

5th Semester End Term Examination: Dec - 2022.

: Low Vision Care : B. Optometry Subject Course

: 50

Full Marks

Time : 2 Hours. Roll No:

Instructions to the Candidates:

- Read the question paper very carefully.
- Start writing from 2nd page onwards; Don't Write On The 1st Page Backside.
 - Question Paper is divided into Three Parts -A, B & C.
 - Part-A is containing 10 multiple choice questions.
- Part- B containing SIX questions out of which FOUR questions are to be answered.
- Part C containing FOUR questions out of which TWO questions are to be answered.
 - Do not write anything except your Roll No. on the question paper.
- Possession of Mobile Phones or any kind of Written Material, Arguments with the Invigilator or Discussing with Co-Student will come under Unfair Means and will Result in the Cancellation of the Papers.

PART - A

[10x1=10]

1. i) WHO headquarters are present in

a) Copenhagen

c) Geneva

Multiple Choice Questions

d) Prague b) Zurich

ii) Developmental age identifies an individual's

b) Sensory function

a) Motor function c) Embryology

d) Cognitive skills

iii) IND stands for

b) Justifiable notifying disturbance d) Just noticed Disturbance a) Just noticeable differences c) Just noticed dioptre

b) Visual Acuity and contrast sensitivity iv) The two visual functions included in WHO's definition of Low vision are a) Visual acuity and Stereopsis

d) Visual field and colour perception c) Visual field and visual acuity

v) Which of the following causes avoidable blindness?

b) Optic atrophy a) Retinitis Pigmentosa

d) Cataract

c) Glaucoma

vi) AUL stands for?		
a) Articles of daily living	b) Activities of daily living	
c) Assisted diurnal limitations	d) None of the following	

categories of Vision impairment? vii) According to WHO there are

d) 7 c)3

viii) In an RP patient, where he is restricted to remain indoors it is a

d) Handicap b) Disorder device ix) CCTV is a/an. a) Impairment c) Disability

x) Which of the following diseases cause peripheral vision loss? d) Software c) Electronic

b) Non Optical

a) Optical

b) Optic neuritis d) Glaucoma c) Stargardt disease a) Macular oedema

PART - B

Answer any FOUR out of SIX

[4x5=20]

2. Write a short note on the RPWD and rights associated with Visually impaired

3. Describe the types of magnification. Define RSM, RDM and LVM

4. Write a short note on filters and their significance.

5. Write a note on Achromatopsia.

6. Elaborate on the factors affecting coping mechanisms from vision loss.

7. What is contrast sensitivity? How is CS evaluated and recorded? Mention the importance of CS.

PART - C

[2x10=20]

Answer any TWO out of FOUR

8. Explain a condition where colour vision is severely impaired. Describe 3 methods to rehabilitate a person with colour vision impairment. 9. Write about: Usher's disease, Lawrence Moon Bardle Biedle Syndrome and Rod Cone dystrophy. Explain what is common in the three diseases.

10. What are macular function test? Elaborate on Amsler Grid. State the

11. Define low vision. Classify low vision according to WHO. Describe importance Kestenbaum's principle for magnification and calculate the magnification for of history taking in low vision testing. Write down the role of optometrist in



5th Semester End Term Examination: Dec - 2022.

Subject

: Systemic Diseases

Course

: B. Optometry

Full Marks : 70 Roll No:

Time : 3 Hours.

Instructions to the Candidates:

Read the question paper very carefully.

- Start writing from 2nd page onwards; Don't Write On The 1st Page Backside
- Question Paper is divided into Three Parts -A, B & C.
- Part-A is containing 10 multiple choice questions.
- Part- B containing EIGHT questions out of which SIX questions are to be answered.
- Part C containing FOUR questions out of which THREE questions are to be answered.
- Do not write anything except your Roll No. on the question paper.
- Possession of Mobile Phones or any kind of Written Material, Arguments with the Invigilator or Discussing with Co-Student will come under Unfair Means and will Result in the Cancellation of the Papers.

	PART - A
Multiple Choice Questions	[10x1=10]
1. i) Abnormal growth of blood vesses	
a) Neovascularization	b) Neovascularization
c) Natovasculazing	d) Striaberation
ii) Central retinal artery is abranch	of
a) Carotid artery	b) Ophthalmic artery
c) Chorio-capillaries	d) Supero temporal artery
iii) Risk factor for Diabetic retinopat	thy include both il and iil
a) Duration of diabetes & Hyperlipidaemia	b) Severity of diabetes and cancer
c) Stroke and cancer	d) Hypertesnion and hyperglycemia
iv) Amaurosis fugax requires	approach
a) Cardio vascular	b) Cerebro vascular
c) Ophthamic	d) All of the above
v) Migraines may cause	
a) Nausea and blurring of vision	b) transient ocular ischemia
c) None of the above	d) Encephalitis

vi) New blood vessels start formic du a) Necrosis		
c) Ischemia	b) Degeneration	
	d) Hypertrophy	
a) Haemorrhaging	b) Exudative	
c) Necrotizing	d) Atrophying	
viii) SLE stands for		
a) System of Leukemic erythocytopenia	b) Sarcoidosis Lemo Erthema	
c) Sustained Lupin ecchymosis	d) Systemic Lupus Erythemator	ıs
ix) Which of the following will requir	e CT Scan as an auxiliary testing?	
a) TAO	b) Retinopathy	
c) Xerophthalmia	d) CMV infection	
x) Myasthenia gravis rece	eptors	
a) Acetylcholine	b) Cholinergic	
c) Sodium	d) Potassium	
	PART - B	
Answer any SIX out of EIGHT		[6x5=30]
2. Sjogren's disease and associated	dry eye	
3. Explain in brief- Behcet's disease	e.	
4. Myasthenia Gravis.		
5. Explain a case of ocular emerger	ncv	
The state of the s		

- 6. Explain consanguinity marriages in very brief. Describe Pedigree charting. Mention an ocular disease which is contracted as a result of the same.
- 7. Leprosy and ocular implication.
- 8. Write a short note on genetic counselling and genetic engineering.
- 9. Explain briefly deficiency diseases and genetic diseases.

PART - C

Answer any THREE out of FOUR

[3x10=30

- 10. Classify the stages of Hypertension. Explain the pathogenesis behind high systemic blood pressure. Describe briefly the classic signs of Hypertensive retinopathy.
- 11. Explain three various auto immune diseases and their underlying pathogenesis. Explain briefly their ocular implications.
- 12. Graves diseases and TAO: Etiology, Risk factors, Work up, Differential diagnosis and Management
- 13. Explain the importance of various vitamins in our body, specifically throw light upon the deficiency of Vitamin A and Xerophthalmia.



5th Semester End Term Examination: Dec - 2022.

Subject

: Research Methodology & Biostatistics

Course **Full Marks**

: B. Optometry

: 70

Roll No:

Time : 3 Hours.

Instructions to the Candidates:

Read the question paper very carefully.

- Start writing from 2nd page onwards; Don't Write On The 1st Page
- Question Paper is divided into Three Parts -A, B & C.

Part-A is containing 10 multiple choice questions.

- Part- B containing EIGHT questions out of which SIX questions are to be
- Part C containing FOUR questions out of which THREE questions are to be
- Do not write anything except your Roll No. on the question paper.
- Possession of Mobile Phones or any kind of Written Material, Arguments with the Invigilator or Discussing with Co-Student will come under Unfair Means and will Result in the Cancellation of the Papers.

PART - A

Multiple Choice Questions

[10x1=10]

- 1. i) Which one of the following is not a measure of mortality
 - a) Net reproduction rate

b) Crude death rate

c) Standardized death rate

- d) Age specific death rate
- ii) In sampling method of statistical investigation, the term "population" refers to
 - a) A collection of human beings
- b) A collection of non living thing
- c) Collection of both having common character
- d) None of the above
- iii) In sampling method of statistical investigation, we take observation on
 - a) Each observation of the population
- b) Only a small part of population

- d) None of the above
- iv) The correlation coefficient always lies between
 - a) 0 and 1

b) 0 and ∞

c) -∞ and ∞

d) -1 and 1

a) Net reproduction rate	
이 경기 보다는 사람들이 나를 받는데 사람들이 살아가지 않는데 하는데 살아 없는데 얼마를 받는데 없다.	b) Crude death rate
c) Standardized death rate	d) Specific death rate
vi) Mortality is related to	
a) Birth	b) Death
c) Migration	d) None of the above
vii) Biostatistics is the branch of sta-	tistics that deals with
a) Living objects	b) Biological events
c) Biography	d) None of the above
viii) When the participants are not	revealed in the study is called
a) Confidentiality	b) Anonymity
c) Ethics	d) Discretion
ix) IRB full form	
a) Internal review board	b) Institutional rating board
c) Institutional review board	d) None of the above
x) Hypothesis are how many types	?
a) 2	b) 1
c) 3	d) 0
	PART - B
Answer any SIX out of EIGHT	[6x5=30]
2. What is research methodolog	y?
3. What is research problem?	
4. Write a short note on research	n design
5. Explain the types of data colle	
6. What is research proposal	
7. Explain research process.	
8. Explain hypothesis and its typ	pes
9. What is applied research?	
	PART - C
Answer any THREE out of FO	

11. Describe ethical issues in research?

13. Describe sample size determination?

12. What are sampling methods, explain it types?



5th Semester End Term Examination: Dec - 2022.

Subject

: Binocular Vision 1

Course

: B. Optometry

Full Marks :

: 50

Roll No:

Time : 2 Hours.

Instructions to the Candidates:

Read the question paper very carefully.

- Start writing from 2nd page onwards; <u>Don't Write On The 1st Page Backside</u>.
 - Question Paper is divided into Three Parts -A, B & C.

Part-A is containing 10 multiple choice questions.

- Part- B containing SIX questions out of which FOUR questions are to be answered.
- Part C containing FOUR questions out of which TWO questions are to b answered.
- Do not write anything except your Roll No. on the question paper.
- Possession of <u>Mobile Phones</u> or any kind of <u>Written Material</u>, <u>Argument with the Invigilator or Discussing with Co-Student will come under <u>Unfamental</u> and will <u>Result</u> in the <u>Cancellation of the Papers</u>.
 </u>

PART - A

Multiple Choice Questions

[10x1=10]

- 1. i) Physiological diplopia is manifest in case of object situated
 a) On horopter
 b) Within panum's space
 c) Outside panum's space
 d) All of this
 - ii) Example of monocular clues except
 - a) Looming
- b) Disparate retinal image
 - c) Motion parallax
- d) Aerial prospective
- iii) Occlusion is a treatment for
 - a) Toxoplasmosis
- b) Exophoria

c) Amblyopia

- d) Refractive error
- iv) Prism bar cover test is used to detect
 - a) Squint

b) Amblyopia

c) Steropsis

- d) None of these
- v) Hirschberg test is used to detect
 - a) Heterophoria
- b) Heterotropia

c) Diplopia

d) None of these

h) Rinogular
b) Binocular
d) None of these
b) Binocular
d) None of these vo eyes
b) Binocular
lopment so that the visual axes are directed at the
b) Sensory mechanism d) None of these
of two eyes
b) Sensory mechanism d) None of these
<u>PART - B</u>

[4x5=20]

- 2. Herring's law of equal innervation
- 3. Write a short note on Horopter?
- 4. What is sensory adaptation?
- 5. Local and global stereopsis

vi) Vision with single eye

- 6. Grades of binocular vision
- 7. Extraocular muscles

PART - C

Answer any TWO out of FOUR

[2x10=20]

- 8. What is BSV? Describe the advantages of BSV? What are the prerequisites of BSV? How is BSV measured using Synaptophore?
- 9. Discuss the classic features and management of Convergence Insufficiency.
- 10. Define Diplopia. Describe crossed and uncrossed Diplopia. Elaborate on the management techniques for a phoria case.
- 11. What is accommodative facility? How do we measure it? Explain the process.



5th Semester End Term Examination: Dec - 2022.

Subject

: Geriatric Optometry and Paediatric Optometry

Course

: B. Optometry

Roll No:

Full Marks

: 50

Time : 2 Hours.

Instructions to the Candidates:

Read the question paper very carefully.

Start writing from 2nd page onwards; Don't Write On The 1st Page Backside.

Question Paper is divided into Three Parts -A, B & C.

Part-A is containing 10 multiple choice questions.

Part- B containing SIX questions out of which FOUR questions are to be answered.

Part C containing FOUR questions out of which TWO questions are to be answered.

Do not write anything except your Roll No. on the question paper.

Possession of Mobile Phones or any kind of Written Material, Arguments with the Invigilator or Discussing with Co-Student will come under Unfair Means and will Result in the Cancellation of the Papers.

PART - A

Multiple Choice Questions

[10x1=10]

- 1. i) Remedial Therapy for myopia is
 - a) Therapy with atropine
 - c) Therapy with glasses
 - ii) Absence of crystalline lens from birth
 - a) Congenital aphakia
 - c) Congenital polycoria
 - iii) Congenital absence of iris is called
 - a) Aniridia
 - c) PPM
 - iv) Abnormally eccentric placed pupil is known as a) Corectopia
 - c) Polycoria

- b) Therapy with contact lens
- d) None of these
- b) Congenital aniridia
- d) None of these
- b) Polycoria
- d) None of these
- b) Polyopia
 - d) None of these

a) Microcorneac) Buphthalmos	b) Megalocornea d) Corneal plana
vi) If the horizontal diameter condition is called	of the cornea is more than 13mm since birth, the
a) Microcornea	b) Megalocornea
c) Buphthalmos	d) Corneal plana
vii) Congenital ptosis is due	to weakening of
a) LPS muscle	b) Orbicularis oculi
c) Muller muscle	d) None of these
viii) HOTV test should be do	ne at a distance of
a) 3 meter	b) 6 meter
c) 1 meter	d) Infinity
ix) LEA symbol test is used for	or avoiding crowding phenomenon in
a) Amblyopia	b) Aphakia
c) Myopia	d) Hyperopia
x) Which test is based on pen	dular eye movement?
a) OKN	b) PFT
c) VEP	d) None of these
	PART - B
Answer any FOUR out of	<u>SIX</u> [4x5=20]
2. Write a short note on m	orphological change of eye in adults •
3. Write a short note on hy	pertension
4. Write a short note on di	abetes.
5. Write a short note cereb	rovascular diseases •
6. What is cataract?	

7. Write a short note on history taking in pediatric patients •

PART - C

Answer any TWO out of FOUR

[2x10=20]

- 8. Discuss hypertensive retinopathy and its grades.
- 9. Discuss diabetic retinopathy and its grades.
- 10. Describe optometric examination in older patients.
- 11. Discuss spectacle dispensing in elderly patients.



5th Semester End Term Examination: Dec - 2022.

Subject

: Contact Lens I

Course

: B. Optometry

Full Marks : 50 Roll No:

Time : 2 Hours.

Instructions to the Candidates:

Read the question paper very carefully.

Start writing from 2nd page onwards; Don't Write On The 1st Page

Question Paper is divided into Three Parts -A, B & C.

Part-A is containing 10 multiple choice questions.

Part- B containing SIX questions out of which FOUR questions are to be

Part C containing FOUR questions out of which TWO questions are to be

Do not write anything except your Roll No. on the question paper.

Possession of Mobile Phones or any kind of Written Material, Arguments with the Invigilator or Discussing with Co-Student will come under Unfair Means and will Result in the Cancellation of the Papers.

PART - A

Multiple Choice Questions

[10x1=10]

1. i) The components of care and maintenance

a) Daily cleaner

b) Rinsing solution

c) Lubricants

d) All of the above

ii) Purpose of care and maintenance

a) Clean lenses and good comfort b) Good vision

c) Safe lens wear

d) All of the above

iii) Wearing RGP lens should provide

a) Good visual acuity with comfort b) No ocular insult

c) No facial appearance

d) All of the above

iv) The degree of fluorescein pooling can be graded as

a) Slightly steep

b) Steep

c) Very steep

d) All of the above

v) Ideal lens movement during fitting assessment is

a) Smooth

b) Rocky

c) Apical

d) All of the above

vi) Dynamic fitting assessment is done by observing a) Decent ration & stability b) Movement after blinking c) Movement in lateral gaze d) All of the above vii) Post fitting assessment is done by assessing a) Dynamic fit b) Static fit c) Vision assessment d) All of the above viii) Preliminary measures for RGP a) HVID b) Radius of curvature c) Lid tonicity d) All of the above ix) Patient selection criteria for RGP a) High motivation of patient b) Moderate to high refractive error c) Corneal toricity d) All of the above x) RGP lens fabrication techniques a) Lathing b) Molding c) Both a & b. d) None of the above PART - B Answer any FOUR out of SIX 2. Write a short note on history of contact lens 3. What is back and front vertex power?

PART - C

Answer any TWO out of FOUR

4. What is magnification?5. What is accommodation?6. What is convergence?7. What is vertex distance?

[2x10=20]

- 8. Discuss optics of contact lenses.
- 9. Describe the properties of contact lens materials
- 10. Discuss indication and contraindications of contact lenses
- 11. Discuss insertion and removal techniques of contact lens practice