Visual and Human Development (9-15 items)

Visual and Human Development: Optics (Physiological)

A. Vision Development in the infant and child
   1. Spatial vision
   2. Refractive error
   3. Color vision
   4. Spectral transmission of the ocular media
   5. Accommodation and convergence
   6. Light sensitivity
   7. Binocular vision and stereopsis
   8. Form reproduction and perception
   9. Temporal vision
  10. Visual fields
  11. Motion perception

B. Effects of Early Environmental Restrictions
   1. Plasticity of the system
   2. Animal models
   3. Light and pattern deprivation
   4. Monocular and binocular deprivation
   5. Refractive error
   6. Strabismus
   7. Cataract

C. Changes in vision with aging
   1. Spatial vision
   2. Refractive error
   3. Color vision
   4. Spectral transmission of the ocular media
   5. Accommodation and convergence
   6. Light sensitivity
   7. Glare (disability and discomfort)
   8. Dark adaptation, glare recovery
   9. Visual fields
  10. Temporal vision
  11. Oculomotor system
  12. Motion perception
  13. Visual attention

D. Visual perceptual-motor skills

E. Anomalies of Child Development
   1. Epidemiology; history and signs/symptoms manifest by patients in the age ranges noted below in (2)
   2. Clinical techniques and tests to assess the development of an infant (birth to 18 months), toddler
      (18-36 months), pre-schooler (3-5 years), and school-age child
   3. Vision problems which may be associated with deviations from normal patterns of development
   4. Tests used by optometrists to determine a child's level of visual-perceptual development, such as:
      a. Visual attention and discrimination
      b. Visual-motor integration
      c. Intersensory integration
      d. Bilateral integration and laterality

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