

SEMESTER-I

I. Basics of Anatomy-I

CO1	Defining, listing and learning the facts about the anatomical structure of human body.
CO2	Recognizing, Understanding, characterizing, explaining the various anatomical structure of human body.
CO3	Identifying, locating and demonstrating the various anatomical structures of human body.
CO4	Performing, implementing and applying the concept for better understanding of various anatomical structures of human body

II. Basics of Physiology-I

CO1	Knowledge: defining, listing and recognizing the physiological structure of the human body
CO2	Comprehension: understanding, characterizing, explaining, identifying and locating the physiological structure of the human body.
CO3	Application: performing, demonstrating, implementing and applying the concept of general physiology in better understanding in relevance to human eye
CO4	Analysis: analyzing, categorizing, comparing and differentiating the physiological structure of the human body.
CO5	Understand & Remember: To understand and remember the proper concept of human body functioning.

III. Basics of Biochemistry-I

CO1	To understand the importance of different types of glasswares and laboratory equipments To understand the importance of chemistry of carbohydrates
CO2	To understand the importance of safety measurements and sampling techniques
CO3	To understand the importance of acid, base, indicators and nutrition
CO4	To understand the importance of chemistry of carbohydrates
CO5	To understand the importance of chemistry of lipids

IV. English

CO1	Introduction to grammar
CO2	Reading skills
CO3	Writing skills
CO4	Pronunciation & communication skills

CO5	Presentation skills
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SEMESTER-II

SUBJECT

I.Basics of Anatomy-II

CO1	Defining, listing and learning the facts about the anatomical structure of human eye
CO2	Recognizing, Understanding, characterizing, explaining the various anatomical structure of human eye..
CO3	Identifying, locating and demonstrating the various anatomical structures of human eye.
CO4	Performing, implementing and applying the concept for better understanding of various anatomical structures of human body
CO5	Analyzing, categorizing, comparing and differentiating various anatomical structures of human body

II.Basics of Physiology-II

CO1	Defining, listing and learning the facts about the physiological structure of human eye.
CO2	Recognizing, Understanding, characterizing, explaining the various physiological structure of human eye..
CO3	Identifying, locating and demonstrating the various physiological structures of human eye.
CO4	Performing, implementing and applying the concept for better understanding of various physiological structures of human body
CO5	Analyzing, categorizing, comparing and differentiating various physiological structures of human body

III. Basics of Biochemistry-II

CO1	To understand the importance of different types of glasswares and laboratory equipments
CO2	To understand the importance of Nucleic Acids & its metabolism
CO3	To understand the importance of Metabolism of Fatty Acids
CO4	To understand the importance of Metabolism of Amino Acids
CO5	To understand the importance of chemistry Clinical Biochemistry

SEMESTER-III

SUBJECT

I.Ocular Microbiology

CO1	The student would be able to produce knowledge of bacteria with diagrams
CO2	Student will be able to tell the distinguishing features of prokaryotes and eukaryotes
CO3	Students would have knowledge of different sterilization techniques and microbial preservation.
CO4	Students will understand the structure and its working action of the microbes in the day to day living.

II.Visual optics –I

CO1	Student will come to know about the vision related defects and their correction measures.
CO2	Student will come to know about the focus of the eye and change in power according to change in vertex distance
CO3	Student will come to know the spectacle distance
CO4	Students will know about the effects of convergence and accommodation in eye

III.Optometric optics-I

CO1	Knowledge to select the tool power for grinding process.
CO2	Knowledge of prism and decent ration in ophthalmic lenses. Knowledge of different types of materials used to make lenses and its characteristics.
CO3	Knowledge lens designs –single vision, bifocals, progressive lens. Knowledge on tinted and protective lenses.
CO4	Knowledge on special lenses like iseikonic, spectacle magnifiers. Knowledge on spectacle frames –manufacture, materials

IV. Optometric Instruments

CO1	Students will come to know about the various instruments used in the optometry
CO2	Student will be able to make a correct choice between the instruments used in the current day practice
CO3	Student will be able to demonstrate the working of the various instruments used in the optometry
CO4	Students will learn about the principle of working of various instruments and also will know to examine the various eye structures

V. Ocular Disease-I

CO1	At the end of the course, the candidate will have sound knowledge of the agents responsible for causing human infections.
CO2	Recall the etio-pathogenesis, the pathological effects & the clinico-pathological correlation of common infections & non-infectious diseases
CO3	Correlate normal & altered morphology of eye in different diseases needed for understanding disease process & their clinical significance.
CO4	Acquire knowledge of common immunological disorders & their resultant effects on the human Body.

VI. Clinical examination of visual system

CO1	Students will be able to understand the purpose, setup and devices required for the test
CO2	Student will be able to differentiate the various types of infections and their origin.
CO3	Student will develop the knowledge of chemotherapy and culture preparation.
CO4	Students will be able to understand the various microbial mechanism of action towards eye infections

VII. Indian Medicine and Telemedicine

CO1	Students will come to know about, Introduction to healthcare delivery system
CO2	Student will be able to learn Need for integration of various system of medicine
CO3	Student will be able to know about AYUSH system of medicine.
CO4	Student also will get basic knowledge about the telemedicine practices in India especially in eye care.

VIII. Clinical optometry II

CO1	Student will understand the basic and advanced principles of Clinical Optometry.
CO2	Students will familiar with basic and advanced diagnostic procedures in Optometry.
CO3	Students apply knowledge from previous clinical learning experience under the supervision of a registered optometrist.
CO4	To do a thorough comprehensive eye examination.

SEMESTER-IV

SUBJECT

I. Optometric Optics-II & Dispensing Optics

CO1	The candidate has clear understanding in terms and by calculation, various characteristics of advanced single vision and multifocal spectacle lenses and bifocal lenses
CO2	The candidate must have fundamental knowledge of spectacle lenses, so as to understand new technology as it arises and to appreciate what is fit for a given purpose
CO3	Student must be able troubleshoot the spectacle related issues.
CO4	Students must be able to help the subjects to find the best suitable spectacle frames as per their professional and personal needs

II. Visual Optics-II

CO1	Overview of the visual system and its optical system
CO2	Imaging using optic measures and the abnormalities in the optical measurements
CO3	Physical optics of the human eye
CO4	Correction of various visual defects

III. Ocular Disease-II and Glaucoma

CO1	Students will be knowledgeable in Etiology. Epidemiology of the ocular diseases.
CO2	Student will able to learn about Symptoms and Signs of the ocular diseases.
CO3	Students will know about Diagnostic approach of the ocular diseases.
CO4	Student will learn Management of the ocular diseases.

IV. Pathology

CO1	Students will be able to understand the pathological states of the eye and their etiology
CO2	Student will be able to differentiate the various types of infections and their origin.
CO3	Student will develop the knowledge of chemotherapy and culture preparation.
CO4	Students will able to understand the various microbial mechanism of action towards eye infections

V. Basic and Ocular Pharmacology

CO1	Students will be able to make the correct choice of drug for a particular condition.
CO2	Student will be able to report an adverse drug reaction related to drug.
CO3	Student will be suggesting the pharmacotherapy.
CO4	Students will learn about the drugs mechanism of action and the routes of drugs for administration of ocular as well as systemic

VI. Clinical optometry

CO1	Students will understand the basic and advanced principles of Clinical Optometry.
CO2	Students will be familiar with basic and advanced diagnostic procedures in Optometry.
CO3	Students will learn to apply knowledge from previous clinical learning experience under the supervision of a registered optometrist.
CO4	Students will learn to do a thorough comprehensive eye examination.