the differences between optic neuritis & papilledema.
4. Discuss Fumigation
5. Enumerate ocular manifestation in Tuberculosis.
6. Preparation of sterile trolley for Cataract surgery.
7. What are the measures taken for medical emergencies?
8. Write a note on Marfan Syndrome.

SHORT ANSWERS

10 X 3 = 30 Marks

9. Mention 3 signs of Thyroid Eye disease.
10. Effects of Hypertension on Eye.
11. Where is Autoclaving done?
12. Mention 3 uses of Lignocaine.
13. Mention the uses of Atropine.
14. List 3 ocular signs in Leprosy.
15. Write the management of Malnutrition.
16. Mention 3 Connective Tissue Disorder.
17. Mention Causes of Helminthiasis.
18. List 3 ocular manifestation in HIV.

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