Date: 12-07-2020

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 (20)

1. **(MCQ)**
   a. All of the following are derivatives of deep cervical fascia except:
      a. a. Pretracheal fascia
      b. b. Prevertebral fascia
      c. c. Stylomandibular ligament
      d. d. Sphenomandibular ligament
   b. Which of the following [ymph nodes are termed Virchow's lymph nodes:
      a. a. Left Infra clavicular

b. b. Left supraclavicular
c. c. Right infraclavicular
d. d. Right supraclavicular

c. Hypoglossal nerve crosses superficial to all of the following are true except:
   a. a. Internal carotid artery
   b. b. External carotid artery
   c. c. Facial artery
   d. d. Loop of lingual artery

d. The true statement about the thyroid gland is:
   a. a. It develops from the thyroglossal duct
   b. b. It lies opposite to C3-C7 cervical vertebrae
   c. c. Its is famous lies opposite cricoid cartilage
   d. d. It is the least vascular endocrine gland in the body

e. All of the following muscles adduct the vocal folds except:
   a. a. Lateral cricoarytenoid
   b. b. Posterior cricoarytenoid
   c. c. Thyroarytenoid
   d. d. Interarytenoid

f. All of the following structures are present in the dellopectoral groove except:
   a. a. Cephalic vein
   b. b. Deltopectoral lymph node
   c. c. Basilica vein
   d. d. Deltoid branch of thyraco-acromial artery

g. Which of the following statement about

cephalic vein is incorrect?

a. a. cephajic vein corresponds to the great saphenous vein of the lower limb
b. b. ft is post axial vein of the upper limb
c. c. It appears is clay vi pectoral fascia to drain into axillary vein
d. d. Greater part of its blood is drained into basilic vein through medial cubital vein

h. The only muscle of anterior compartment of arm that is inserted into the humerus is:

a. a. Biceps brachii
b. b. Coracobrachialis
c. c. Brachialis
d. d. None

i. All transitions which at the level of insertion of coracobrachialis are Correct except

a. a. Median nerve crosses brachial artery from lateral to medial side
b. b. Ulnar pierces medial intermuscular septum to enter the posterior compartment of the arm
c. c. Cephalic vein pierces the deep fascia
d. d. Radial nerve pierces the lateral intermuscularseptum to enter the anterior compartment of the arm

j. All of the following are branches of brachial artery except:

a. a. Profunda branchii artery
b. b. Main humeral nutrient artery

c. c. Radial collateral artery
d. d. Superior ulnar collateral artery

k. Nucleus m Vikas supplies all of the following except:
   a. a. All muscles of the larynx
   b. b. Stylopharyngeous muscle
   c. c. Constrictor muscle of pharynx
   d. d. Palatoglossus muscle

l. A LMN lesion is a lesion in the
   a. a. anterior grey column of spinal cord
   b. b. Dorsal root ganglion
   c. c Pontine nuclei
   d. d. Sympathetic chain

m. In the tegmentum of midbrain lemniscii are arranged from middle to lateral side as:
   a. a. Medial, spinal trigeminal, lateral
   b. b. Medial, lateral, spinal trigeminal
   c. c. Lateral, trigeminal, spinal
   d. d. Medial, trigeminal spinal, lateral

n. Medial, trigeminal, spinal, lateral All of the following are intracerebral nuclei except:
   a. a. Dentate nucleus
   b. b. Fastigial nucleus
   c. c. Globus nucleus
   d. d. Red nucleus

o. The upper half of the esophagusis lined by
   a. a. Stratified cuboidal epithelium
   b. b. Stratified squamous non-keratinized epithelium

c. c. Stratified columnar non- keratinized epithelium
d. d, Stratified squamous keratinized epithelium

p. The haversian system is found in;
a. a. Diaphysis of long bones
b. b, Cancellous bone
c. c. Epiphysis
d. d. Spongy bones of children

q. Primordial germ cell is derived from:
a. a. Ectoderm
b. b. Mesoderm
c. c. Endoderm
d. d. Mesodermal sinus

r. Embryonic life end at
a. a. 6 weeks
b. b. 8 weeks
c. c. 10 weeks
d. d. 38 weeks

s. Joint between epihysis and diaphysis of a long bone is a type of the joint
a. a. Plane synovial joint
b. b. Fibrous joint
c. c. Symphysis joint
d. d. Synchondrosis

t. Endocrine gland with portal system of circulation
a. a, Hypophysis cerebri
b. b. Ovary

c. c. Pineal
d. d. Pancreas

Section 2

2. **Write following structured essay question (1 out of 2)** (10)
   a. Describe type, origin, insertion, nerve supply, action, structures undercover, applied anatomy of deltoid muscle.: (1+1+1+1+2+2+2)
   b. Describe part, relation, branches and applied anatomy of Axillary artery (1+3+3+3)
3. **Case based question (2 out of 3)** (10)
   a. 35 year old woman came to the surgeon with complaint of hard, painless lump in the upper outer quadrant of the right breast. Examination revealed enlarged axillary lymph nodes on the right side and loss of mobility of the breast. X-ray of vertebral column showed irregular shadows in the bodies of L4 and L5 vertebrae. (14242)
      a. a. What is the probable diagnosis?
      b. b. Name the three muscles related to the base of the breast.
      c. c. Describe lymphatic drainage of breast.
   b. A patient has swelling below the lower jaw on the right side. The swelling increased in size during eating. The surgeon inspected the sublingual papilla in the floor of the mouth and

did a bidigital examination by putting index finger inside the oral cavity and the thumb outside in front of the angle of the mandible. (1241-1)

a. a. Which salivary gland is palpated in this case?
b. b. Name the parts of these gland and the muscle that separates these parts.
c. c. What is the length of its duct and where does it open?
d. d. Name the radiological investigation done to visualize the duct system of salivary glands.

c. A patient was brought to the hospital with sudden onset of vertigo and nystagmus. The attending physician noted that the patient had dysphagia, dysarthria and hoarseness of voice. On examination, it was found that the Jaryngeal and palatine muscles on left side were paralyzed. There was Joss of pain and temperature on the body below the neck on the right side. The patient had unsteady gait. The above signs and symptoms are indicative of a vascular lesion in brainstem.

a. a. Name the parts of the brain stem and identify the syndrome.
b. b. Which artery is occluded in this syndrome and what is it a branch of?
c. c. Give reason for lass of pain and

temperature on the left side of face.

d. d. Give reason for loss of pain and temperature sensations below the neck on the right side.

e. e. Explain the paralysis of Jaryngeal, pharyngeal and palatine muscles. (1+1+1+i+1)

4. **A. Write short notes on (1 out of 2)** (5)
   a. Blood supply of long bone
   b. Modification of Deep fascia
5. **B. Write short notes on (1 out of 2)** (5)
   a. Hyaline cartilage
   b. Microscopic anatomy of thick skin

Section 3

5. **Short answer question (2 out of 3)** (10)
   a. Radial nerve in arm
   b. Otic ganglion
   c. Posterior belly of digastric muscle.
6. **Long question - structured essay question (1 out of 2)** (10)
   a. Facial nerve: nucleus, intra and extra cranial course, enumerate branches and applied anatomy. (2+3+2+3)
   b. Describe relations, content, connections and applied anatomy of superior Sagittal sinus. (2+2+3+3)
7. **Write short notes on (2 out of 3)** (5)

a. Internal Capsule
b. Draw & label T.S of Midbrain at the level of superior colliculus
c. circle of Willis

8. **A. Write short notes on (1 out of 2)** (5)
   a. Microscopic anatomy of thyroid gland
   b. Microscopic anatomy of circumvallate papillae.
9. **B. Write short notes on [1 out of 2)** (5)
   a. Frist pharyngeal arch
   b. Development of Thymus
10. **Write answer in one or two sentences (5 out of 6)** (10)
    a. Which are the boundaries & content of Anatomical snuff box?
    b. Motor supply of Parotid Gland.
    c. Draw & label T.S. of spinal cord at cervical level
    d. What is function of sesamoid bone?
    e. Type of cartilage with one example.
    f. Urothelium epithelium.

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