

ADMISSION NUMBER

School of Medical and Allied Sciences

Bachelor of Optometry
Mid Term Examination - Nov 2023

Duration : 90 Minutes Max Marks : 50

Sem III - L1UA302T - Visual Optics-I

General Instructions
Answer to the specific question asked
Draw neat, labelled diagrams wherever necessary
Approved data hand books are allowed subject to verification by the Invigilator

| 1) | A concave mirror has a focal length of 15 cm. An object is placed 30 cm in front of the mirror. Determine the position of the image and its characteristics using ray diagrams. | K2 (2) |
|----|---|---------|
| 2) | Explain the concept of reflection of light using the law of reflection. Provide an example illustrating the application of this law. | K1 (3) |
| 3) | Describe the role of the cornea and the lens in the refraction of light within the eye. | K2 (4) |
| 4) | Asses the etiology alongwith all the types of Myopia. | K2 (6) |
| 5) | Explain how the pupil's size is controlled and how it affects the amount of light entering the eye. | K3 (6) |
| 6) | Define the term "refraction of light." Describe how the speed of light changes when it travels from a rarer medium to a denser medium. | K3 (9) |
| 7) | Discuss the process of visual transduction, including the roles of photoreceptor cells and their interaction with the optic nerve. | K4 (8) |
| 8) | Appraise the prevalence of refractive errors globally. | K4 (12) |
| | OR | |
| | Appraise the etiology, different types, clinical features and treatment of Near sightedness. | K4 (12) |