

**VINAYAKA MISSION'S RESEARCH FOUNDATION, SALEM
(Deemed to be University)**

M.OPTOMETRY DEGREE EXAMINATION – December 2021

Second Semester

PEDIATRIC OPTOMETRY & BINOCULAR VISION

Three Hours

Maximum: 100 marks

I. Choose the Best Answer :**(20 x 1 = 20)**

1. _____ pathway is thought to be specialized for analysis of visual motion.
a. Blob pathway b. P pathway c. Interblob pathway d. M pathway
2. The _____ area within the extrastriate primate visual cortex contains a high proportion of direction selective neurons.
a. Middle temporal (MT) area b. Area 19 c. V1 area d. Area 17
3. The field in front and behind the horopter in which the extended diplopia does not occur is_____
A. Horopter B. Panum's fusional space C. Fusion D. Stereopsis
4. The ability to perceive an image formed with each eye simultaneously is called
A. Fusion B. Sensory C. Horopter D. Motor
5. When the horopter changes shape at different fixation distances, what happens to the value of the Hering-Hillebrand deviation?
A. It increases B. It decreases C. It does not change
D. It will increase by multiples of 2 depending on the fixation distance
E. The horopter does not change shapes and the value of the Hering-Hillebrand deviation becomes more negative at further fixation distances.
6. Thechart should be used for the children between the age of 3-5 years.
a) Logmarchart b) tumbling E chart c) lea test d) jaeger chart
7.is a form of strabismus in which one / both eyes turns inward.
a) Esotropia b) exotropia c) esophoria d) exophoria
8.prism is used for keratometer
a) wollaston prism b) bi prism c) rotary prism d) reflecting prism
9.is the treatment for amblyopia
a) Glasses b) contact lenses c) eye patching d) both a& b
10. Fresnel prism is also known as.....
a) ground prism b) loose prism c) risley double prisms d) wafer prism
11. Colobomas are located inquadrants
a) Inferotemporal b) superonasal c) inferonasal d) supero temporal
12. Prisms in glasses are used to primarily correct.....
a) Double vision b) positional correction c) convergence correction d) all the above

13. The first structure which the majority of retinal ganglion cells project to, and synapse with, in the brain is the _____
a) Superior Colliculus b) Visual Cortex c) Optic Chiasm d) Lateral Geniculate Nucleus
14. Neurons that are stained by cytochrome oxidase in the visual cortex are sensitive to _____
a) Colour b) The orientation of lines c) Depth cues d) Moving stimuli
15. A complex cells in the visual cortex _____
a) Responds best to moving lines of any orientation
b) Responds best to angle
c) Responds best to lines-but requires visual input from both eyes
d) Responds maximally when a line is anywhere in it's respective field providing it is in the correct orientation
16. The peak spectral responsivity of rods is at approximately
a) 510 nm b) 520 nm c) 530 nm d) 540 nm
17. The OKR is designed to work at slow optical changes and its performance begins to deteriorate at frequencies above
a) 0.2Hz b) 0.6Hz c) 0.06Hz d) 0.4Hz
18. According to the logistic growth model, the parafoveal visual threshold is _____ above that of an adult's threshold at 19.5 weeks
a) 0.5 log unit b) 0.4 log unit c) 0.3 log unit d) 0.2 log unit
19. Abbreviation of CLAMP study
a) Contact Lens and Myopia Prevention study b) Contact Lens and Myopia Progression study
c) Contact Lens and Myopia Protection study
d) Contact Lens and Myopia Protrusion study
20. The retina starts to form around 40 days postconception and is thought to have a full complement of cells by _____ days
a) 160 b) 150 c) 140 d) 130

II .Write an Essay on:

(4 x 10 = 40)

21. What is orientation selectivity and the mechanism in infancy?
22. Explain the sensory aspects and retinal element
23. Explain about dyslexia, and its symptoms signs complications and treatment?
24. Explain about the development of the Retina

III .Write an Long Essay on :

(2 x 20 = 40)

25. How does the human visual field develop?
26. Explain about development of visual cortex.

(S.No.M22065)

(2 x 20 = 40)