

M.B.B.S. FIRST PROFESSIONAL EXAMINATION, APRIL/MAY-2021

ANATOMY
PAPER - FIRST

Time allotted: Three hours

SET - A

[Max Marks: 100]

Q. 1. Multiple choice questions (attempt all MCQs in the allotted first 20 minutes in the OMR sheet) (1 x 20 = 20)

1. All are contents of the carotid sheath **except**:
 - a. Internal carotid artery
 - b. External carotid artery
 - c. Internal jugular vein
 - d. Vagus nerve
2. The posterior belly of digastric muscle is supplied by:
 - a. Mandibular nerve
 - b. Hypoglossal nerve
 - c. Facial nerve
 - d. Accessory nerve
3. All are branches of first part of maxillary artery **except**:
 - a. Deep auricular
 - b. Posterior tympanic
 - c. Middle meningeal
 - d. Inferior alveolar
4. Safety muscle of the larynx is:
 - a. Lateral cricoarytenoid
 - b. Posterior cricoarytenoid
 - c. Cricothyroid
 - d. Thyroarytenoid
5. Medial boundary of pyramidal fossa is formed by:
 - a. Lamina of thyroid cartilage
 - b. Aryepiglottic fold
 - c. Thyrohyoid membrane
 - d. Glossoepiglottic fold
6. Nerve to medial pterygoid supplies all of the following muscles **except**:
 - a. Tensor palati
 - b. Tensor tympani
 - c. Medial pterygoid
 - d. Levator veli palatini
7. Which nucleus is related with the taste pathway?
 - a. Superior salivatory nucleus
 - b. Inferior salivatory nucleus
 - c. Lacrimatory nucleus
 - d. Nucleus of tractus solitarius
8. Cutaneous innervations of angle of the mandible is by segments:
 - a. C1, C2
 - b. C2, C3
 - c. C3, C4
 - d. C4, C5
- Filum terminale in the spinal cord is attached to:
 - a. Dorsal aspect of fifth sacral vertebra
 - b. Ventral aspect of fifth sacral vertebra
 - c. Dorsal aspect of first coccygeal vertebra
 - d. Ventral aspect of first coccygeal vertebra
- The lateral most intracerebellar nucleus is:
 - a. Fastigial nucleus
 - b. Emboliform nucleus
 - c. Globose nucleus
 - d. Dentate nucleus
11. Anterior wall of the third ventricle is formed by all **except**:
 - a. Mamillary bodies
 - b. Anterior column of the fornix
 - c. Anterior commissure
 - d. Lamina terminalis
12. All of the following fibres pass through the genu of the internal capsule **except**:
 - a. Corticopontine fibres
 - b. Corticonuclear fibres
 - c. Superior thalamic radiations
 - d. Corticospinal fibres for upper limb, trunk and lower limb
13. The commonest cause of subarachnoid haemorrhage is rupture of:
 - a. Cerebral veins
 - b. Middle meningeal artery
 - c. Charcot's artery
 - d. Berry aneurysms in circle of Willis
14. The largest subarachnoid cistern is:
 - a. Interpeduncular cistern
 - b. Cisterna Ambiens
 - c. Pontine cistern
 - d. Cerebellomedullary cistern
15. Ventral ramus of 5th & 6th cervical spinal nerve form:
 - a. Medial cord
 - b. Lateral cord
 - c. Upper trunk
 - d. Middle trunk
16. Subacromial bursa separates the coracoacromial arch from the tendon of:
 - a. Subscapularis
 - b. Teres minor
 - c. Supraspinatus
 - d. Infraspinatus
17. The failure of closure of anterior neuropore in the brain results in:
 - a. Holoprosencephaly
 - b. Sacrococcygeal teratoma
 - c. Anencephaly
 - d. Serinomelia
18. Commonest site of fertilization in the fallopian tube is:
 - a. Infundibulum
 - b. Ampulla
 - c. Isthmus
 - d. Intramural part
19. Primary centre of ossification appears in which part of a long bone?
 - a. Diaphysis
 - b. Metaphysis
 - c. Epiphyseal plate
 - d. Epiphysis
20. Which is a pressure epiphysis?
 - a. Os trigonum
 - b. Radial tuberosity
 - c. Head of radius
 - d. Tubercle of humerus

**ANATOMY
PAPER- FIRST**

Note: Attempt all questions.
Draw suitable diagrams (wherever necessary)

- Q. 2. Give reasons:** (2 x 5 = 10)
- a. Facial nerve injury may lead to decreased salivation
 - b. Hypoglossal nerve injury deviates tongue to the side of lesion
 - c. Cavernous sinus thrombosis may lead to paralysis of extraocular muscles
 - d. Lumbar puncture is done at L3-L4 level
 - e. Lesions of axillary nerve may lead to difficulty in abduction
- Q. 3. Problem based question:** (1+3+4+2 = 10)
- A young boy came to the OPD with a painful swelling on the face in front of the right ear. The pain increased while eating. On examination, he was diagnosed to be having an infection of parotid gland.
- a. Why are parotid swellings painful?
 - b. Mention the secretomotor nerve supply of parotid gland.
 - c. Where does the parotid duct open? Mention & draw the structures pierced by it.
 - d. Draw a well labelled diagram showing microstructure of the parotid gland.
- Q. 4. Write short notes on:** (6 x 4 = 24)
- a. Arterial supply of scalp
 - b. Carpal tunnel syndrome
 - c. Blood supply of superolateral surface of cerebral hemisphere
 - d. How to communicate effectively with patients
- Q. 5. Structured questions:**
- (i) Describe the 4 major muscles of mastication under following headings in a tabular form: (3+3+1+3= 10)
- a. Origin
 - b. Insertion
 - c. Nerve supply
 - d. Actions
- (ii) Write about the shoulder joint under following headings: (2+2+6= 10)
- a. Enumeration of ligaments
 - b. Diagram showing relations
 - c. Movements & muscles causing (in a tabular form)
- 6. Answer as directed :** (4 x 4 = 16)
- a. Draw a well labelled diagram of a Section of midbrain at superior colliculus level
 - b. Write a note on anastomosis
 - c. Enumerate cartilaginous derivatives of all pharyngeal arches
 - d. Write a note on implantation

M.B.B.S. FIRST PROFESSIONAL EXAMINATION, APRIL/MAY-2021**ANATOMY****PAPER - SECOND****[Time allotted: Three hours]****SET - A****[Max Marks: 100]****Q. 1. Multiple choice questions (attempt all MCQs in the allotted first 20 minutes in the OMR sheet) (1 x 20 = 20)**

1. Deep inguinal ring is an opening in:
 - a. External oblique
 - b. Internal oblique
 - c. Transversus abdominis
 - d. Fascia transversalis
2. Anastomoses between the gastroepiploic vessels lies in the following plane of greater omentum:
 - a. Anterior to 1st layer
 - b. Between 1st & 2nd layers
 - c. Between 2nd & 3rd layers
 - d. Between 3rd & 4th layers
3. 2nd part of duodenum develops from:
 - a. Foregut
 - b. Midgut
 - c. Foregut and midgut
 - d. Hindgut
4. The following structure is a content of gastrosplenic ligament:
 - a. Short gastric vessels
 - b. Tail of pancreas
 - c. Terminal part of splenic vessels
 - d. Left gastric vessels
5. Left renal vein:
 - a. Runs between inferior mesenteric vessels & aorta
 - b. Drains into portal vein
 - c. Is a remnant of subcardinal vein
 - d. Left gonadal vein opens into it
6. Commonest position of appendix is:
 - a. Paracolic
 - b. Retrocaecal
 - c. Splenic
 - d. Promontoric
7. Pelvic Ureter in females:
 - a. Lies in the lateral wall of ovarian fossa
 - b. Is crossed by the uterine artery from above
 - c. Is crossed by the uterine artery from below
 - d. Descends in the pelvis upto the level of ischial tuberosity
8. The following structure passes deep to the medial arcuate ligament of diaphragm:
 - a. Greater splanchnic nerve
 - b. Azygos vein
 - c. Sympathetic trunk
 - d. Subcostal vessels
9. Trigone of urinary bladder:
 - a. Is lined by simple columnar epithelium
 - b. Apex is formed by ureteric orifice
 - c. Mucosa is loosely attached to underlying musculature
 - d. Develops from absorption of mesonephric ducts
10. Pudendal canal lies in which wall of ischioanal fossa:
 - a. Anterior
 - b. Posterior
 - c. Medial
 - d. Lateral
11. Iliotibial tract:
 - a. Is a condensation of superficial fascia
 - b. Overlies the medial compartment of thigh
 - c. Receives the insertions of all gluteal muscles
 - d. Stabilizes the knee in erect posture
12. Housemaid's knee is inflammation of the bursa:
 - a. Suprapatellar
 - b. Prepatellar
 - c. Superficial infrapatellar
 - d. Anserine
13. Deepest structure in contents of popliteal fossa is:
 - a. Tibial nerve
 - b. Common peroneal nerve
 - c. Popliteal artery
 - d. Popliteal vein
14. Dorsalis pedis artery:
 - a. Is an end artery
 - b. Reaches upto web space great & 2nd toes
 - c. Anastomoses with lateral plantar artery
 - d. Anastomoses with medial plantar artery
15. Internal mammary artery arises from:
 - a. Axillary artery
 - b. Subclavian artery
 - c. Brachiocephalic trunk
 - d. Descending thoracic aorta
16. Foreign bodies usually lodge in:
 - a. Right bronchus
 - b. Left bronchus
 - c. Carina
 - d. Left lung
17. Coronary sinus develops from:
 - a. Primitive left atrium
 - b. Absorption of pulmonary veins
 - c. Sinus venarum
 - d. Left horn of sinus venosus
18. Arch of azygos vein receives:
 - a. Left 1st posterior intercostal vein
 - b. Right 1st posterior intercostal vein
 - c. Left superior intercostal vein
 - d. Right superior intercostal vein
19. Turner's syndrome has the following genotype:
 - a. 46, XX
 - b. 45, XO
 - c. 47, XXY
 - d. Trisomy 21
20. Test preferred for studying chromosomes during IVF:
 - a. Amniocentesis
 - b. Chorionic villus sampling
 - c. Preimplantation genetic diagnosis
 - d. Transcervical retrieval of trophoblasts

ANATOMY
PAPER- SECOND

Note: Attempt all questions.
Draw suitable diagrams (wherever necessary)

- Q. 2. Give reasons:** (2 x 5 = 10)
- a. Paramedian incisions are preferred over midline incisions for abdominal surgeries.
 - b. Pain of renal colic runs from loin to groin.
 - c. Left sided varicocele is more common than right sided.
 - d. People with flatfoot cannot walk for a long distance.
 - e. Pneumothorax can occur owing to injuries at the root of the neck.
- Q. 3. Problem based question:** (2 x 5 = 10)
- A 25 year old married came to the Emergency with severe pain over the umbilical region along with vomiting and mild grade fever. On examination, Mc Burney's point was found to be tender.
- a. What is your diagnosis? What is Mc Burney's point?
 - b. Explain why the pain was referred to the umbilical region.
 - c. Briefly describe the blood supply with clinical aspects
 - d. Write about the development of appendix
 - e. Draw the microscopic structure of this organ.
- Q. 4. Write short notes on:** (6 x 4 = 24)
- a. Development of stomach
 - b. Varicose veins of lower limb
 - c. Karyotyping
 - d. Cadaver as our first teacher
- Q. 5. Structured questions:**
- (i) Write about prostate gland under following headings: (2+2+3+3= 10)
- a. Lobes
 - b. Capsules
 - c. Diagram of Microscopic structure
 - d. Interior of prostatic urethra
- (ii) Write about the heart under following headings: (3+4+3= 10)
- a. Well labelled diagram to show the interior of right atrium
 - b. Note on development of interatrial septum
 - c. List sources of development of right & left ventricles
- Q. 6. Answer as indicated:** (4 x 4 = 16)
- a. Write about boundaries and contents of Popliteal fossa
 - b. Enumerate ligaments of knee joint
 - c. Write about Bronchopulmonary segments of left lung
 - d. Draw a well labelled diagram of Transitional epithelium