**Opto 321**

**Binocular Vision I**

**1st Midterm Exam – 2nd Semester 1434/1435**

Name:………………………………………..………. ID:……………………………… Date:…………………………

**Part 1 :**

For Each Question, Choose the Correct Answer from the Multiple-Choice List. (1 mark each)

1. One of these points is not a significance of BSV :
2. Stereopsis
3. Enhancement of visual function
4. Enhance the quality of vision
5. Enhanced visual performance
6. Which one is not a major advantage of BV:
7. Large Visual field
8. Binocular Summation
9. Stereopsis
10. None
11. Pursuit eye movement is :
12. slow eye movement for tracking and following
13. fast eye movement to change the direction of the eye
14. slow inward or outward movements of the two eyes
15. None
16. C.N. 3 innervated all the following muscles except :
17. MR & SR
18. IR & IO
19. LR & SO
20. All the above
21. Once the image of the object project on the fovea, the Retinomotor value equal to:
22. -1 to 0
23. 0
24. 0 to +1
25. None
26. According to the Figure below, which one is/are the correct corresponding points :
27. aL & aR / bL & bR
28. aL & bL / aR & aR
29. aL & bR / bL & aR
30. Both A & C



1. Which one is responsible for the binocular perception of depth “ Stereopsis”:
2. Retinomotor value
3. Horopter
4. Vieth-Muller circle
5. Panum’s fusional area
6. The slightly differences in the left and right images receive by the left and right retinas called :
7. Depth perception
8. Diplopia
9. Visual direction
10. Binocular disparity
11. To perceive depth , we depend on :
12. fixation disparity
13. depth clue
14. monocular clues
15. All the above
16. Which statement is not correct about Ocular dominance:
17. Most of the population is left-eye dominant
18. tendency to prefer image from one eye to the other eye
19. it changes depending upon direction of gaze due to image size changes on the retinas
20. both A & C
21. Diplopia happens because of :
22. Objects lying on the horopter
23. Objects lying on Panum's fusional area
24. Objects lying off the horopter and outside Panum's fusional area
25. None
26. Directional Dominance refers to :
27. subjective alignment of two objects presented at a stereo disparity far beyond Panum's area
28. the eye that does a better job of fixating on an object of regard under binocular conditions
29. difference in the two retinal images that might lead to rivalry or some binocular interaction
30. None
31. Unit to measuring Convergence is :
32. Diopter
33. Degree
34. Prism
35. Prism per Diopter
36. A high AC:A ratio can cause near
37. Eso-deviation
38. Exo-deviation
39. Cyclo-deviation
40. No deviation
41. A low AC:A ratio can cause near
	1. Eso-deviation
	2. Exo-deviation
	3. Cyclo-deviation
	4. No deviation

**Part 2 :**

Put **( T )** for true statements and **( F )** for false statements. (1 mark each)

1. Binocular Single Vision is the ability to use both eyes at the same time while Binocular Vision is the ability to fuse the two separate images seen by each eye into one image ( **F**  )
2. To have BSV, the refractive errors should be no more than 5% difference between the two eyes ( **T**  )
3. Dextroversion is accomplished by contraction of right LR and left MR muscles ( **T**  )
4. In normal BSV, the points nasal to the fovea in one eye are corresponded with points nasal to the fovea of the other eye ( **F** )
5. As far as the extra-foveal points away from the fovea, the eye's deviation (squint) determined ( **T**  )
6. The actual Vieth-Muller Circle was found to be flatter than horopter curve (  **F** )
7. Object within Panum’s space do not give rise to diplopia ( **T**  )
8. No sensory and motor fusion occurs unless the binocular images fall exactly on the corresponding retinal points of each eye **( F** )
9. Object beyond Panum’s area will stimulate non-corresponding temporal retina in each eye which projected temporally giving rise to uncrossed diplopia ( **F**  )
10. On near fixation accommodation is exerted, which leads to excessive convergence and an exo-deviation ( **F**  )

**Part 3 :**

1. Mention 4 types of tests which are used to determent Dominant eye and explain one?
2. Miles test
3. Porta test
4. Convergence near point test
5. Lens fogging technique
6. Defined the areas pointed with arrows :

