

The West Bengal University of Health Sciences
MBBS 1st Professional Examination (New Regulation),
February - March 2022

Subject: Anatomy
 Paper : II

Full Marks : 100
 Time : 3 hours

Attempt all questions. The figures in the margin indicate full marks.

1. a) A patient after cerebrovascular accident shows hemiplegia. On examination it is found that he has some vascular injury in internal capsule. Describe the internal capsule under the following headings -- position, parts, fibres passing through different parts and effect of injury. Describe the blood supply to internal capsule through circle of willis with a proper diagram. (2+2+3+3)+5

- b) A child came to the OPD with a complaint of injury to the external ear. On examination, a perforation was found in the tympanic membrane. Discuss the development, gross anatomy, arterial and nerve supply of tympanic membrane. Also discuss about the branches of the intrapertrous part of facial nerve. What is Ramsay – Hunt syndrome? 3+3+2+2+3+2

2. a) Enumerate the structures forming the tonsillar bed. Enumerate the arteries supplying the palatine tonsil and origin of the arteries. Describe the histological picture of tonsil with suitable diagram. 3+4+3
- b) Draw a labeled diagram of the transverse section of midbrain at the level of superior colliculus. Mention the functional importance of substantia nigra. Explain weber's syndrome? 4+3+3
- c) Enumerate the arches of foot. Describe the factors maintaining the medial longitudinal arch. Explain pes cavus. 2+6+2

3. Write a short notes on the following: 2x5
 - a) Layers of retina with diagram.
 - b) Sensory and motor speech areas of the brain.

4. Explain the following statements: 5x4
 - a) Infections of the upper lip may spread to the cavernous sinus.
 - b) Anteroinferior part of the nasal septum is a common site of epistaxis.
 - c) Supranuclear facial nerve injury spares the muscles of the forehead.
 - d) Incompetence of the ankle perforators may give rise to varicose veins in the leg.
 - e) Anatomical basis of hydrocephalus.

5. Choose the correct option for each of the following: 10x1
 - i) All the following are supplied by recurrent laryngeal nerve except:
 - a) Cricothyroid
 - b) Posterior cricoarytenoid
 - c) Lateral cricoarytenoid
 - d) Transverse arytenoid

- ii) Which of the following attains adult size before birth?
- a) Ear ossicles
 - b) Maxilla.
 - c) Mastoid.
 - d) Parietal bone.
- iii) What might you expect to see if the obturator nerve is damaged?
- a) Waddling gait
 - b) Lateral swinging of the leg when walking
 - c) Foot drop
 - d) High stepping gait
- iv) Dorsal part of second aortic arch gives rise to
- a) Maxillary artery
 - b) Common carotid artery
 - c) Stapedial artery
 - d) Subclavian artery
- v) All structures pass through the petro-tympanic fissure of temporal bone **except**
- a) Tympanic branch of glossopharyngeal nerve
 - b) Chorda tympani nerve
 - c) Anterior ligament of malleus
 - d) Anterior tympanic branch of maxillary artery.
- vi) Aqueous humor is formed by
- a) Iris
 - b) Sclera
 - c) Cornea
 - d) Ciliary body
- vii) All of the following cells of cerebellum are inhibitory in nature **except**
- a) Granule cell
 - b) Golgi cell
 - c) Purkinje cell
 - d) Stellate cell
- viii) All muscles are supplied by femoral nerve **except**
- a) Iliacus
 - b) Psoas major
 - c) Pectineus
 - d) Sartorius
- ix) Housemaid's knee is an inflammation of
- a) Infrapatellar bursa
 - b) Semimembranosus bursa
 - c) Prepatellar bursa
 - d) Suprapatellar bursa
- x) The only cranial nerve which emerges from the dorsal side of the brain stem -
- a) Oculomotor Nerve
 - b) Trigeminal Nerve
 - c) Facial Nerve
 - d) Trochlear Nerve