

BINDURA UNIVERSITY OF SCIENCE EDUCATION

FACULTY OF SCIENCE & ENGINEERING

DEPARTMENT OF OPTOMETRY

BACHELOR OF SCIENCE HONOURS DEGREE IN OPTOMETRY

OPTC 204: CLINICAL OPTOMETRY I

DURATION: 3 HOUR

TOTAL MARKS: 100

NOV 2024

CANDIDATE NUMBER:

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INSTRUCTIONS

This exam contains TWO sections: Section A: 40 Marks; Section B: 60 Marks

Answer Section A on the Question paper and Section B on the answer booklet. Answer all questions.

SECTION A. Attempt all questions. (40 marks)

1. Near visual acuity is tested by
 - a) Snellen's chart
 - b) Jaeger's chart
 - c) Cambridge chart
 - d) Key chart
2. Which of the following statements is true about case history?
 - a) It includes information taken only at the beginning of the consultation.
 - b) Confidentiality and privacy are important only during history taking.
 - c) The chief complaint is usually important in determining the crucial tests.
 - d) All the above.
3. Which of the following statement best describes the chief complaint in patient history?
 - a) It is taken to ascertain patient's expectations.
 - b) It is taken to prescribe ocular medication for the patient.
 - c) It is taken to acquire primary reason for the patient seeking consultation.
 - d) It is taken to determine the specific tests to be performed during the examination.

4. The amplitude of accommodation of a person having farpoint α and near point at 10 cm is
- 10D
 - 1D
 - 1.5D
 - None of these.
5. Pinhole increases V.A. by
- Reducing the size of blur circle
 - Increasing the size of blur circle
 - Cutting of peripheral rays
 - Both (a) & (c).
6. Near point of convergence is measured with
- RAF ruler
 - Diploscope
 - Cycloplegia
 - Fogging method.
7. Uncover test is used to evaluate
- Exophoria
 - Exotropia
 - Hypertropia
 - All of these.
8. Horizontally Maddox rod is placed in front of left eye & patient is seeing vertical streak right side to the spotlight, the strabismus is
- Hyperphoria
 - Hypophoria
 - Esophoria
 - Exophoria.
9. Titmus test is a test for
- Ac: A ratio
 - Steropsis
 - Convergence
 - Paralytic squint.
10. In which test Red green goggles are not used?
- Hess Test
 - Worth 4 dot test
 - Diplopia charting test
 - Duochrome test.
11. The spherical equivalent of JCC is
- +1
 - 1
 - 0
 - 2

12. Cycloplegic refraction is contraindicated in
- Young hyperopic
 - Esophoria
 - Glaucoma
 - Children < 7 yrs.
13. The amplitude of accommodation of a person having far point ∞ and near point at 15 cm is
- 6.67D
 - 0.15D
 - 1.5D
 - 6.0D.
14. At the end of retinoscopy on slight forward movement of examiner's head, the movement of the reflex is obtained
- With
 - Against
 - Nil movement
 - Rapid movement.
15. When the retinoscopy is done at 50 cm then working lens should be
- +1.5 D
 - +1.00 D
 - +2.00 D
 - None of these.
16. At the end of retinoscopy on slight backward movement of examiner's head, the movement of the reflex is obtained
- With
 - Against
 - Nil movement
 - Rapid movement.
17. In objective refraction:
- Accommodation is stimulated if the patient stared at the light from the retinoscope (True) (False)
 - "With" motion occurs in high myope if the sleeve of the retinoscope is placed in the plano mirror position. (True) (False)
 - "Against" motion occurs in hypermetropia if the sleeve of the retinoscope is placed in the concave mirror position. (True) (False)
 - Movement of the reflex increases as the neutralization point is near. (True) (False)
 - The power of the working distance lens in diopters is proportional to the working distance in metres. (True) (False)

18. A 40-year-old myopic woman recently changes her glasses and find them uncomfortable despite having a visual acuity of 6/6 in both eyes. The following may be responsible.
- a) Change of axis (True) (False)
 - b) Decentering of the lens (True) (False)
 - c) Over-correction of myopia (True) (False)
 - d) Change of lens form (True) (False)
 - e) Onset of presbyopia (True) (False)
19. The cover test can be used in investigating the following aspects of strabismus except.....
- a) Consistency of the deviation
 - b) Direction of the deviation
 - c) Eye preference
 - d) Degree of deviation
 - e) None of the above
20. What minimum amplitude of accommodation is expected for a 40-year-old individual?
- a) 9.00D
 - b) 6.50D
 - c) 3.00D
 - d) 5.00D
 - e) 8.25D
21. A patient reports first sustained blur at a distance of 25cm while wearing a +1.50D lens in addition to his best visual acuity subjective correction of +1.25D. What is his amplitude of accommodation?
- a) 2.75D
 - b) 3.00D
 - c) 2.50D
 - d) 0.25D
 - e) 1.25D
22. In assessing visual acuity in children, the following are used?
- a) Lea symbols (True) (False)
 - b) Sheridan-Gardner test (True) (False)
 - c) Cardiff cards (True) (False)
 - d) EDTR charts (True) (False)
 - e) Picture chart (True) (False)
23. During streak retinoscopy, the following is true about the point of neutrality:
- a) The retinoscopy refraction is complete (True) (False)
 - b) The reflex becomes dimmer (True) (False)
 - c) Moving towards the patient produces against movement in all meridians (True) (False)
 - d) The retinal and the peephole of the retinoscope form the conjugate points. (True) (False)
 - e) The reflex becomes sharper (True) (False)

24. Which of the following statements about alternate cover test is true?

- a) Should always be performed before cover-uncover test
- b) If the uncovered eye moves in on uncovering, the patient has esophoria.
- c) It is not useful in detecting cyclophoria
- d) Detects both phoria and tropia

SECTION B. Attempt all questions. (60 marks)

- I. How will you distinguish between orthophoria, heterophoria and heterotropia with the help of cover/uncover test and list all the probable outcomes? (10 marks)
- II. Calculate the minimum and average amplitude of accommodation (AOA) for a patient aged 22. (4 marks)
- III. List any 3 supplementary distance VA tests. (3 marks)
- IV. List the tests for 1st degree, 2nd degree and 3rd degree fusion. (6 marks)
- V. What is the meaning of 6/36 notation in VA? (2 marks)
- VI. Outline the role of J.C.C. (Jackson crossed cylinder) during refraction. (4 marks)
- VII. List 5 preliminary external tests in an optometric clinic and the instruments used. (10 marks)
- VIII. Explain duochrome's test utility in monocular subjective refraction. (4 marks)
- IX. List four factors that can influence the end-points in retinoscopy. (8 marks)
- X. Outline the important information of a good case history. (12 marks)

END OF PAPER