

001/23

The West Bengal University of Health Sciences
MBBS 1st Professional Examination (New Regulation), Nov-Dec 2023
 Subject: Anatomy
 Paper : II

Full Marks : 100
 Time : 3 hours

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

1. a) A 7 year old child was complaining of recurrent upper respiratory tract infection and was inattentive in class. He was diagnosed to be suffering from otitis media with effusion.
 - i) Which anatomical area is affected?
 - ii) What is the boundary and content of the above area? Explain with diagram.
 - iii) Where will you make an incision as a surgeon to drain the effusion if required? Justify with reasons.
 - iv) Describe the intratemporal course of the facial nerve.
 - v) What is the source of development of the affected area? 1+(3+3)+(1+2)+4+1

- b) Following an operation of right parotid gland, a patient develops weakness of facial muscles of that side. State the relations of the affected cranial nerve with respect to the parotid gland. Give a brief account of the functional components with nuclei, branches and distributions of the nerve. Enumerate the features of LMN type of palsy of the nerve with explanation. 3+(2+2+2)+6

2. a) A child was brought to ophthalmology OPD for constant watering of one eye.
 - i) Explain the anatomical causes of this symptom.
 - ii) Enumerate the structures forming lacrimal apparatus.
 - iii) Prepare a flow chart of the secretomotor pathway to lacrimal gland. 2+4+4

- b) A male baby is presented with varicosity of veins in lower limb.
 - i) Name the superficial veins draining the lower limb.
 - ii) What is fate of these veins? 2+2+6
 - iii) Name the main tributaries of their superficial vein.

- c) What is karyotyping? What is main genetic defect of Klinefelter's syndrome? Enumerate the symptoms of the syndrome. 2+2+6

3. Write a short note on the following: 2x5
 - a) Aneuploidy.
 - b) Ciliary ganglia.

4. Explain the following statements: 5x4
 - a) The composite development of tongue is confirmed by studying the sensory innervations.
 - b) Haemophilia carrier mother may have a sufferer son.
 - c) Tumor of inferior parietal lobule may lead to sensory aphasia.
 - d) Thyroid enlargement fails to rise above thyroid cartilage and it moves up and down with deglutition.
 - e) Ankle sprain usually occurs when the foot is planter flexed.

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

- i) Sinus of Morgagni transmits all except
 - a) Auditory tube
 - b) Ascending palatine artery
 - c) Tensor veli palatini
 - d) Palatine branch of Aascending pharyngeal artery
- ii) A fish bone got stuck in right vallecula was removed with prolonged effort causing laceration of tissue. Which nerve will carry the pain sensation from this area?
 - a) External laryngeal nerve
 - b) Internal laryngeal nerve
 - c) Glossopharyngeal nerve
 - d) Hypoglossal nerve
- iii) Waddling gait is due to:
 - a) Bilateral paralysis of gluteus maximus.
 - b) Unilateral paralysis of gluteus medius.
 - c) Bilateral paralysis of gluteus medius and minimus.
 - d) Unilateral paralysis of tensor fascia lata.
- iv) Regarding passavant's ridge all true except:
 - a) It contains horizontal fibres of palatopharyngeus muscle.
 - b) It closes oropharyngeal isthmus.
 - c) It is positioned at the level of lower border of C1.
 - d) Paralysis of its muscles cause nasal regurgitation.
- v) Nucleus Ambiguus contributes to the fibres of the following cranial nerve except:
 - a) Accessory nerve.
 - b) Vagus nerve.
 - c) Glossopharyngeal nerve.
 - d) Facial nerve.
- vi) The last tributary of left internal jugular vein is
 - a) Lingual vein
 - b) Middle thyroid vein
 - c) Occipital vein
 - d) Thoracic duct
- vii) A child at the age of 10 year is presented to your office with abnormal twisting of the neck towards right side, the chin is pointed to other direction, unable to rotate his neck. Based on the knowledge of first professional anatomy, which part is involved?
 - a) Anterior strap muscles of neck.
 - b) Right side of sternocleidomastoid muscle.
 - c) Left side of sternocleidomastoid muscle.
 - d) Contracture of platysma.
- viii) In general OPD a mother has come with her child of four years. The child is crying with high fever. On inspection the right tibia is swollen red hot mimicking acute signs of inflammation. On deep palpation around the knee, the baby is crying more. Mother gave past history of sore throat. On the basis of anatomy knowledge where is the problem?
 - a) Around the knee
 - b) Epiphysis
 - c) Metaphysis
 - d) Diaphysis
- ix) Select the incorrect statement regarding the Spinal accessory nerve:
 - a) It emerges in the posterior triangle by piercing the posterior border of sterno-cleidomastoid muscle.
 - b) It is related to lymph nodes belonging to upper deep cervical lymph node.
 - c) It runs parallel to the fibres of scalenus medius.
 - d) It supplies sterno-cleidomastoid and trapezius muscle.
- x) Posterior surface of epiglottis is lined by:
 - a) Pseudo stratified ciliated columnar epithelium.
 - b) Non keratinized stratified squamous epithelium.
 - c) Pseudo stratified ciliated columnar and non keratinized stratified squamous epithelium.
 - d) Stratified columnar epithelium.