

001/22

**The West Bengal University of Health Sciences**  
**MBBS 1<sup>st</sup> Professional Examination (New Regulation), June 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 40 year old male complains of weakness of facial muscles of right side following operation on right parotid gland. Enumerate the functional components of the affected cranial nerve. Describe the intracranial course of the nerve. Enumerate the branches of facial nerve from intracranial part of the nerve. State the relation of the nerve with parotid gland. 4+5+3+3  
b) A 65 year old patient presented with a history of hypertension developed paralysis in the left side of his body. On examination the neurosurgeon found increased muscle tone, increase tendon reflexes and positive Babinski sign on the affected side. The sensory examination revealed altered sensation on the affected side. C.T. Scan of brain revealed a small lesion in his right cerebral hemisphere in the region of internal capsule.
  - i) What did he suffer from?
  - ii) Which type of paralysis was this, explain?
  - iii) Name the different parts of the internal capsule and mention the part in which the lesion was located.
  - iv) Enumerate the fibres passing through different parts of internal capsule.
  - v) Enumerate the arteries supplying the different parts of internal capsule with diagram.
  - vi) Name the most commonly ruptured artery of the cerebral haemorrhage. 1+2+(2+1)+4+4+1
2. a) Describe the muscles of pharynx with their nerve supply. Write down a note on Killian's dehiscence. 6+4  
b) Describe the pathway of cerebrospinal fluid circulation. Describe the structures present on floor of the fourth ventricle. 1+3+5+1  
c) A patient suffers from dislocation of patella following an automobile accident. What are the factors preventing dislocation of patella in normal person? Name two ligaments of the knee joint commonly affected in trauma. What are the different varieties of rotation possible in knee joint? Why knee joint is called "Compound" as well as "Complex" joint? 2+2+4+1+1
3. Write a short notes on the following: 2x5
  - a) Down's syndrome.
  - b) Cavernous sinus with connection.
4. Explain the following statements: 5x4
  - a) Medial meniscus is more prone to injury than lateral meniscus.
  - b) A patient with head injury complains of nasal regurgitation of food.
  - c) Lesion in pretectal nucleus of midbrain causes Argyll Robertson's pupil.
  - d) Repeated throat infection if neglected may cause mastoiditis.
  - e) Femoral hernia is more common in females than males.

P.T.O

5. Choose the correct option for each of the following:

10x1

i) Branches of internal Carotid artery are all except:

- a) Ophthalmic artery.
- b) Anterior cerebral artery.
- c) Posterior communicating artery.
- ☒ d) Facial artery.

ii) Mitral cells are present in:

- a) Kidney.
- b) Mitral valve.
- c) Olfactory tract.
- ☒ d) Optic nerve.

iii) Treacher Collins syndrome is characterized by under-development of which of the following bones:

- a) Zygomatic.
- b) Maxillary.
- ☒ c) Sphenoid.
- d) Hyoid.

iv) Midline cleft lip is due to failure of fusion of:

- ☒ a) Maxillary processes.
- b) Medial nasal processes.
- c) Medial & lateral nasal process.
- d) Medial nasal & maxillary process.

v) Hyperextension of the hip joint is prevented by the:

- a) Obturator internus tendon.
- ☒ b) Iliofemoral ligament.
- c) Iliotibial tract.
- d) Tensor fascia latae muscle.

vi) Blood supply of Little's area is from all the arteries except:

- a) Greater palatine artery.
- b) Septal branch of superior labial artery.
- c) Anterior ethmoidal artery.
- ☒ d) Nasal branch of sphenopalatine artery.

vii) All of the following glands are supplied by Facial Nerve except:

- a) Lacrimal.
- b) Submandibular.
- c) Nasal.
- ☒ d) Parotid.

viii) Following are all the features of cerebellar lesions except:

- a) Dysidiachokinesia.
- b) Nystagmus.
- ☒ c) Rigidity of voluntary muscles.
- d) Intention tremors.

ix) The nerve having fibres of Edinger Westphal nucleus as its component is:

- ☒ a) Oculomotor.
- b) Trochlear.
- c) Trigeminal.
- d) Abducent.

x) The only abductor of vocal cords is:

- ☒ a) Posterior cricoarytenoid.
- b) Inter arytenoids.
- c) Lateral cricoarytenoid.
- d) Cricothyroid.