

13 In the labyrinth

- A The orifice of the vestibular aqueduct is located in the anterior part of the medial wall of the bony vestibule.
- B The most superior part of the superior semicircular canal is located beneath the arcuate eminence.
- C In the anatomical position the plane of the lateral semicircular canals is at an angle of 30 degrees to horizontal, tilting down posteriorly.
- D The osseous labyrinth contains endolymph and the membranous labyrinth perilymph.
- E The scala media is also known as the cochlear duct.

14 In the inner ear

- A The scala tympani, containing endolymph, communicates with the subarachnoid space via the cochlear aqueduct.
- B Cortilymph is similar to perilymph.
- C There are 3–4 rows of outer hair cells which are arranged in rows in a pattern of a W.
- D The inner hair cells are columnar in shape compared to the outer hair cells which are bulbous.
- E The stria vascularis is located on the outer aspect of the cochlear duct.

15 In the cochlear nerve

- A The type I fibres are probably efferent and type II probably afferent.
- B The dorsal root ganglion is represented by the spiral ganglion and the nerve by the central processes.
- C The first synapse is at the dorsal and ventral cochlear nuclei after which the majority of fibres ascend in the contralateral lateral lemniscus.
- D The primary auditory centres are located in the trapezoid body.
- E The olivocochlear fibres are type II fibres, originate from both olivary nuclei and terminate at the base of the cochlea.

16 In the vestibular labyrinth

- A The three semicircular ducts open into the utricle by six separate openings.
- B The utriculo-endolymphatic valve consists of flaps of mucosa permitting inflow and not outflow of endolymph.
- C The macula of the utricle lies in the horizontal plane and that of the saccule in a vertical plane.
- D The hair cells of the utricular macula project into a membrane containing otoliths.
- E Depolarization of a sensory cell occurs if the stereocilia are displaced away from the kinocilium.