



BRAINWARE UNIVERSITY

Term End Examination 2025-2026

Programme – B.Optomtry-2021/B.Optomtry-2022/B.Optomtry-2023

Course Name – Occupational Optometry

Course Code - BOPTOC604

(Semester VI)

Full Marks : 60

Time : 2:30 Hours

[The figure in the margin indicates full marks. Candidates are required to give their answers in their own words as far as practicable.]

Group-A

(Multiple Choice Type Question)

1 x 15=15

1. Choose the correct alternative from the following :

- (i) Identify who initiated the inclusion of occupational optometry in the undergraduate optometry program in India.
 - a) Dr. P.P. Santanam
 - b) Dr. Sankara Nethralaya
 - c) Elite School of Optometry
 - d) Medical Research Foundation
- (ii) Select the primary aim of the visual task analysis conducted by an occupational optometrist
 - a) To determine the job satisfaction of employees
 - b) To assess the efficiency of accommodation and convergence
 - c) To evaluate the physical demands of different jobs
 - d) To understand the visual demand each job creates on individuals
- (iii) Select the purpose of follow-up services in occupational optometry
 - a) To conduct routine eye examinations
 - b) To assess the efficiency of accommodation and convergence
 - c) To evaluate the impact of provided services
 - d) To determine job satisfaction
- (iv) Identify the ideal combinations for successful occupational optometry clinical practice.
 - a) Assessment of work place/task and assessment of individual visual capabilities
 - b) Matching the visual abilities to the visual requirements of the job
 - c) Matching visual field to the visual requirements of the job
 - d) Matching work and visual acuity
- (v) Which statement best describes a disadvantage of fluorescent lighting?
 - a) Low energy consumption
 - b) Flickering and glare
 - c) Long lifespan
 - d) Warm color temperature
- (vi) Identify the primary cause of musculoskeletal disorders (MSDs) in optometry practice.
 - a) Prolonged standing
 - b) Repetitive tasks
 - c) Exposure to chemicals
 - d) Noise pollution

- (vii) Which of the following best describes the primary objective of industrial vision screening?
- To diagnose eye diseases
 - To improve vision in workers
 - To assess visual acuity and detect vision problems
 - To provide eye makeup services
- (viii) Select, how does proper lighting contribute to reducing occupational hazards in optometry?
- Improved tear film stability
 - Reduces eye strain
 - Causes drowsiness
 - Promotes dehydration
- (ix) Find the one that relates to the primary goal of making ergonomic adjustments in optometric workspaces?
- To increase discomfort
 - To improve safety and comfort
 - To encourage poor posture
 - To reduce productivity
- (x) Among these, what best describes the recommended frequency for conducting industrial vision screenings for workers based on safety guidelines?
- Monthly
 - As needed based on job tasks and individual risk factors
 - Annually
 - Every 2 years
- (xi) Which of the following statements best describes how color vision deficiency affects eligibility for certain driving or transportation jobs?
- It may disqualify individuals from safety-sensitive roles.
 - It has no impact on eligibility for transportation jobs.
 - It may enhance eligibility for certain roles.
 - It may reduce eligibility for administrative roles.
- (xii) From the list, which of the following best describes the purpose of blue light filters in VDU (Visual Display Unit) monitors?
- To enhance color saturation
 - To reduce the emission of harmful blue light
 - To improve screen resolution
 - To increase screen contrast
- (xiii) Among the options, which of the following best describes the purpose of screen resolution in VDUs?
- To control the size of text and images
 - To adjust screen brightness
 - To regulate screen refresh rate
 - To enhance color accuracy
- (xiv) Determine the recommended action for individuals who accidentally drop a contact lens on a dirty surface in the workplace?
- Rinse the lens with tap water and reinsert it
 - Clean the lens with saliva and reinsert it
 - Dispose of the lens and use a new one
 - Rub the lens with a tissue and reinsert it
- (xv) Which of the following best describes a potential consequence of wearing contact lenses while swimming in a pool or hot tub?
- Dry eye syndrome
 - Corneal abrasion
 - Allergic conjunctivitis
 - Bacterial keratitis

Group-B

(Short Answer Type Questions)

3 x 5=15

- Discuss how an occupational optometrist contribute to establishing visual requirements or standards for different jobs. (3)
- Define the purpose of conducting a visual task analysis in an occupational optometry service. (3)
- Discuss the sources of electromagnetic radiations in different work places. (3)
- Explain the widely accepted theories of Color vision. (3)
- Explain electromagnetic radiation and its effects on the eyes. (3)

OR

Classify the units used to measure light and electromagnetic radiation. (3)

Group-C
(Long Answer Type Questions)

5 x 6=30

7. In optometric practice, identify the potential risks associated with prolonged standing or sitting. (5)
8. Differentiate between connotative and denotative color coding with examples in each case. (5)
Why is occupational color vision of such great significance?
9. Explain how color vision defects impacts daily life in terms of occupation considering childhood too career options? (5)
10. Analyze how lighting conditions impact industrial vision screening results. (5)
11. Explain how often individuals should take breaks when using VDUs for extended periods. (5)
12. Explain non mechanical hazards and the occupations mostly at risk. (5)

OR

Describe the different kinds of ocular injuries that are most commonly caused in different sports with examples (5)

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