

4001

First Year MBBS Examination
I MBBS Anatomy Paper 1 (New)

Time: 3 hours

Max Marks: 100

Instructions: 1. Answer to the points. 2. Figure to the right indicates marks. 3. Use separate answer books for each section. 4. Draw diagrams wherever necessary. 5. Write legibly.

Section 1

1. MCQ (20)

- a. Following are derivatives of the sixth pharyngeal arch, EXCEPT: A. Cricothyroid muscle B. Posterior Cricoarytenoid muscle Cc. Thyroarytenoid muscle D. Cricoid Cartilage
- b. Inferior olivary nucleus has prominent connections with following A. Cerebral Cortex B. Caudate nucleus on Cerebellum D. Cuneate nucleus
- c. Thyroid follicle is lined by: A. Simple

cuboidal epithelium B. Stratified squamous non-keratinized epithelium C. Pseudostratified ciliated columnar epithelium D.. Stratified squamous keratinized epithelium

- d. Following nerve carries parasympathetic fibers from otic ganglion to supply the parotid gland: A. Greater superficial petrosal nerve B. Lesser petrosal nerve C. Auriculotemporal nerve D. Jacobson's nerve
- e. Following muscles open jaw, EXCEPT: A. Lateral pterygoid B. Masseter C. Digastric D. Geniohyoid
- f. Following nerves arise from radial nerve, EXCEPT: A. Posterior cutaneous nerve of arm B. Lower lateral cutaneous nerve of arm C. Posterior cutaneous nerve of forearm D. Lateral cutaneous nerve of forearm
- g. Dupuytren's disease affect following structure: A. Palmar aponeurosis B, Abductor pollicis longus tendon C. Flexor retinaculum of the wrist D. Extensor retinaculum of the wrist
- h. Superior cerebellar peduncle's efferent fibers are destined to synapse in contralateral: A. Substantia nigra B. Red

nucleus C. Globus pallidus D. Putamen

- i. Following vertebra's transverse process is posterior attachment of Sibson's fascia. A. Sixth cervical B. Seventh Cervical Cc. First thoracic D. Fourth thoracic
- j. Following muscle is supplied by axillary nerve: A. Subscapularis B. Supraspinatus Cc. Infraspinatus D. " Teres minor
- k. Destruction of the following structure results in hemiballismus: A. Thalamus B. Premotor area Cc. Primary motor cortex D, Subthalamix nucleus
- l. Following nerve is commonly involved in Guyon's canal syndrome: A. Posterior intcrosseous nerve B. Median nerve C. Radial nerve D. Ulnar nerve
- m. Following functional cortical area is present in calcarine sulcus: A. Primary auditory area B. Primary visual area Cc. Sensory speech area D. Primary somatosensory area
- n. Onodi cell is the most posterior etnmidal air cell that may extend over the sphenoid sinus. Following nerve is closely related to Onodi cell: A. Optic nerve B. Oculomotor nerve of Nasociliary nerve D. Maxillary nerve

- o. Following swellings fuse to form tongue, EXCEPT: A. Arytenoid B. Copula Cc. Hypobranchial eminence D. Tuberculum impar
- p. Following are boundaries of piriform fossa, EXCEPT: A. Aryepiglottic fold B. Thyroid cartilage Cc. Thyrohyoid membrane Dz. Cricoid cartilage
- q. Following vein continues as axillary vein: A. Subclavian vein B. Brachial vein C. Basilic vein D. Subscapular vein
- r. Axons of following neuronal cells from optic nerve: A. Bipolar cells B. Photoreceptor cells Cc. Ganglion cells D. Amacrine cells
- s. Sensory epithelium of hearing is known as: A. Utricular macula B. Sacculus Cc. Organ of Corti D. Crista ampullaris
- t. The central region of the upper lip presents a shallow vertical groove, known as: A. Columella B. Philtrum C. Mentolabial groove D. Vestibule of mouth

Section 2

1. Structured long question. (1 out of 2) (1x 10-10) (10)
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- a. Describe course & relations, and branches of axillary artery. Describe scapular anastomosis. (3+4+3)
 - b. Describe the types and subtypes, ligaments, and movements of proximal radio-ulnar joints. (2+4+4)
2. Case based questions. (2 out of 3) (2x 5=10) (10)
- a. A 24-year old woman presented with a 4-day history of gradually worsening right leg weakness, burning pain and loss of sensation in the left leg. On examination her hip and knee flexion, and ankle dorsiflexion were affected on the right side. Tone was increased in right leg. There was impaired proprioception in the right leg. (i) What is diagnosis of the mentioned case? (ii) What is anatomical basis of right leg weakness and leg? (iii) What is anatomical basis of impaired proprioception in the right leg? (iv) What is anatomical basis of altered sensations in the left leg? (v) What is arterial supply of spinal cord? He had
 - b. A 65-year old male present in OPD with history of fall on the outstretched hand. He had pain and swelling on the dorsal aspect of the left wrist. His wrist movements painful. X-ray of his left wrist showed the fracture of the lower end of radius. (i)

What is the name of fracture of lower end of radius? What is the name of deformity of hand in this fracture?; (ii) Name the space in which styloid process of the radius and contents of this space?

- c. A-60-year old male presented with complain of hoarseness of voice, weak voice, He has been operated for thyroidectomy 3 months back. On examination his left vocal cord was found to be paralyzed and lied in the & cadaverica €™ position. (i) What is anatomical basis of the above mentioned clinical features? (ii) What is motor sensory supply of larynx? (iii) Name two investigations that are the most suitable to diagnose this case.

3. A. Write short notes on (1 out of 2) (1x 5=05)
(5)

- a. Types and functions of skin
- b. Types of synovial joint movements.

4. B. Write short notes on (1 out of 2) (1x5=05)
(5)

- a. Microscopic structure of cardiac muscle
- b. Microscopic structure of compact bone.

Section 3

1. Write short notes on (2 out of 3)(2x 5=10) (10)
 - a. Superior sagittal sinus.
 - b. Muscles of mastication.
 - c. Lateral wall of nose.
 2. Structured long question. (1 out of 2) (1x 10 =10) (10)
 - a. What are boundaries of suboccipital triangle? Describe its contents and clinical highlights. Describe suboccipital muscles in detail, (2+3+2+3)
 - b. Describe parts, location and relations, blood supply and clinical highlights of pituitary gland. What is craniopharyngioma? (2+2+2+3+1)
 3. Write short notes on (2 out of 3) (2 x 5 =10) (10)
 - a. Commissural fibers..
 - b. Describe transverse section of the midbrain at the level of superior colliculus.
 - c. Describe principal connections and functions of all nuclei of cerebellum.
 4. A. Write short notes on (Histology) (1 out of 2) (1x 5=05) (5)
 - a. Palatine tonsil
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b. Tongue

5. B. Write short notes on (Embryology) (1 out of 2) (1 x 5 = 05) (5)
 - a. Developmental anomalies of palate
 - b. Development of thyroid gland
6. Write answers in on two sentences, (5 out of 6) (5 x 2 = 10) (10)
 - a. What is Ludwig's angina?
 - b. Write boundaries of Petit's triangle, What is its clinical significance?.
 - c. Name the site and effects of lesion in Millard Gubler syndrome.
 - d. Name all muscles causing elevation and depression of eyeball.
 - e. Enumerate all structures developed from the third pharyngeal pouch,
 - f. Enumerate all laminae of typical neocortex in cerebral hemisphere.
