

**17 The vestibular nerve**

- A Scarpa's ganglion is located in the internal auditory canal.
- B There are anastamotic connections between the superior vestibular nerve and facial nerve.
- C The inferior vestibular nerve supplies the posterior canal and the saccule.
- D The vestibular nuclei send fibres to the medial longitudinal bundle (MLB) which are responsible for reflex postural muscle tone.
- E The blood supply is mainly from the internal auditory artery which is derived from the posterior inferior cerebellar artery.

**18 Blood supply of the labyrinth**

- A The internal auditory artery divides into an anterior vestibular and common cochlear branches.
- B The cochlear artery ultimately forms the stria vascularis.
- C The spiral modiolar artery has rich anastomoses with terminal branches of the vestibulocochlear artery.
- D The vestibulocochlear artery is a branch of the common cochlear.
- E The labyrinthine artery is the principal arterial supply of the inner ear.

**19 Anatomy of the internal auditory canal**

- A The fundus, at the lateral end, is a vertical plate of thin solid bone.
- B The transverse crest separates the inferior vestibular nerve from the cochlear nerve.
- C 'Bill's' bar or the vertical crest was named after King William IV of England.
- D The vertical crest divides the upper compartment into an anterior portion for the facial nerve and a posterior portion for the superior vestibular nerve.
- E The foramen singulare in the lower compartment, transmits the nerve from the posterior semicircular canal.