Paper Code: MBBS101 Regn. No.

M.B.B.S. FIRST PROFESSIONAL EXAMINATION, JULY/AUGUST-2018 **ANATOMY**

PAPER - FIRST

[Time allotted: Three hours]

SET - B

[Max Marks: 50]

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

 $(\frac{1}{2} \times 20 = 10)$

Medial wall of the middle ear shows:

a. Pyramid

b. Promontory

c. Canal for tensor tympani

d. Canal for chorda tympani

2. The circumvallate papillae develop from:

a. Hypobranchial eminence

b. Lingual swellings

c. Tuberculum impar

d. Second arch endoderm

3. In climbing a tree, the following two muscles contract together:

a. Teres major and teres minor

b. Latissimus dorsi and teres major

c. Pectoralis major and latissimus dorsi

d. Teres major and pectoralis major

In which of the following at elbow region the secondary center of ossification appears first?

a. Head of radius

b. Capitulum

c. Medial epicondyle

d. Olecranon process

The skin overlying the thenar eminence is supplied by:

a. Recurrent branch of median nerve

b. Palmar cutaneous branch of ulnar nerve

c. Palmar cutaneous branch of median nerve

d. Lateral proper digital branch of median nerve

Flexion of distal phalanx is brought by:

a. Tendon of flexor degitorum superficialis

b. Tendon of flexor degitorum profundus

c. By lumbrical muscle

d. By dorsal digital expansion

Which of the following is a pressure epiphysis?

a. Os trigonum

b. Radial tuberosity

c. Head of radium

d. Fabella

What is the epithelium lining the mesothelium?

Simple cuboidal

b. Simple columnar

Stratified columnar C.

d. Simple squamous

The failure of closure of anterior neuropore results is:

Holoprosencephaly

Sacrococcygeal teratoma b.

Anencephaly

d. Serinomelia

10. Which of the following muscles receives C1 fibers directly from the hypoglossal nerve?

Geniohyoid

Genioglossus b.

Sternothyroid

d. Sternohyoid

11. Effect of injury to the right optic tract results in:

Bitemporal hemianopia

Right homonymous hemianopia

Left homonymous hemianopia

d. Amblyopia

12. The commonest cause of subarachnoid hemorrhage is rupture of:

Cerebral veins

Middle meningeal artery

Charcot's artery

Berry aneurysms in circle of Willis

13. All are contents of the carotid sheath except:

Internal carotid artery

b. External carotid artery

Internal jugular vein

d. Vagus nerve

14. Medial boundary of pyriform fossa is formed by:

Lamina of thyroid cartilage

b. Aryepiglottic fold

Thyrohyoid membrane

d. Glossoepiglottic fold

15. Anterior wall of the third ventricle is formed by all except:

Mamilllary bodies

Anterior column of the fornix

Anterior commissure

d. Lamina terminalis

16. Superior parathyroid glands develop from:

a. Mesoderm of third arch

b. Mesoderm of fourth arch

Endoderm of third arch

d. Endoderm of fourth arch

17. The absence of tears is due to lesion in:

a. Trigeminal ganglion

b. Ciliary ganglion

Sphenopalatine ganglion

d. Superior cervical sympathetic ganglion

18. The philtrum of the upper lip develops from:

a. Lateral nasal process

b. Globular process

Maxillary process

d. Fusion of maxillary and globular processes

19. The safety muscle of the tongue is:

a. Intrinsic muscles

b. Hyoglossus muscles

Genioglossus muscles

Styloglossus muscles

20. The medial wall of orbit is formed by the following bones except:

a. Lamina papyracea

b. Lacrimal bone

c. Lesser wing of sphenoid

d. Frontal process of maxilla

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ANATOMY PAPER- FIRST

Note: Attempt all questions.

Draw suitable diagrams (wherever necessary)

Q. 2. Give reasons why:

 $(1 \times 5 = 05)$

- a. Injury to the scalp causes black eye formation.
- b. Right subclavian artery is hooked by recurrent laryngeal nerve.
- c. Ulnar nerve injury at the level to wrist joint causes claw hand deformity.
- d. Primary cartilaginous joints ossify later in life but secondary cartilaginous joints never ossify.
- e. Lesion of the posterior cerebral artery is usually accompanied by macular sparing.

Q. 3. Problem based question:

 $(\frac{1}{2} + \frac{1}{2} + \frac{1}{2} + \frac{1}{2} + 2 + 1 = 05)$

A 35 year old woman had a partial thyroidectomy for the treatment of thyrotoxicosis. During the operation a ligature slipped off the right superior thyroid artery. In order to stop the hemorrhage, the surgeon blindly grabbed for the artery with artery forceps. The operation was completed without further incident. The next morning the surgeon noticed that the patient spoke with a husky voice. Using your knowledge of anatomy, answer the following questions-

- a. What is the position of the vocal folds in the above situation?
- b. Name the muscle involved.
- c. Which nerve is involved?
- d. Which is it a branch of?
- e. Name other intrinsic muscles of larynx, giving their action and nerve supply.
- f. Give the sensory supply of larynx.

Q. 4. Write short notes on:

 $(2.5 \times 4 = 10)$

- a. Dangerous area of face
- b. IXth cranial nerve
- c. Circle of Willis
- d. Mid palmer space

O. 5. (i) Describe brachial plexus under following (draw diagram also):

(1+2+2=5)

- a. Formation
- b. Branches
- c. Erbs paralysis

(ii) Describe temporomandibular joint under the following:

(2+2+1=5)

- a. Type and articular surface
- b. Muscles acting on it with their action
- c. Applied importance

Q. 6. Answer as indicated:

 $(2.5 \times 4 = 10)$

- a. Write a note on epiphysis
- b. Enumerate the derivatives of 1st pharyngeal arch
- c. Draw a well labelled diagram showing TS of mid brain at the level of superior colliculus
- d. Histology of cornea

M.B.B.S. FIRST PROFESSIONAL EXAMINATION, JULY/AUGUST-2018

ANATOMY PAPER - SECOND

[Time allotted: Three hours]

SET - D

[Max Marks: 50]

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

 $(\frac{1}{2} \times 20 = 10)$

1.	The	ureter	devel	ops	from:
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- a. Mesonephric duct
- b. Pera mesonephric duct
- Urogenital sinus
- d. Metanephric blastema
- 2. Internal thoracic artery is a branch of:
 - a. Bracheo-cephalic trunk
 - b. Internal carotid artery
 - c. Inferior thyroid artery
 - d. Subclavian artery
- What is not true regarding the carina?
 - a. Mucosa most sensitive
 - b. Located at tracheal bifurcation
 - c. Located at the distance of 40 cm from incisor teeth
 - d. Visible in bronchoscopy
- Glutenus medius muscle is supplied by:
 - Superior gluteal nerve a.
 - b. Inferior gluteal nerve
 - c. Both superior and inferior gluteal nerve
 - d. Obturator nerve
- Which of the following nerve is not a branch by lumber plexus?
 - a. Pudendal nerve
 - b. Genito-femoral nerve
 - Iliohypogastric nerve
 - d. Femoral nerve
- The second part of duodenum lies anterior to the:
 - a. Inferior vena cava
 - b. Right kidney
 - C. Liver
 - Gall bladder d.
- Which of the following arteries is not a branch of the internal iliac artery?
 - Superior vesicle
 - Inferior vesicle b.
 - Ovarian c.
 - d. Uterine
- The movement of inversion and eversion occurs on the:
 - Subtalar joint
 - Subtalar and midtarsal joints
 - Subtalar and calcaneo-cuboid joints C.
 - Ankle and tarsometatarsal joints
- The articularis genu is supplied by:
 - a. Nerve to vastus lateralis
 - b. Nerve to vastus medialis
 - Nerve to vastus intermedius
 - d. Saphenous nerve
- 10. A little above the pubis, the posterior rectus sheath is formed by:
 - Aponeurosis of internal oblique a.
 - Aponeurosis of transverses abdominis
 - Fascia transversalis
 - Peritoneum

- 11. A patent vitello-intestinal fistula connects:
 - a. Foregut to umbilicus
 - b. Midgut to umbilicus
 - c. Hindgut to umbilicus
 - d. Midgut to symphysis pubis
- 12. The pelvic diaphragm is formed by the:

 - a. Levator ani muscle onlyb. Levator ani and coccygem muscles
 - c. Levator ani and pyriformis muscles
 - d. Levator ani and obturator internus muscles
- 13. The deep perineal pouch contains:
 - a. Sphinctor vesicae
 - Root of penis
 - Membranous urethra c.
 - Ejaculatory duct d.
- 14. Ductus arteriosus connects:
 - a. Subclavian artery to arch of aorta
 - b. Pulmonary trunk to subclavian artery
 - Pulmonary trunk to arch of aorta c.
 - d. Pulmonary trunk to left atrium
- 15. The vermiform appendix:
 - a. Has three taenia coli
 - b. Is developing from hind gut

 - c. Opens into the caecumd. Supplied by a branch from celiac trunk
- 16. Disc between L3 and L4 vertebra corresponds to:
 - a. Anterior superior iliac spine
 - Tuberocity of iliac crest
 - Highest point on iliac crest C.
 - Posterior superior iliac spine
- 17. Turner's syndrome occurs due to:
 - a. Non-disjunction of X-chromosome
 - Non-disjunction of Y-chromosome
 - Non-disjunction of X & Y chromosomes C.
 - None of the above
- 18. Venous plexus in prostate are present:
 - a. Inside the true capsule
 - b. Outside the false capsule
 - Between true and false capsule c.
 - d. None of the above
- 19. The following ligament is the strongest in the hip joint:
 - a. Ilio-femoral ligament
 - b. Pubo-femoral ligament
 - Ischio-femoral ligament c.
- d. Ligament of head of femur
- 20. Lateral longitudinal arch of foot is:
 - Supported by the spring ligament
 - Constituted by the navicular bone only
 - Lower than the medial longitudinal arch C.
 - None of the above

ANATOMY PAPER - SECOND

Note: Attempt all questions. Draw suitable diagrams (wherever necessary) $(1 \times 5 = 05)$ Q. 2. Give reasons why: a. Portal hypertension may lead to haematemesis. b. Fracture at neck of fibula sometimes leads to foot drop. c. Irritation at under surface of diaphragm leads to pain at tip of shoulder joint. d. Cardiac pain due to angina pectoris or myocardial infarction is usually referred to the inner aspect of upper limb. e. Infection of perianal space are very painful. $(1 \times 5 = 05)$ Problem based question: A 62 years old man came to the hospital because of the complaint of blood stained stool and altered bowel habits for last two months. He was also having complaints of pain radiating down the back of both thighs and weakness of thigh muscles. On per rectum examination, a growth was palpable on the posterior rectal wall. a. Give the extent of the rectum. b. What is ampulla of rectum? c. Which nerve is involved by the growth? d. Give peritoneal reflection on and from the rectum in male and female. e. Explain development of rectum. $(2.5 \times 4 = 10)$ Q. 4. Write short notes on: a. Broncho pulmonary segments b. Karyotyping c. Head of pancreas

d. Microscopic structure of gall bladder Q. 5. Structured questions: (2+1+2=05)(i) Write about extra-hepatic biliary system under the following headings: a. Parts and development b. Applied importance c. Histology of gall bladder (1+2+2=05)(ii) Describe the superior mediastinum under the following headings: a. Boundaries b. Content c. Superior mediastinal syndrome Write in brief about:

a. Femoral canal

b. Hypospadias

c. Common peroneal nerve impry to the at foot.

d. Coronary sinus

Medial long turinal foot. $(2.5 \times 4 = 10)$ Q. 6. Write in brief about: