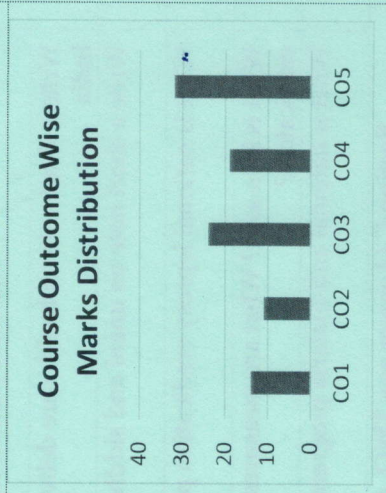
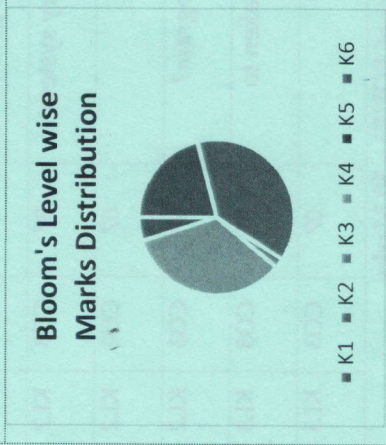


CO1	Aware of traditional health care systems
CO2	Aware of latest healthcare systems
CO3	knowledgeable about the telemedicine practices in India
CO4	Understand the traditional treatment methods
CO5	Correlates the treatment of ocular diseases using telemedicine with ocular refractive anomalies

GRAPHICAL REPRESENTATION



	ARKA JAIN University Jharkhand		[03-12-2025] END SEM EXAMINATION School of Health & Allied Sciences
Subject Name Indian Medicine & Telemedicine	Session Odd, 2025-26		
Semester III	Year Nov, 2025		
Time: 3 Hour Max. Marks : 70	<ul style="list-style-type: none"> Start writing from 2nd page onwards; don't Write on the 1st Page Backside Answer all Questions of Section A (Compulsory) Answer Any <u>Four</u> out of Six of Section B Answer Any <u>Two</u> out of Four of Section C Possession of <u>Mobile Phones</u> or any kind of <u>Written Material, Arguments with the Invigilator or Discussing with Co-Student</u> will come under <u>Unfair Means</u> and will <u>Result</u> in the <u>Cancellation of the Papers.</u> 		
Knowledge Level (KL)	K1 : Remembering K3 : Applying K5 : Evaluating K2 : Understanding K4 : Analysing K6 : Creating		

Q.N	QUESTIONS	Marks	COs	KL
1				
i	Elements of primary health care include all of the following except a) An adequate supply of safe water b) Providing essential drugs c) Sound referral system d) Health education	01	CO2	KL1
ii	Which of the following is a new concept in Primary Health Care? a) Equitable distribution b) Community participation c) Qualitative inquiry d) Primary Health care	01	CO2	KL1
iii	Function of PHC are a) Referral services b) Family planning c) Basic laboratory services d) All of the above	01	CO2	KL2
iv	National rural health mission (NHRM) was launched by a) 2001	01	CO2	KL3

v	b) 2003 c) 2005 d) 2007 Which of the following is the primary component of Janani Shishu Suraksha Yojna a) Early registration b) Institutional birth c) Post-delivery care d) All of the above	01	CO2	KL2
vi	Mantra of dharma, artha, kama and moksha is a) Hitayu b) Sukhayu c) Arogya d) None of these	01	CO3	KL3
vii	NPCB Stands for a) National Program for control of blindness b) National Population control blind c) National protection control blind d) None of the above	01	CO3	KL3
viii	The third level of Indian health care system is called as a) Tertiary health care b) Private Hospitals c) PHCs d) All of the above	01	CO2	KL2
ix	The first interaction point between the medical officer and the village community a) District Hospital b) PHC c) Medical colleges d) Regional Institutes	01	CO2	KL2
x	Examples of non-communicable diseases are a) Diabetes b) Hepatitis A, B&C c) Covid-19 d) All of the above	01	CO2	KL1
xi	ASHA Stands for a) Accredited social health activist b) Associated social health activist	01	CO2	KL1

xii	c) Accountable social health activist d) None of the above A census contain a) Demographic data b) Economic data c) Social data d) All of the above	01	CO2	KL2
Section B (Answer any FOUR out of SIX) – 28 Marks (Each question Carry 07 Marks)				
Q. No.	QUESTIONS	Marks	COs	KL
2	Write a short note on introduction to Ayurveda	07	CO2	KL2
3	Write a short note on health care delivery system in India	07	CO3	KL2
4	Write a short note on unani and siddha	07	CO2	KL2
5	What is national leprosy eradication program?	07	CO3	KL2
6	What is kala-azar? What are measures taken to eradicate it?	07	CO3	KL3
7	What is national anti-malaria program?	07	CO3	KL3
Section C (Answer any TWO out of FOUR) – 30 Marks (Each question Carry 15 Marks)				
Q. No.	QUESTIONS	Marks	COs	KL
8	Describe principal and methods of epidemiology	15	CO3	KL2
9	Discuss issues in health care delivery system in India	15	CO4	KL2
10	Discuss health scenario of India	15	CO3	KL2
11	Describe community participation in health care delivery system	15	CO2	KL3

CO1	Understand about the characteristics of bacteria, viruses, fungi and parasites.
CO2	Understand of the principles of sterilization and disinfection in hospital and ophthalmic practice.
CO3	Understand of the pathogenesis of the diseases caused by the organisms in the human body with particular reference to the eye infections.
CO4	Understand basic principles of diagnostic ocular Microbiology.

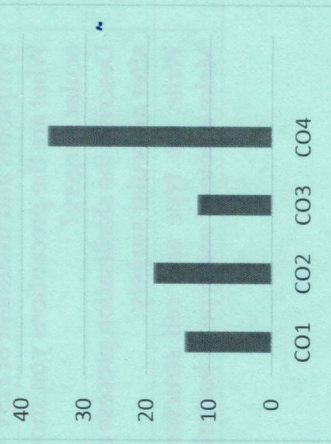
GRAPHICAL REPRESENTATION

Bloom's level wise marks distribution



■ K1 ■ K2 ■ K3 ■ K4 ■ K5 ■ K6

course outcome wise mrks distribution



ARKA JAIN University
Jharkhand



[19-11-2025]

END SEM EXAMINATION
School of Health & Allied Sciences

Program	Bachelor of Optometry	
Subject Name	Ocular microbiology	Session Odd, 2025-26
Semester	III	Year Nov, 2025
Time: 2 Hour Max. Marks: 50	<ul style="list-style-type: none"> Start writing from 2nd page onwards; don't Write on the 1st Page Backside Answer all Questions of Section A (Compulsory) Answer Any Four out of Six of Section B Answer Any Two out of Four of Section C 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. 	
Knowledge Level (KL)	K1 : Remembering K2 : Understanding	K3 : Applying K4 : Analysing K5 : Evaluating K6 : Creating

Section A (Each question Carry 01 Marks from Q1-i to x) – 10 Marks

Q. N 1	QUESTIONS	Marks	COs	KL
i	Examples of commensals that can found in eye - a) Staphylococcus epidermidis b) E. coli c) xerosis d) None of the above.	01	CO1	K2
ii	An infection superimposed on a primary infection that may be by commensal or a pathogen called as- a) Primary infection b) Reinfection c) Secondary infection d) Cross infection.	01	CO3	K3
iii	Pharmaceuticals waste consists of a) Needles b) Drugs c) Scalpel d) Bacteria	01	CO2	K4
iv	Cause of malaria - a) Aedes mosquito b) Black flies c) Anopheles mosquito d) Chrysops fly	01	CO3	K4

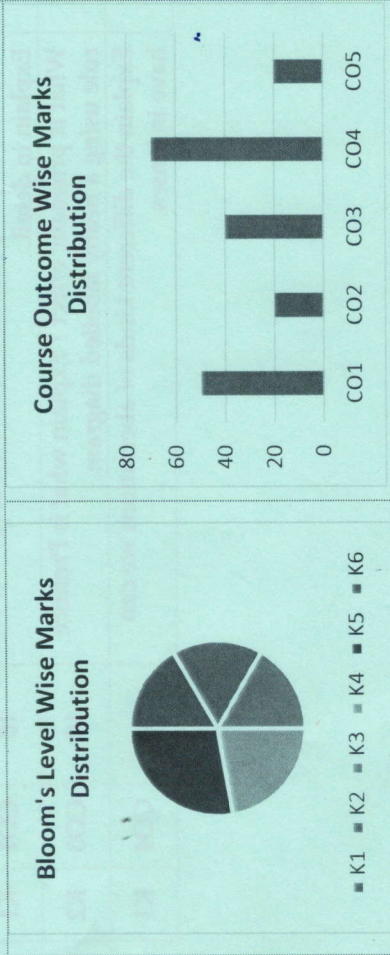
v	Pressurized containers are consists of a) Ethylene oxide b) Polymethane c) Hydrochloric acid d) Arsenic	01	CO2	K5
vi	Human anatomical wastes were segregated in which color of container a) Yellow b) Blue c) Green d) Red	01	CO4	K1
vii	Hospital acquired infections are also known as a) Nosocomial infection b) Viral infection c) Parasitic infection d) Fungal infection	01	CO2	K3
viii	Examples of a true membrane- a) Plasma membrane b) Ribosomes c) Nucleolus d) Cytoskeleton	01	CO1	K4
ix	DNA virus except a) Parvovirus b) Papovirus c) Poxvirus d) Picornavirus	01	CO1	K5
x	Follicular conjunctivitis can be seen in a) Chlamydial trachomatis b) Viral conjunctivitis c) Bacterial conjunctivitis d) Both a & b	01	CO1	K1
Section B (Answer any FOUR out of SIX) - 20 Marks (Each question Carry 5 Marks)				
Q. No.	QUESTIONS	Marks	COs	KL
2	How do you differentiate HSV and HZO ocular effect after identify its sign and symptoms. Write down the management of each type.	05	CO4	K5
3	What do you understand by the term normal flora? Discuss about type of normal flora?	05	CO4	K6
4	Discuss the replication process of the virus that they can effect a healthy host cell.	05	CO1	K5

5	How do you identify acanthamoeba eye infection? What is the mode of transmission and management of acanthamoeba eye infection?	05	CO4	K3
6	Write a short note on waste management in hospital practice.	05	CO2	K2
7	Make a short note on chlamydia eye effect and its treatment and how will you control the chlamydia infection.	05	CO1	K4
Section C (Answer any TWO out of FOUR) - 20 Marks (Each question Carry 10 Marks)				
Q. No.	QUESTIONS	Marks	COs	KL
8	Write down general characteristics and structure of virus with a diagram? Write down the sign and symptoms and treatment of HSV virus?	10	CO2	K5
9	What are the precautions you should take before the ocular surgery?	10	CO4	K4
10	Describe the sterilisation process of OT instrument after an ocular surgery.	10	CO4	K3
11	Write the type and cell structure of the bacteria? Make a note of one type of bacterial eye infection.	10	CO3	K5

CO- Course Outcomes, **KL-** Knowledge Level, **PO** – Program Outcome

CO1	Understand the concept of different phenomenon of light & basic of Ophthalmic prism.
CO2	Understand the concept & terminology use to describe the ophthalmic lenses
CO3	Understand the concept of different types & design of ophthalmic lenses
CO4	Understand the concept of Prismatic effect
CO5	Apply the Prentice's Rule

GRAPHICAL REPRESENTATION



ARKA JAIN University
Jharkhand

[24-11-2025]
END SEM EXAMINATION
School of Health & Allied Sciences

Program	Bachelor of Optometry	
Subject Name	Optometric Optics I	Session Odd, 2025-26
Semester	III	Year Nov, 2025 *
Time: 2 Hour Max. Marks : 50	<ul style="list-style-type: none"> Start writing from 2nd page onwards; <u>don't Write on the 1st Page Backside</u> Answer all Questions of Section A (Compulsory) Answer Any Four out of Six of Section B Answer Any Two out of Four of Section C Possession of Mobile Phones or any kind of Written Material, Arguments with the Invigilator or Discussing with Co-Student will comes under Unfair Means and will Result in the Cancellation of the Papers. 	
Knowledge Level (KL)	K1 : Remembering	K3 : Applying
	K2 : Understanding	K4 : Analysing
		K5 : Evaluating K6 : Creating

Q. N1	QUESTIONS	Marks	COs	KL
i	X is an optical defect due to which a comet-like image is formed instead of a point image. X is a) Coma c) Curvature b) Astigmatism d) Distortion	01	CO2	K4
ii	Find the magnification of a convex lens if an object is placed 30 cm in front of a convex lens which has a focal length of 15 cm. a) +1 c) -0.5 b) +0.5 d) -1	01	CO1	K4
iii	In the case of remote sensing, which of the following waves is not used? a) X rays b) Visible ray c) Thermal infrared Ray d) Radio waves	01	CO1	K2
iv	If distance PD is 66mm & the near PD is 60mm, then what is the segment inset for each eye? a) 4mm b) 3mm c) 2mm d) 5mm	01	CO1	K3

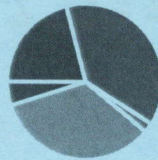
v	The rays of different colours fail to converge at a point after going through a converging lens. This defect is called a) Coma b) Spherical Aberration c) Chromatic Aberration d) Distortion	01	CO4	K3
vi	Normal pentoscopic tilt is a) $10^\circ - 14^\circ$ b) $5^\circ - 7^\circ$ c) $9^\circ - 11^\circ$ d) $14^\circ - 17^\circ$	01	CO4	K5
vii	For pentoscopic angle optical centre must be moved up above pupil centre by 1mm for a) 3° b) 4° c) 2° d) 5°	01	CO4	K5
viii	$+3.50 \text{ DSP} / +1.5 \text{ DC} \times 90^\circ$. What is the S. Q.? a) $+5.25 \text{ D}$ b) -5.25 D c) $+5.00 \text{ D}$ d) $+5.50 \text{ D}$	01	CO5	K5
ix	Normal vertex distance is a) (12 - 13) mm b) (8 - 10) mm c) (14 - 15) mm d) None of the above	01	CO4	K5
x	Mark the correct option :- a) If the incident rays are converging, we have a real object. b) If the final rays are converging, we have a real image c) The image of a virtual object is called a virtual image d) If the image is virtual, the corresponding object is called virtual object.	01	CO5	K5
Section B (Answer any FOUR out of SIX) - 20 Marks (Each question Carry 5 Marks)				
Q. No.	QUESTIONS	Marks	COs	KL
2	What is Sag formula? Explain.	05	CO3	K3
3	What do you understand by Vertex Distance? Does it have any bearing with effective power? Explain with a diagram.	05	CO4	K2
4	Explain the law of refraction with a neat labelled diagram.	05	CO1	K1
5	If a -6.00 D sphere (made in 1.5) is tilted 30° what will be the induced sphere & cylinder?	05	CO3	K4
6	Do toric transposition of the following : $-1.5 \text{ Dspl} / +2.25 \text{ Dcycl} @ 60^\circ$ (BC +5.0)	05	CO4	K4

7	Do simple transposition with cross section : a) $+2.25 \text{ Dspl} / -3.50 \text{ DC} \times 70^\circ$ b) $-3.25 \text{ Dspl} / -1.25 \text{ DC} \times 160^\circ$	05	CO3	K5
Section C (Answer any TWO out of FOUR) - 20 Marks (Each question Carry 10 Marks)				
Q. No.	QUESTIONS	Marks	COs	KL
8	Write a short note on spherical, cylindrical & spherocylindrical lenses with a neatly labelled diagram.	10	CO2	K2
9	What is Fresnel prism & what are its uses ? Explain in detail.	10	CO1	K1
10	What is prismatic effect ? Explain what is Prentice rule using a neatly labelled diagram.	10	CO3	K2
11	Explain the different kinds of aberrations we can have in lenses.	10	CO4	K1

CO1	Understand about the various optical constants of the eye & their measurements
CO2	Understand the various aspects of vision and measuring visual acuity
CO3	Have knowledge about various optical defects of the eye
CO4	Analyse about various refractive anomalies of the eye
CO5	Apply all the theoretical skills on practical purpose

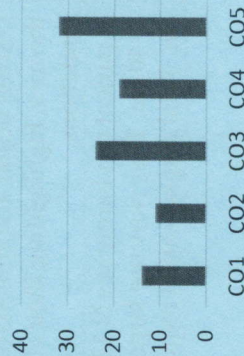
GRAPHICAL REPRESENTATION

Bloom's Level wise Marks Distribution



■ K1 ■ K2 ■ K3 ■ K4 ■ K5 ■ K6

Course Outcome Wise Marks Distribution



[21-11-2025]
END SEM EXAMINATION
School of Health & Allied Sciences

Program	Bachelor of Optometry	
Subject Name	Visual Optics I	Session Odd, 2025-26
Semester	III	Year Nov, 2025
Time: 2 Hour Max. Marks : 50	<ul style="list-style-type: none"> Start writing from 2nd page onwards; don't Write on the 1st Page Backside Answer all Questions of Section A (Compulsory) Answer Any Four out of Six of Section B Answer Any Two out of Four of Section C Possession of Mobile Phones or any kind of Written Material, Arguments with the Invigilator or Discussing with Co-Student will comes under Unfair Means and will Result in the Cancellation of the Papers. 	
Knowledge Level (KL)	K1 : Remembering	K3 : Applying
	K2 : Understanding	K4 : Analysing
		K5 : Evaluating
		K6 : Creating

Section A (Each question Carry 01 Marks from Q1-i to x) - 10 Marks

Q. N1	QUESTIONS	Marks	COs	KL
i	How many cardinal points present in Schematic eye: a) 6 b) 4 c) 2 d) 1	01	CO1	K2
ii	What is keratometry used to measure? a) Axial length of the eye b) Curvature of the cornea c) Depth of the anterior chamber d) Thickness of the retina	01	CO2	K4
iii	The line joining fixation point and center of rotation is called: a) Optical axis b) Visual axis c) Fixation axis d) Pupillary axis	01	CO3	K2
iv	Aberrations are corrected by: a) Single vision lens b) PALs c) Bifocal lens d) Double lens	01	CO5	K3
v	Which part of the eye is most responsible for converging light to a focus on the retina? a) Cornea b) Lens c) Retina d) Pupil	01	CO1	K2

7	What is keratometry? Discuss its types and outline the procedure, mentioning its clinical applications and possible sources of error.	05	CO5	K5
Section C (Answer any TWO out of FOUR) - 20 Marks (Each question Carry 10 Marks)				
Q. No.	QUESTIONS	Marks	COs	KL
8	Discuss different types of visual acuity charts, comparing applications, and limitations in clinical practice.	10	CO3	K4
9	Describe ocular aberrations, their types, and explain their clinical applications in refractive corrections and visual optics	10	CO5	K5
10	Discuss ocular accommodation and its major theories, highlighting their clinical relevance and limitations.	10	CO3	K2
11	A patient can barely see N 12 at a reading distance of 40 cm. They now use large print book N 24 at 30 cm. Total magnification required for the patient?	10	CO4	K5

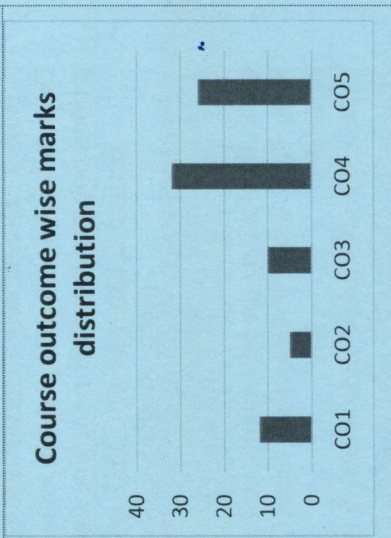
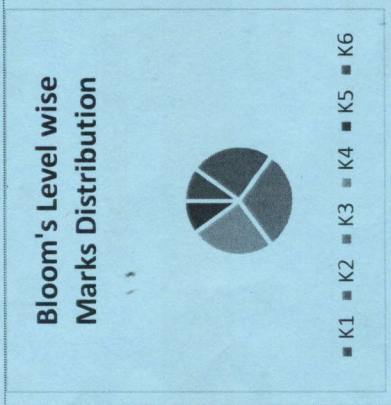
vi	Colour vision in human eyes is the function of photoreceptor cells named: a) Rods b) Cones c) Blind spot d) Fovea	01	CO2	K5
vii	Out of focus aberration creates which type of image in report a) Fuzzy image. b) Sharp image c) Virtual image d) None of the above	01	CO5	K4
viii	At birth child is generally _____ a) Myopic b) Hypermetropic c) Emmetropic d) Emmetrized	01	CO1	K2
ix	The central part of the crystalline lens is known as the: a) Capsule b) Cortex c) Nucleus d) Posterior chamber	01	CO2	K1
x	Which of the following best describes the visual axis of the eye? a) The line connecting the center of the cornea to the center of the retina. b) The line of light entering the eye c) The path of light focused on the fovea d) The line connecting the pupil to the visual target	01	CO3	K2

Section B (Answer any FOUR out of SIX) - 20 Marks
(Each question Carry 5 Marks)

Q. No.	QUESTIONS	Marks	COs	KL
2	Define chromatic aberration in the eye and explain how its longitudinal and transverse components affect image clarity and visual performance.	05	CO5	K5
3	What are the Gullstrand and Reduced eye models, and how do they simplify understanding ocular optics and its clinical applications?	05	CO3	K2
4	Write a short note on ocular axes and angles with a well-labelled diagram, highlighting their clinical relevance.	05	CO2	K1
5	State the purpose of color vision testing, classify its main types with examples, and explain the underlying theories of color vision.	05	CO3	K3
6	Briefly discuss (a) Diffraction and (b) Polarization, describing their fundamental principles, classifications, and optical importance in relation to the eye and vision, supported with appropriate examples.	05	CO4	K4

CO1	Understand and application of the refractive instrument
CO2	Understand & design, application and use of refractive instrument use in refraction room
CO3	Understand the optics and applying the basic functions of posterior segment diagnostics
CO4	Understand the optics and applying the basic functions and importance of examination of anterior segment
CO5	Understand and applying the various tools to measure ocular condition

GRAPHICAL REPRESENTATION



[26-11-2025]
END SEM EXAMINATION
School of Health & Allied Sciences

Program	Bachelor of Optometry	
Subject Name	Optometric Instruments	
Semester	III	Session Year
		Odd, 2025-26 Nov, 2025
Time: 2 Hour Max. Marks : 50	<ul style="list-style-type: none"> Start writing from 2nd page onwards; don't Write on the 1st Page Backside Answer all Questions of Section A (Compulsory) Answer Any Four out of Six of Section B Answer Any Two out of Four of Section C Possession of <u>Mobile Phones</u> or any kind of <u>Written Material, Arguments with the Invigilator or Discussing with Co-Student</u> will come under <u>Unfair Means</u> and will <u>Result</u> in the <u>Cancellation of the Papers.</u> 	
Knowledge Level (KL)	K1 : Remembering K2 : Understanding	K3 : Applying K4 : Analysing K5 : Evaluating K6 : Creating

Q. N	QUESTIONS	Marks	COs	KL
1				
i	Cycloplegics are used in retinoscopy in patients with: A) High hypermetropia B) High myopia C) High astigmatism D) Aphakia patients	01	CO1	K1
ii	In a slit lamp the eyepiece usually has a lens of A) + 10D B) + 20D C) + 22D D) + 40D.	01	CO3	K2
iii	The red-free filter enhances contrast by removing which color? A) Blue B) Yellow C) Red D) Green	01	CO3	K3
iv	Which lens is most commonly used in indirect ophthalmoscopy? A) 90D B) 78D	01	CO4	K4

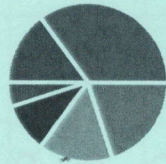
v	C) 20D D) 60D In indirect Ophthalmoscopy the image is A) Real B) Inverted C) Magnified D) All of these.	01	CO4	K4
vi	A keratometer reads 43.00 D at 180° and 44.25 D at 90°. What type of astigmatism is present? A) Against-the-rule B) With-the-rule C) Oblique D) Irregular	01	CO1	K3
vii	Aqueous flare is best seen with A) Conical beam B) Specular reflection C) Sclerotic scatter D) None of these	01	CO3	K3
viii	A lensometer shows single sharp lines when measuring a lens. What type of lens is it? A) Spherical lens B) Cylindrical lens C) Bifocal lens D) Progressive lens	01	CO3	K5
ix	What is the average central corneal thickness (CCT) in a healthy adult eye? A) 300-350 µm B) 400-450 µm C) 520-550 µm D) 600-650 µm	01	CO5	K1
x	Which method would you consider the most accurate for measuring corneal thickness in a clinical setting? A) Schirmer's test B) Slit-lamp biomicroscopy C) Ultrasonic pachymetry D) Direct ophthalmoscopy	01	CO3	K5
Section B (Answer any FOUR out of SIX) - 20 Marks (Each question Carry 5 Marks)				
Q. No.	QUESTIONS	Marks	COs	KL
2	Write about different types of pediatric visual acuity testing.	05	CO4	K2

3	You observe a dull, slow "with" motion during retinoscopy. Analyze what this indicates about the patient's refractive status and how you would proceed.	05	CO2	K4
4	Differentiate between manual and automated lensometer in terms of working principle and output	05	CO4	K2, K4
5	Explain the optical principles behind direct and indirect ophthalmoscopy.	05	CO3	K2
6	Describe the steps to perform an ERG and how it helps assess retinal function.	05	CO1	K3
7	A patient presents with reduced vision in one eye. Describe how you would perform monocular retinoscopy to assess their refractive status.	05	CO5	K3
Section C (Answer any TWO out of FOUR) - 20 Marks (Each question Carry 10 Marks)				
Q. No.	QUESTIONS	Marks	COs	KL
8	Critically evaluate the advantages and limitations of Humphrey Visual Field testing versus Goldman perimetry.	10	CO5	K5
9	Explain the principle of Indentation & Application Tonometry. Discuss the relative advantages and disadvantages of Indentation & Applanation & Non-contact Tonometry	10	CO4	K4
10	Describe the different types of Illumination techniques used in Slit Lamp Bio-Microscopy in details.	10	CO4	K2
11	Describe the steps involved in performing static retinoscopy and the adjustments needed for working distance	10	CO5	K3

CO1	Understand the concept of different Ocular diseases of anterior segment of Eye
CO2	Apply the concept of anatomy & Physiology of Eye while understanding the Pathology of different ocular diseases
CO3	Utilize the concept of clinical features of the diseases for the differential diagnosis of the anterior segment diseases
CO4	Analyze the concept of clinical features of the diseases for the management of anterior segment diseases

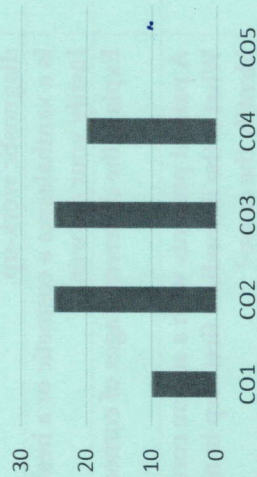
GRAPHICAL REPRESENTATION

Bloom's Level wise Marks Distribution



■ K1 ■ K2 ■ K3 ■ K4 ■ K5 ■ K6

Course Outcome Wise Marks Distribution



ARKA JAIN University
Jharkhand



[28-11-2025]

END SEM EXAMINATION
School of Health & Allied Sciences

Program	Bachelor of Optometry	
Subject Name	Ocular Disease 1	Session Odd, 2025-26
Semester	III	Year Nov, 2025
Time: 2 Hour Max. Marks : 50	<ul style="list-style-type: none"> Start writing from 2nd page onwards; don't write on the 1st Page Backside Answer all Questions of Section A (Compulsory) Answer Any Four out of Six of Section B Answer Any Two out of Four of Section C Possession of Mobile Phones or any kind of Written Material, Arguments with the Invigilator or Discussing with Co-Student will come under <u>Unfair Means</u> and will <u>Result</u> in the <u>Cancellation of the Papers.</u> 	
Knowledge Level (KL)	K1 : Remembering K2 : Understanding	K3 : Applying K4 : Analysing K5 : Evaluating K6 : Creating

Section A (Each question Carry 01 Marks from Q1-i to x) – 10 Marks			
Q. N1	QUESTIONS	Marks	COs
i	Which of the following is not a cause of enophthalmos? A. Blow-out fracture of orbital floor B. Silent sinus syndrome C. Graves' ophthalmopathy D. Post-radiation orbital fat atrophy	01	CO1
ii	In distinguishing orbital cellulitis from preseptal cellulitis, the presence of which sign is MOST helpful? A. Eyelid swelling B. Fever C. Proptosis or globe displacement D. Redness	01	CO3
iii	What distinguishes external hordeolum from chalazion? A. External hordeolum is painless and chronic B. Chalazion involves acute infection of lash follicle C. External hordeolum is acute and painful D. Chalazion presents with proptosis	01	CO1
iv	A child presents with lid swelling, tender red lump near lash line. Diagnosis? A. Internal hordeolum	01	CO3

Section B (Answer any FOUR out of SIX) - 20 Marks (Each question Carry 5 Marks)				
Q. No.	QUESTIONS	Marks	COs	KL
2	Describe the relationship between Graves' Ophthalmopathy and proptosis.	05	CO1	K2
3	How would you differentiate between Preseptal Cellulitis and Orbital Cellulitis on clinical examination?	05	CO3	K4
4	A young child presents with a painless, slowly enlarging mass in the upper eyelid that is pushing the eyeball downwards. Create a concise list of potential diagnoses and outline an initial diagnostic work-up.	05	CO3	K6
5	Is a xanthelasma a cosmetic or a health concern? Justify your answer.	05	CO4	K5
6	Explain the different stages of corneal ulcers.	05	CO2	K2
7	A patient presents with a severe corneal ulcer. What is the immediate first step in management to identify the cause?	05	CO4	K3
Section C (Answer any TWO out of FOUR) - 20 Marks (Each question Carry 10 Marks)				
Q. No.	QUESTIONS	Marks	COs	KL
8	Explain the pathophysiology of Spring Catarrh (Vernal Conjunctivitis).	10	CO2	K2
9	A patient with a recent history of a sexually transmitted infection presents with a red, painful eye, and the pupil is small and irregular. What type of uveitis is most likely, and why?	10	CO3	K3
10	In what ways are episcleritis and scleritis similar, and in what ways are they different?	10	CO2	K4
11	Evaluate the importance of a thorough clinical examination of uveitis and scleritis in a patient with a known systemic autoimmune disease.	10	CO4	K5

v	B. Chalazion C. Blepharitis D. Sebaceous gland carcinoma Band-shaped keratopathy is characterized by: A. Pigmented band near limbus B. Lipid deposition in central cornea C. Calcium deposition in Bowman's layer D. Corneal vascularization	01	CO1	K2
vi	A child presents with a cloudy cornea since birth. On exam, you find enlarged corneal diameter and high IOP. Likely condition? A. Congenital glaucoma B. Megalocornea C. Corneal dystrophy D. Keratoconus	01	CO3	K3
vii	A patient with severe pain, deep scleral congestion, and decreased vision presents. What's the most probable diagnosis? A. Allergic conjunctivitis B. Episcleritis C. Scleritis D. Keratitis	01	CO3	K2
viii	A patient post-intraocular surgery develops sudden vision loss, hypopyon, and lid swelling. Most likely diagnosis? A. Acute anterior uveitis B. Endophthalmitis C. Panuveitis D. Optic neuritis	01	CO3	K4
ix	Which of the following is a hallmark sign of cavernous sinus thrombosis? A. Bilateral proptosis B. Optic nerve atrophy C. Pulsatile tinnitus D. Ptosis and ophthalmoplegia	01	CO1	K1
x	Which dystrophy shows honeycomb appearance in Bowman's layer? A. Granular dystrophy B. Reis-Bucklers dystrophy C. Lattice dystrophy D. Fuchs dystrophy	01	CO1	K1



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[01-12-2025]
END SEM EXAMINATION
School of Health & Allied Sciences

Program	Bachelor of Optometry		
Subject Name	Clinical examination of the visual system	Session	Odd, 2025-26
Semester	III	Year	Nov, 2025
Time: 2 Hour Max. Marks : 50	<ul style="list-style-type: none"> Start writing from 2nd page onwards; don't Write on the 1st Page Backside Answer all Questions of Section A (Compulsory) Answer Any Four out of Six of Section B Answer Any Two out of Four of Section C Possession of <u>Mobile Phones</u> or any kind of <u>Written Material, Arguments with the Invigilator or Discussing with Co-Student</u> will come under <u>Unfair Means</u> and will <u>Result</u> in the <u>Cancellation of the Papers.</u> 		
Knowledge Level (KL)	K1 : Remembering K2 : Understanding	K3 : Applying K4 : Analysing	K5 : Evaluating K6 : Creating

Section A (Each question Carry 01 Marks from Q1-i to x) – 10 Marks			
Q. N	QUESTIONS	Marks	COs
1			KL
i	Name the test use to assess EOM	01	CO4
ii	Name two charts used to assess visual acuity in pediatric age group	01	CO4
iii	Name the tonometer considered as Gold Standard	01	CO3
iv	Full Form of TBUT and NITBUT	01	CO4
v	Importance of Birth History	01	CO5
vi	How and when to perform confrontation test	01	CO4
vii	Name all Extra ocular muscles	01	CO4
viii	Name the colour vision chart used for screening purpose	01	CO4
ix	Interpretation of HBT	01	CO2
x	Difference between Schirmer's I and Schirmer's II test	01	CO4

Section B (Answer any FOUR out of SIX) – 20 Marks
(Each question Carry 5 Marks)

Q. No.	QUESTIONS	Marks	COs	KL
2	Explained the procedure of Maddox rod	05	CO2	K3
3	Discuss about the visual acuity assessment in Geriatric age group	05	CO2	K3
4	Name test and explain procedure for pupillary examination	05	CO3	K5
5	Name different plates in colour vision chart with its interpretation	05	CO2	K5
6	Name different techniques used in slit lamp biomicroscope	05	CO2	K3
7	Explain about the van Herrick grading and it's used in clinical practice	05	CO2	K3

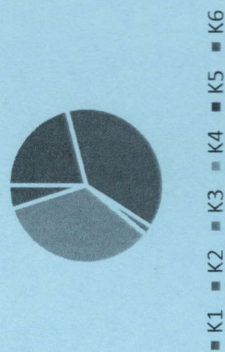
Section C (Answer any TWO out of FOUR) – 20 Marks
(Each question Carry 10 Marks)

Q. No.	QUESTIONS	Marks	COs	KL
8	Discuss in detail about paediatric history taking	10	CO1	K2
9	Different types of ophthalmoscopes and its used	10	CO2	K1
10	Write about old and modified principle of tonometer	10	CO2	K3
11	Discuss about different charts for visual acuity assessment in paediatric age group	10	CO2	K3

Course Outcomes	CO1	CO2	CO3	CO4	CO5
Understand about the process of history taking and its clinical importance					
Understand about various clinical examination tests available					
Analyse the importance of pupillary examination in the field of optometry					
Apply all the theoretical knowledge on practical field					
Understand about the process of history taking and its clinical importance					

GRAPHICAL REPRESENTATION

Bloom's Level wise Marks Distribution



Course Outcome Wise Marks Distribution

